


Somerset County Agricultural Development Board



Somerset County Farmland Preservation Plan





Farmland Preservation &
Agricultural Development Plan

May 2022

Volume 3 of the Somerset County Preservation Plan

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SOMERSET COUNTY IS AN EQUAL OPPORTUNITY EMPLOYER

**SOMERSET COUNTY PLANNING BOARD
RESOLUTION CONCERNING THE ADOPTION OF THE SOMERSET COUNTY
MASTER PLAN – PRESERVATION PLAN ELEMENT**

WHEREAS, In accordance with the provisions and spirit of the New Jersey Planning Act, N.J.S.A. 40:27-2 et seq., the Somerset County Planning Board (the Board) has prepared a Preservation Plan Element of the Somerset County Master Plan to serve as a guide for the County's preservation (open space, farmland and historic) planning efforts and investment decisions; and

WHEREAS, in conjunction with the foregoing, a public hearing was held by the County Planning Board as required at a Special Meeting on March 30, 2022 concerning the proposed replacement and succession of the previous Open Space and Recreation Master Plan Element, the Farmland Preservation Plan contained within the Somerset County Master Plan and the creation of the first Historic Preservation Plan Element; and

WHEREAS, heretofore, as part of the process for the development of the aforesaid Preservation Plan, the Somerset County Planning Board conducted an extensive public outreach process from 2019 until 2022 in the form of municipal reviews, numerous meetings with municipal officials and stakeholder groups, presentations on drafts of the Preservation Plan at Planning Partners Forums and at regularly scheduled meetings of the Somerset County Planning Board held throughout from 2019 to 2022, and four public meetings in late 2021 in order to obtain public input; and

WHEREAS, based upon the foregoing, the Somerset County Planning Board has taken into due consideration the public comments and communications presented to the Board throughout this process; and


WHEREAS, the various committees of the Board, including the Master Plan, Land Use, and Environment and Utilities Committees have reviewed and provided their comments at various stages throughout the development of the Preservation Plan Element.

NOW THEREFORE BE IT RESOLVED THAT that the Somerset County Planning Board hereby formally adopts the Preservation Plan Element as an element of the Somerset County Master Plan; and does so in support of the implementation of the Somerset County Investment Framework and Comprehensive Economic Development Strategy for Somerset County adopted by the Somerset County Planning Board as amendments to the County Master Plan in 2014; and

BE IT FURTHER RESOLVED THAT the Somerset County Planning Board declares its intent to periodically review these documents and up-date them appropriately so that same remain relevant and valuable tools for county and local planning; and

BE IT FURTHER RESOLVED THAT electronic copies of the Preservation Plan Element shall be made available to the Somerset County Board of County Commissioners, the municipalities of Somerset County, the Somerset County Cultural and Heritage Commission, the Somerset County Parks Commission, the Somerset County Agriculture Development Board, adjacent counties, the New Jersey Highlands Council, the New Jersey Office of Planning Advocacy and the Somerset County Business Partnership.

I, Matthew D. Loper, Secretary of the Somerset County Planning Board, County of Somerset, in the State of New Jersey do hereby certify that the foregoing is a true copy of a resolution adopted by said Planning Board of Somerset at its regularly convened meeting on May 17, 2022.



Matthew D. Loper, Secretary
Somerset County Planning Board



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5.1. Introduction

Agriculture is an essential feature of Somerset County's landscape. Nearly one-fifth of the county remains in agriculture nearly 350 years after colonial settlement. Farming remains an integral part of the county's heritage and culture, and residents who are not part of the agricultural industry identify farmland as critical to Somerset County's desirability as a place to live and work.

Farming laid down the earliest land use patterns discernable across Somerset County's present-day landscape. The next large change was caused by the arrival of the automobile, highways, and suburbanization over the course of the twentieth century. In the last hundred years, the county's landscape has evolved from one dominated by farms and forests to one in which just over half is urban or suburban. Yet, farmers still plow their fields, much of the county's natural legacy is still in evidence, and fine, well-kept buildings and landscapes reflect the county's many decades of history.

A. The Need for this Plan

While the landscape of Somerset County was dominated by agriculture a century ago, today most of the county has become suburban in nature. This has had both positive and negative consequences for the agricultural industry. On the one hand the increased local population provides those farmers who have changed with the times with a larger consumer base for niche agricultural products, such as locally grown foods, organic goods, and equine services. On the other hand, conversion of land for urban development has meant that farmland has grown increasingly scarce and expensive, and that more conflicts between farms and adjacent communities are likely to arise.

The preservation of farmland and open space is a key tool for the County in influencing the direction of growth county-wide, since regulation of land use itself is divided among the county's 21 townships and boroughs. In addition, the farming industry remains an important component of Somerset County's local economy. In 2017, agricultural income totaled \$20.1 million. While this may only be a small part of the county's overall economic output, the ripple effects of the agricultural industry are felt throughout other businesses such as the stores, equipment suppliers, and veterinarians who need commerce with farms. Moreover, half of the county's land – including what is no longer in agriculture – is considered prime farmland, which needs fewer inputs and less irrigation to be highly productive. More than

Why Preserve Farmland?

Farms feed us. They provide a host of economic, environmental, and socio-cultural benefits. They are also threatened. In recent decades, residential and commercial development has decimated America's agricultural lands. Nationwide, almost 31 million acres of farmland was lost due to development and expanding urban areas between 1992 and 2012, 11 million acres of which was the best quality agricultural land. New Jersey saw its farmland reduced by more than 300,000 acres over the last forty years (although the number of acres in farming has rebounded slightly as measured in the 2017 Ag Census, thought to be caused by the capture of more hobby farms whose incomes, perhaps partly through inflation, qualified them to be counted). This loss of farmland is essentially permanent. It takes natural forces millennia to build richly productive soils; bulldozers can destroy fertile farmland in minutes. Government farmland preservation programs and many private land trusts work to preserve the resource that feeds us, providing a variety of other public benefits:

Benefits to the Agricultural Community:

- Promotes farming and supports the agri-business system. The agri-business system is a very complex network of producers, processors, sellers and supporting services.
- Ensures that no development unrelated to agriculture will occur on the land thus providing security to the landowners, and leading to greater capital investments.

(Continued on page 3)

80 percent of the county's land is prime, of statewide importance, or of local importance. Such soils are a valuable natural resource and in fact, geologically speaking, such richness is rare worldwide. As the world's population grows – or indeed, as the region's

population grows and transport of food from beyond the region becomes more costly in energy and environmental terms – Somerset County's farms are well-positioned to produce food well beyond what the immediate community might require.

Accordingly, Somerset County's Master Plan in 1987 set as a goal the retention of the remaining agricultural regions in the county, as a means of (a) preventing sprawl that leads to the inefficient provision of resources, (b) economic development related to agricultural jobs and products, and (c) protecting natural resources and preserving the open character of the county.

B. The Somerset County Preservation Plan

Whenever feasible and appropriate to maximize taxpayer dollars and benefits for residents, local government works to prioritize projects that accomplish multiple gains – for open space, farmland, and historic preservation goals. For example, trails and greenways within or alongside permanently protected farmland, where permitted, are scenic and popular. Lands that protect the historic landscape context of historic resources and serve park and open space purposes also yield multiple benefits.

This basic idea lies behind the novel approach of creating a three-part Somerset County Preservation Plan, of which this plan is but one part. The overall plan includes two plans required to qualify the County for state incentive funding to preserve land – this Farmland Preservation & Agricultural Development Plan (an update to the County's 2008 plan) and an Open Space Preservation Plan (also an update to an existing plan) – plus a completely new Historic Preservation Plan. The overall plan also includes chapters on tourism, interpretation, and

education and outreach, plus a chapter describing the county's cultural landscape, including its natural, agricultural, and historic qualities.

As Somerset County has matured, the opportunity now exists for the County, operating through the Somerset Agricultural Development Board, to maximize its farmland preservation system and provide benefits for county residents through creative initiatives, partnerships, and coordination with the County's Open Space Preservation and Historic Preservation Programs. Protecting and providing connections to all of these resources provides a well-rounded experience of recreation, nature, history, and farm businesses for county residents and encourages visitation from beyond the county, which offers economic benefits on top of many other benefits.

C. The Importance of Partnerships

As the Open Space Preservation Plan – companion to this Farmland Preservation & Agricultural Development Plan – has also recognized, when key parcels come on the market in desirable locations, the County will need to have the means and support to move as quickly as possible to respond to opportunities for preserving farmland. Sometimes a nonprofit land trust can move even faster, as long as they know the County and other partners are backing the transaction to cover the costs the land trust cannot carry. Land trusts may also be able to subdivide parcels acquired to support local government open space preservation objectives, but which are larger than needed; excess land can be returned to productive use, for example, as farmland under easement.

This plan, therefore, is meant in part to support the ongoing dialogue and coordination needed among all

(Continued from page 2)

- Provides landowners the opportunity to improve or expand their operations.
- Allows the farm to be passed between generations.

Benefits to the General Public:

- Secures a local food base.
- Stabilizes the local tax base. (Residential development increases taxes in order to provide services such as schools, police, fire, and utilities.)
- Improves water quality and provides for groundwater recharge.
- Preserves the scenic environment.
- Preserves wildlife habitat.
- Preserves the historical integrity of the area.
- Preserves the quality of life that residents have come to expect.

Sources: Introduction adapted from https://conservationtools.org/guides/147-why-preserve-farmland#_edn2, updated with data from the American Farmland Trust's "Farms Under Threat Study," <https://farmlandinfo.org/publications/farms-under-threat-the-state-of-americas-farmland/>; New Jersey data gleaned from "Farming Flourishes in the Garden State," NJ Spotlight and NJTV News, <https://www.njfarmland.org/>, subsection, New Jersey's Farmland Revival, "Farmers are working more acres, but profitability can still be elusive." Benefits statements drawn from the website of the Berks County, PA, Department of Agriculture, <https://www.co.berks.pa.us/Dept/DeptofAg/Pages/How-and-Why-is-Farmland-Important.aspx>

potential partners in the shared goal to protect Somerset County's high-quality environment – including stakeholders in other related plans as described in the foregoing section. Many partners are needed to build upon the successes all have enjoyed to date.

Partnerships will be important in making sure that next phase of protecting the county's farmland is



Mission of the Somerset County Agricultural Development Board

- Preserves farmland in Somerset County in perpetuity for our future generations.
- Works with existing preserved farmers to resolve stewardship matters and assist in the implementation of these resolutions.
- Assists in Right-to-Farm matters and mediates where possible, so that residents and farmers can peacefully co-exist.
- Advises the Somerset County Board of Commissioners on all agriculturally-related matters.
- Reviews and comments, where applicable, on pertinent legislation relating to the agricultural industry or the New Jersey Farmland Preservation Program.
- Disseminates information to farmers on pending legislation, Best Management Practices, and new technology in the industry.
- Educates the public on the importance of agriculture in Somerset County, and the necessity for not only preserving it, but enhancing and supporting this industry throughout the State of New Jersey.
- Encourages healthy lifestyles by promoting locally-grown agricultural products to our residents.

Source:
<https://www.co.somerset.nj.us/government/public-works/planning/agriculture-development-board>

accomplished as efficiently and effectively as possible. Not only can local governments – both the County and its municipalities – step up to this challenge, but so can nonprofit conservancies or land trusts devoted to the public welfare. All of these parties can collaborate to maximize state and federal grants, as

well as seek donations from foundations and private donors.

D. The Particular Challenge of Saving Farmland in Somerset County

In 2017, New Jersey as a whole had the second-highest farmland values in the nation. Somerset County, owing to its location straddling North Jersey and Central Jersey – influenced by both the NJ-NY-CT metro region to the north and the Princeton-Trenton-Philadelphia metro corridor to the south – possesses farmland that is among the most expensive in the state. Prior to 2000 the average cost per acre of preserving farmland in the county was below \$9,200. Costs since 2010 have averaged more than \$25,000 per acre. While values have declined since their peak prior to the 2008 recession, they are still 80 percent higher than values in the 1990s.

Two of the most important reasons Somerset County still has a farming community in the face of this challenge are the productivity of the land itself and the talents of its long-time farming community. Anyone who remains in farming and who has withstood development pressures throughout the county has figured out a way to make farming pay even in the face of steep costs in this particular regional farm economy. For those who own considerable acreage and are not farmers but who lease it to those who will farm it, a third reason is the local property tax incentive for non-farming landowners to keep their privately owned open space in farming.

It is safe to say, however, that a fourth reason Somerset County's farming community survives is that the county's farmers and leaders determined almost three decades ago to access funds from the



The Somerset County Agricultural Development Board preserved its first farm in 1987: Baron Farm, Branchburg Township. (Photo courtesy Somerset County Office of Planning, Policy and Economic Development)

state’s farmland preservation program and deploy local companion programs to fund the purchase of agricultural conservation easements. In effect, farmland protected in this way has had development pressures removed – encouraging farmers to remain on the land. Other than letting the land revert to nature (ultimately forest in this climate), in fact the only use for this protected land is farming. Together with farmers in surrounding counties – particularly to the west in Hunterdon County – those who have remained in farming in Somerset County so far have proven to be sufficient to provide the all-important “critical mass” of demand that allows the farm support system of the region to survive. Without tractor dealers, veterinarians, feed suppliers, and other farm-related businesses, it would be difficult if not impossible for farming itself to continue.

As the cost of buying farmland continues to rise, farmers who have not sold agricultural easements may yet be squeezed out. A bad year – too much rain, or drought – could spell temptation to sell and retire. Younger farmers to replace those who are retiring may find it difficult to buy unprotected farmland at market rate. It is more likely that developers will snap that land up, unless Somerset County itself can compete to buy it outright to maintain as open space. (Sometimes, such publicly owned land is temporarily leased for farming, until needed for open space purposes, but it is by far better for farmland, under easement or not, to remain in the hands of private owners who can properly care for and invest in it.)

There are two basic ways out of this bind:

- Step up governmental efforts to buy agricultural easements; and



- Work on a community-wide basis to strengthen conditions for farm profitability.

Both are needed, urgently, to ensure that Somerset County's farming can endure. Hence, this plan is not only about farmland preservation, but also about agricultural development. Section 5.9 of this plan provides a thorough and lengthy examination of the many ways Somerset County can continue its focus on ways to enable farmers to make a profit and adapt as economic conditions for farming continue to change.

E. Farmland Preservation by the Numbers

As shown in Map 5.1.1, Permanently Preserved Farmland and Open Space, 42,543 acres are permanently preserved in Somerset County, almost 22 percent of the county's land area of 195,520 acres. The bulk of the preserved land consists of 34,170 acres of open space, 17.5 percent. The remaining 8,373 acres of the county's preserved land area is permanently preserved farmland, to be used for agricultural purposes in perpetuity.

Since the County's 2008 agricultural preservation plan, which reported 6,710 protected acres, Somerset County has protected an additional 1,663 acres, an increase of 25 percent. In total, governmental partners have spent \$139.7 million to preserve agricultural land in the county, with Somerset County providing \$33.6 million or 24 percent of the cost.

F. Where Farmland Is Being Preserved: Somerset County's Agricultural Development Area

The 8,373 acres of preserved farmland – and farm acres in general – are not evenly spread throughout the county. In 1983, the New Jersey State Legislature passed the State Agriculture Retention and Development Act, which resulted in the creation of the State Agriculture Development Committee (SADC). The SADC administers state funding for farmland preservation programs, establishes farmland preservation policy statewide, and operates the program in general. In April of 1983, the Somerset County Board of Chosen Freeholders created the Somerset County Agriculture



Somerset County farming is distinguished by the extent and variety of its equine industry. This page, a horse farm on preserved land in Neshanic; opposite page, a preserved horse farm in Bedminster.

Development Board (SCADB), which oversees the preservation program in the county.

Under the act, county agricultural development boards are tasked with designating Agricultural Development Areas (ADAs) in their jurisdictions. An ADA is an area that has the potential for long-term agricultural viability. The Somerset County ADA is largely located in the northwestern and southern portions of the county where there are concentrations of high-quality farmland. One additional section of the ADA is located in Warren Township where there is another pocket of farmland. While there are other individual farms that can be found throughout the county, the ADA generally excludes isolated farms or those closer to areas of development. Portions or all of Bedminster, Bernards, Bernardsville, Branchburg, Far Hills, Franklin, Hillsborough, Millstone, Montgomery, Peapack-Gladstone, and Warren are included in the ADA, which is divided into 10 separate regions for administrative purposes (described in Section 5.5; see Map 5.5.1).

Of the jurisdictions participating in Somerset County's ADA, Hillsborough at 3,498 acres has the most farmland preserved. Bedminster follows at 1,864 acres preserved, then Branchburg with 1,089 acres and Montgomery with 2,281 acres. However, it is Branchburg that has the highest percentage of its tax-assessed farmland preserved, 43 percent. Hillsborough follows at 36 percent preserved, then Montgomery at 22 percent and Bedminster at 18 percent.

G. Funding for Farmland Preservation

Somerset County's direct source of funding to accomplish farmland preservation is the Preservation Trust Fund. Commonly called the "Open Space Preservation Trust Fund" because of its origins for the purpose of saving open space lands, and formally known as the Somerset County Open Space, Recreation, Farmland and Historic Preservation Trust Fund, this plan uses the simpler "Preservation Trust Fund" because the fund today is dedicated to all three of the resources addressed by the Somerset County Preservation Plan. The fund, described thoroughly in



both Section 5.6 of this plan and Chapter 3 of the Preservation Plan, benefits from a modest property tax approved by county voters (\$.03 per \$100 assessed value) that has enabled the County's purchases of agricultural conservation easements. Additionally, outside the fund the County pays for certain operational expenses of the County, principally staffing, needed to acquire those easements. Although such expenses could be supported by the Preservation Trust Fund, the commissioners' longstanding policy is to devote the entirety of the spending on the capital expense of acquiring the easements – to invest in acquisition of long-term assets on behalf of the county's residents.

A major benefit of having the Preservation Trust Fund is that it enables the County to use its funding to leverage other funds. Federal, state, municipal, and nonprofit funding streams have also supported agricultural preservation, so much so that to date only about 30 percent of the cost of purchasing agricultural conservation easements in Somerset County has accrued to the County itself.

H. Farmland Preservation Goals

As of the latest Agricultural Census, conducted every five years by the U.S. Department of Agriculture and most recently issued in 2017, Somerset County had 35,862 acres in agriculture, about 18 percent of total land in the county. Protected acreage totals 8,373 acres, leaving roughly three-quarters of that 18 percent unprotected, more than 27,000 acres.

With this plan, Somerset County restates its strong commitment to farmland preservation, setting a goal of reaching 16,000 acres preserved, or a little less than half the current amount of farmland in Somerset County. To accomplish this goal, as much action as possible must be taken within the next 10 years, by 2030. Roughly speaking, with not quite a

With this plan, Somerset County restates its strong commitment to farmland preservation, setting a goal of reaching 16,000 acres preserved, or a little less than half the current amount of farmland in Somerset County. Due to multiple challenges – primarily rising costs and limited funding – this goal should not be regarded as achievable in one short decade.

quarter of the county in open space or farmland protection, and half the county already committed to urban and suburban development, there is not much land left to protect, and what is available is becoming more expensive with every passing year. Somerset County and its municipalities and partners must therefore consider contending strategically for

every acre still uncommitted to development. Land conservation specialists in New Jersey consider that every acre will be committed by 2050.

Section 5.6 delves into the potential for funding to support the farmland preservation goal. Major challenges in reaching the goal include (1) projections of less funding from other partners; (2) the demands on the Preservation Trust Fund also to meet open space and historic preservation needs; (3) development pressures from the expected rate of growth in northern New Jersey and Somerset County; and (4) the inexorable rise in the cost of land and therefore easements that accompanies those development pressures. Finally, even if sufficient funding were to become available, (5) the program depends on willing easement sellers; 18,186 acres are currently identified as candidate farms eligible for

farmland preservation, so theoretically many farmers are willing to limit their development rights through easements.

The goal of 16,000 acres of preserved farmland, therefore, should not be regarded as completely achievable in one short decade. An equal emphasis on maintaining and enhancing the long-term prosperity of the agricultural industry, as described in Section 5.9, Economic Development, is needed in order to keep farming sustainable enough to justify protecting it over a much longer period.

In addition to farmland preservation, an equal emphasis on maintaining and enhancing the long-term prosperity of the agricultural industry is needed in order to keep farming sustainable enough to justify protecting it over a much longer period.

I. Saving Farmland with or without Agricultural Easements

It is surprising, but encouraging, that to date protecting only 25 percent of the county’s current land base for agriculture has apparently helped to stabilize the industry. Current trends for farmland loss, farm profitability, and an ageing farmer population in Somerset County are worrisome, however. If they continue, current estimates suggest the county could see roughly 4,000 acres of farmland converted to other uses by 2030 (see Section 5.6, Table 5.6.1). Therefore, simply preventing that loss over the next 10 years itself would be an achievement for Somerset County, probably one less determined by the success of the County’s farmland preservation program than the community’s ability to encourage the success of farming in general.

This element of the preservation program gets back to the challenge of profitability described earlier.

Without continued profitability, farmers will not continue in farming long enough for the preservation program to expand protection sufficiently to sustain a stable industry over the long term. Moreover, as loss of profitability discourages current and new farmers, replacement farmers will not be available to keep farming the preserved farmland. The preservation program needs a continued supply of farmers to own/lease and thus manage the preserved land and contribute to the health of the farm economy – thereby keeping enough land in farming for the County to arrive at its preservation goal over time.

J. Conclusion

This Farmland Preservation & Agricultural Development Plan recognizes considerable investment and years of effort among many governmental and nonprofit agencies, often in partnership. The public’s investment in farmland is an important, leading-edge strategy in supporting Somerset County farming.

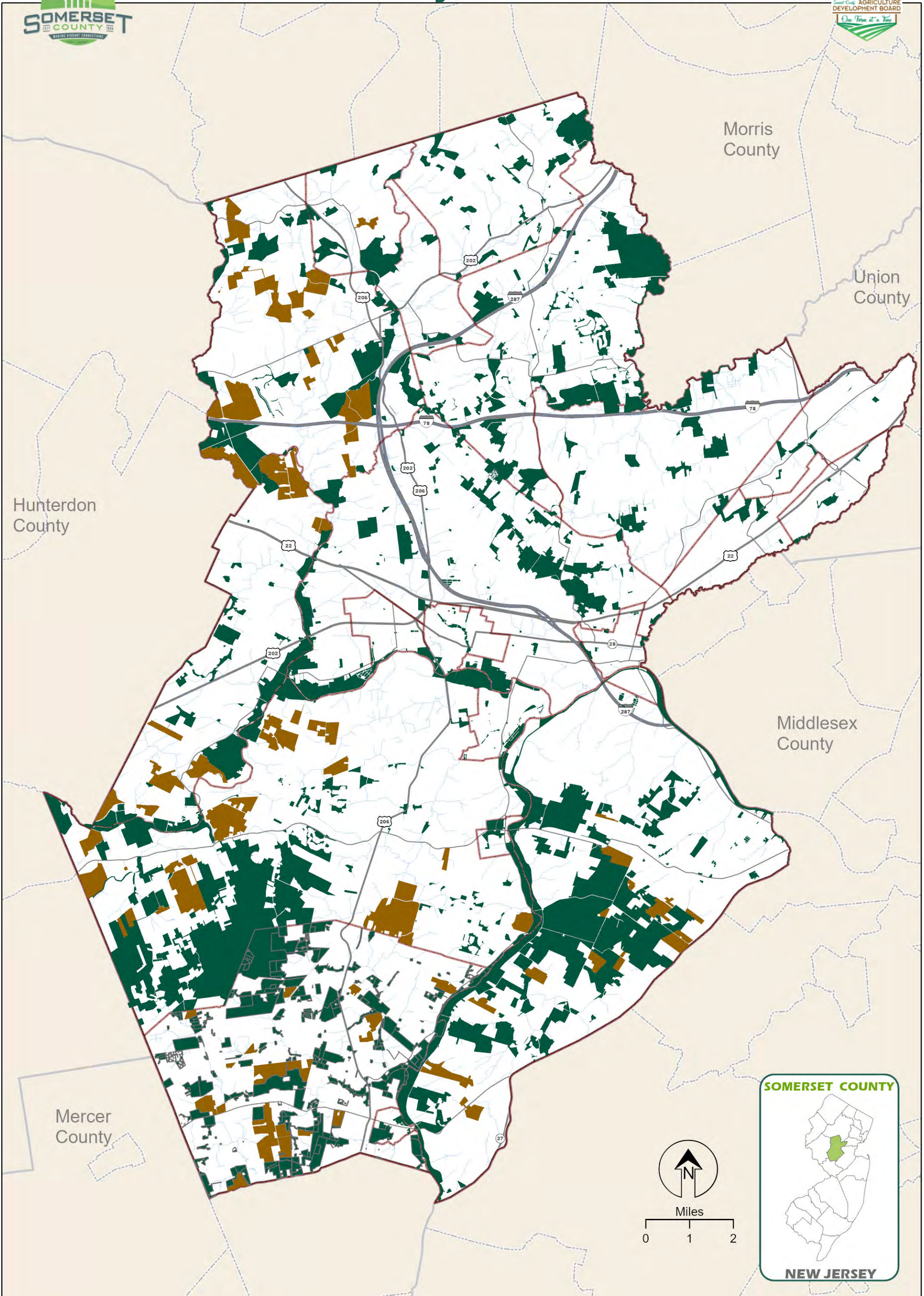
Over nearly 30 years, the Somerset County Open Space, Recreation, Farmland and Historic Preservation Trust Fund – the Preservation Trust Fund – has been critical to helping to sustain the land base of the agricultural economy and give encouragement to farmers seeking to remain in business in ever more challenging economic conditions. The greatest challenges, however, may be ahead. Many factors can be expected to bring more change to this region – population growth, economic shifts in markets and consumer demand, wage requirements, new technologies, evolving transportation. Simply



Agritourism is a way for some farmers to capture more dollars 'behind the farm gate' instead of finding off-farm employment - and a part of the experiences non-farming county residents can enjoy on protected farmland.

“holding our ground” can no longer be the only strategy for supporting a resilient agricultural industry – farmers, farms, businesses, advisors, buyers, consumers – capable of thriving in the years ahead with a deep level of community support. Somerset County’s investment and leadership in

what the County itself can accomplish, protecting farmland, should be regarded as an ongoing catalyst for a greater, community-wide determination to make the most of Somerset County farming.

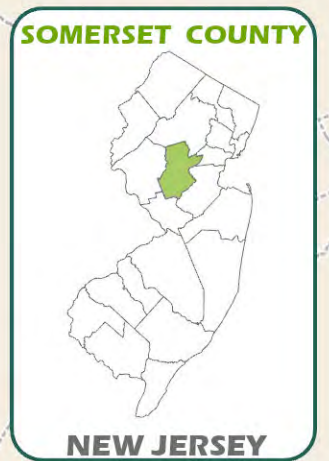


Preserved Farmland and Open Space

- Preserved Farmland
- Preserved Open Space



Miles
0 1 2



5.2. Somerset County's Agricultural Land Base

Agriculture is an essential feature of Somerset County's landscape, with farmland comprising nearly one-fifth of the county and farming practice remaining an integral part of county heritage and culture. Family farms have tilled the land for generations, and residents who are not part of the agricultural industry identify farmland as key to making Somerset County a desirable place to live and work. This section of the Farmland Preservation & Agricultural Development Plan discusses trends in the land base through time as well as key attributes affecting that land, including available soil and water.

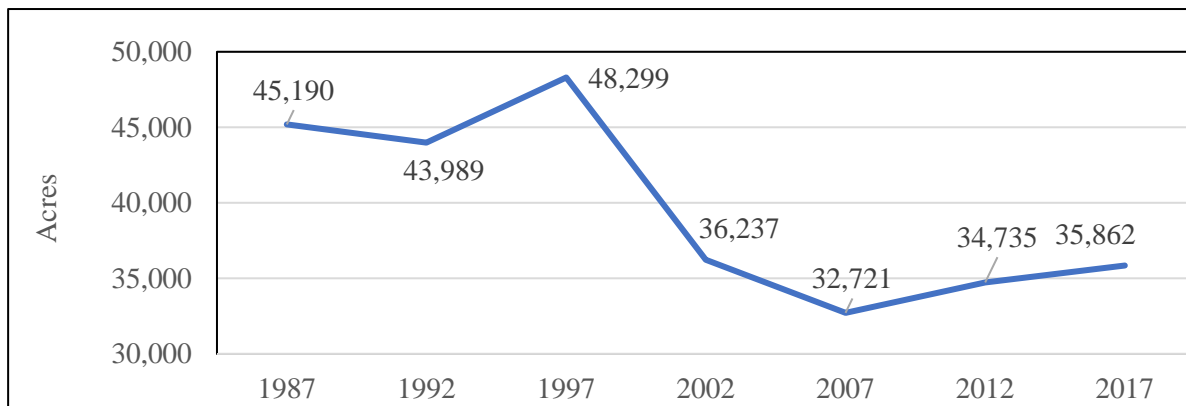
A. Introduction: Statistical Resources

For this plan, statistical information regarding agricultural production and market values was obtained from a combination of the United States Department of Agriculture's (USDA) National Agriculture Statistics Service (NASS) annual Census of Agriculture and the New Jersey Department of Treasury's Farmland Assessment.

The USDA conducts the Census of Agriculture every five years. It is a complete count of U.S. farms and ranches where \$1,000 or more in products were

raised and sold. Census questions have been added through time so not every census contains the same information. In addition, NASS does not report respondent information if only one farm in a county reports a certain information point (i.e., produces a specific crop) in order to protect the identity of individual participants. This is noticeable at a county level, where data points may drop off reported data for a given year, making trends difficult to determine at times. During the writing of

Figure 5.2.A Somerset County Land in Farms, 1987-20



Source: USDA Census of Agriculture

Table 5.2.1. Somerset County Acres in Agricultural Land by Municipality, 1997-2019

Municipality	1997	2000	2005	2010	2015	2019
Bedminster	11,049	10,036	10,366	10,059	9,170	10,285
Bernards	1,995	1,519	1,292	1,183	1,177	1,200
Bernardsville	1,450	1,409	1,560	1,696	1,806	1,861
Bound Brook	-	-	-	-	-	-
Branchburg	4,453	3,725	3,025	2,766	2,547	2,539
Bridgewater	738	563	419	487	455	306
Far Hills	1,055	1,143	1,421	1,333	1,383	1,478
Franklin	7,584	7,134	5,805	5,203	4,753	4,263
Green Brook	25	25	8	8	53	54
Hillsborough	15,402	14,060	12,235	11,443	10,280	9,704
Manville	50	-	-	-	-	-
Millstone	134	130	136	67	68	76
Montgomery	6,960	5,746	5,577	5,408	4,549	4,191
North Plainfield	-	-	-	-	-	-
Peapack-Gladstone	1,783	1,796	1,474	1,620	1,569	1,628
Raritan	-	-	-	-	-	-
Rocky Hill	30	26	29	29	10	16
Somerville	-	-	-	-	-	-
South Bound Brook	-	-	-	-	-	-
Warren	1,695	1,516	978	828	853	801
Watchung	14	14	12	-	43	43
Somerset County	54,417	48,842	44,337	42,130	38,715	38,444

Source: New Jersey Farmland Assessment

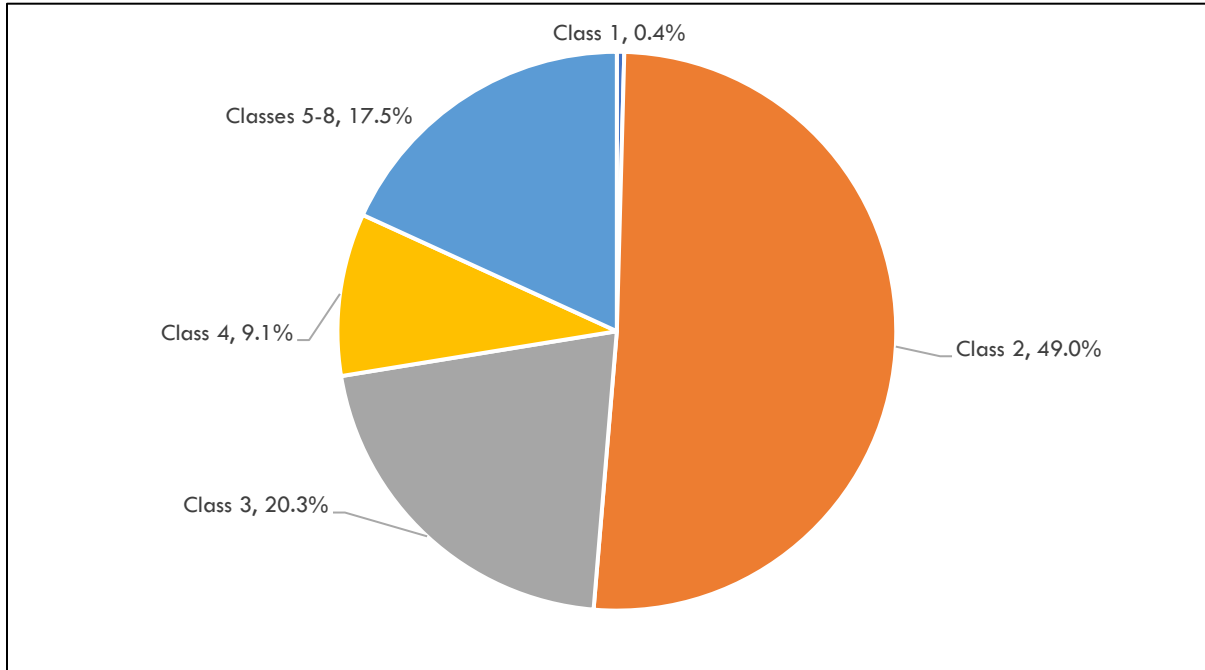
this plan, NASS had just completed conducting the 2017 Census. Where feasible, plan text was updated with 2017 data, but in some instances NASS had yet to release details and 2012 was the most recent data available.

The New Jersey Farmland Assessment was enacted into law by the state legislature in 1964. Through the assessment, farmland in New Jersey is valued at its productivity value rather than through standard property value assessment, but in turn agricultural landowners must fill out forms reporting information about their operations. The most recent data

available during the development of this plan is from 2019.

B. Location and Size of Agricultural Land Base

As of 2017, Somerset County had 35,862 acres in agriculture, about 19 percent of total land in the county. Figure 5.2.A shows how this number has declined since 1987, when there were 45,190 acres in farms or 23 percent of the county. This 21 percent decline in acreage over 30 years has not been a steady one, as agricultural land first grew to 48,299 in 1997 and then dropped below the current number to 32,721 in 2007. Agricultural land has actually

Figure 5.2.B. Capability Class Distribution of Soils in Somerset County

Source: USDA NRCS Soil Survey, Survey Area Version 14, Version Date 9/28/16.

rebounded by 3,141 acres or 10 percent in the last decade.

Table 5.2.1 provides a breakdown of the data from the New Jersey Farmland Assessment. These totals are not directly comparable to the Census data due to their different source and definitions, but they display a similar trend of declining agricultural land base. Between 1997 and 2015, Somerset County is reported as losing 29 percent of its land in agriculture, a decline of 15,702 acres. Of the agricultural decline in agricultural land between 1997 and 2015, more than 5,000 acres or one-third of the decline was located in Hillsborough Township.

Significant decreases were also seen in Franklin (2,831 acres or 37 percent), Montgomery (2,411 acres or 35 percent), and Branchburg (1,906 acres or 43 percent). In Franklin Township, 1,879 acres are no longer counted as farmland, but this represents a smaller percentage decline compared to most other municipalities and the county as a whole

(17 percent). As of 2015, more than half of the agricultural land in Somerset County was located in two municipalities: Bedminster (24 percent) and Hillsborough (27 percent). Six out of 21 municipalities have no farmland remaining, and another four have fewer than 100 acres in farmland remaining. In general, the northern, southern, and western sections of the county maintain the most agricultural land, with the center and eastern sections being occupied by suburban development.

C. Distribution of Soil Types

The Natural Resources Conservation Service (NRCS) in the USDA classifies soils based on certain characteristics, including a breakdown of eight different “capability groupings.” These groupings show the general suitability of soils for most kinds of field crops based on soil limitations, risk of damage if used for crops, and how well the soils respond to treatment. Note that capability groupings do not consider if soil has undergone a major transfor-

mation to change soil characteristics, such as urban development or irrigation. The capability groupings are as follows:

- **Class 1:** These soils have few limitations restricting their use. They are productive, deep, have low risk of erosion, and require only ordinary management practices to maintain productivity.
- **Class 2:** These soils have some limitations that reduce the choice of plants or require moderate conservation practices. Such limitations can include gentle slopes, moderate risk of erosion, less than ideal depth, etc. As a result, more than ordinary management practices are required to maintain productivity.
- **Class 3:** These soils have severe limitations that reduce the productivity of plants or require special conservation practices. Even with careful management, productivity may be limited.
- **Class 4:** These soils have even more severe limitations that restrict the productivity of plants and or require considerable management, such that resulting production may be marginal compared to inputs.
- **Classes 5 through 8:** These soils are generally not suited for crop production, as they have limitations that restrict their use to pasture, range, woodland, or wildlife food and cover.

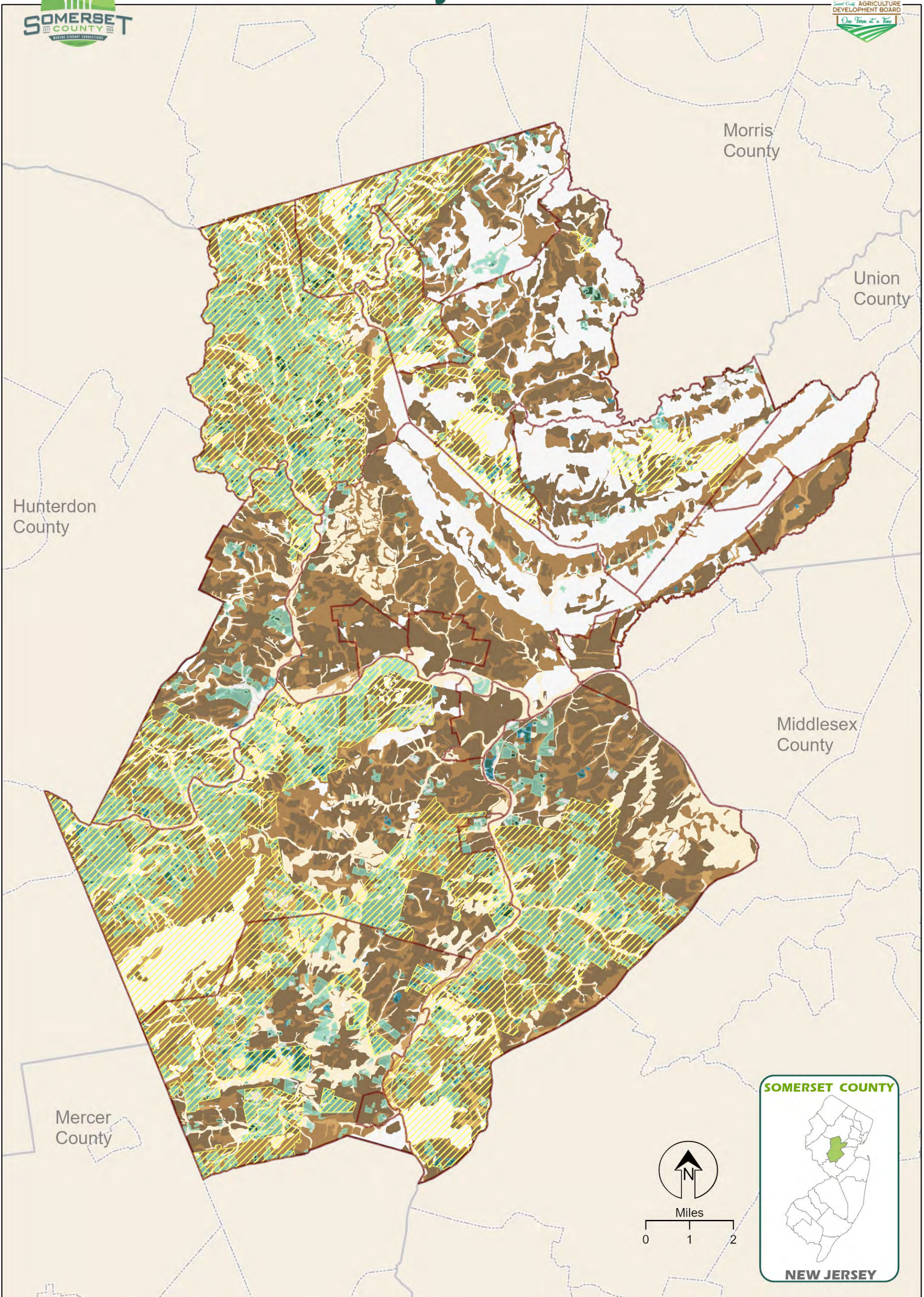
Figure 5.2.B displays the capability class distribution of soils in Somerset County. While less than one percent of the county's soils are the most ideal

for crop production, 49 percent of soils are classified as capability grouping two and can produce high yields of crops when treated and managed according to acceptable farming methods. Only 26.5 percent of the county's soils fall into classes four through eight and therefore are not recommended for most crop production.

Map 5.2.1 displays another classification of soil detail in Somerset County, this one by a slightly broader set of NRCS categories. These categories are as follows:

- **Prime Farmland Soils:** These align with Classes 1 and 2. The land therefore has the best combination of physical and chemical characteristics for producing crops.
- **Soils of Statewide Importance:** These generally align with Class 3, and can produce crops yields when well managed.
- **Local Importance:** Aligned with Class 4, soils of local importance can still be productive when managed for certain agricultural uses, including growing hay and raising/feeding of livestock. Unique soils. These are specific soils in Classes 5 through 8 that exhibit certain qualities that may be favorable to the production of specialized crops such as particular fruits or vegetables.
- **Not Prime Farmland.** Most of Classes 5 through 8.

As Map 5.2.1 shows, most of the prime farmland in Somerset County is located in the western and southern regions, namely in Bedminster, Branchburg, Hillsborough, Montgomery, and Franklin townships.



Productive & Tillable Soils

Select NCRS categories for productive soils shown with Somerset County land use land cover designated tillable soils and county agriculture development areas

Agriculture Development Areas

Soil Suitability	
	Prime Farmland
	Statewide Importance
	Statewide Importance (if drained)
	Unique Importance
	Local Importance
	Not Prime Farmland

Tillable Soils (LULC Categories)	
	Agricultural Wetlands (modified)
	Confined Animal Feeding Operation
	Cropland and Pastureland
	Former Agricultural Wetland
	Orchards and Vineyards
	Other Agriculture

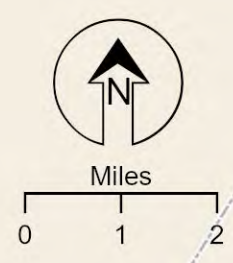


Table 5.2.2. Irrigation Status of Agricultural Land in Somerset County, NJ

	1997	2002	2007	2012	2017
Irrigated Agricultural Land					
Acres	571	293	372	526	876
Percent of Total Agricultural Land	1.2%	0.8%	1.1%	1.5%	2.4%
Farm Operations with Irrigation					
Number	60	66	60	53	88
Percent of Total Farm Operations	12.3%	14.9%	13.5%	13.3%	19.5%

Source: USDA Census of Agriculture

D. Number of Irrigated Acres and Available Water Sources

According to the U.S. Census of Agriculture, irrigated land represents a relatively small percentage of total agricultural land in Somerset County. Table 5.2.2 shows irrigated farmland trends for the county. Over time, fewer than one-fifth of agricultural operations have had irrigation. While only about two percent of total agricultural acreage has been irrigated through time, there has been an upward trend in the number and percentage of acres irrigated since 2002.

The municipal-level irrigation information found in the New Jersey Farmland Assessment data shows that the majority of irrigated land in the county is located in Montgomery Township, with significant amounts also found in Franklin and Hillsborough. This is likely connected to data discussed in Section 3, Agricultural Industry, which reveals that these three municipalities have the largest amount of acreage in nursery operations, as nurseries are a water-intensive form of agriculture. Further increasing the amount of irrigated land in Somerset County may be difficult in certain areas of the county due to limited availability of water. Table 5.2.3 displays key water data from the New Jersey Department of Environmental Protection (DEP) for the twenty Hydrologic Unit Codes (HUCs) partially or entirely in the county.

HUCs are a method by which subwatersheds are broken down and labeled. Data represented is as follows:

- Whether during peak water use in 2015 the subwatershed experienced net gain or loss of water.
- Which use category was the main one causing depletive and consumptive loss at peak times. Use categories include agriculture, aquifer leakage, industrial/commercial/mining, irrigation for non-agriculture such as lawns, and potable supply.
- Remaining available unconfined groundwater and surface water for depletive and consumptive use by HUC at peak use rates, ranging from “limited” to greater than 100 millions of gallons per day (mgd).
- The number and name of the watershed management area (WMA) in which each HUC11 is located.
- For each of these WMAs, the projected net amount of water that will remain available for new uses in 2020. This was calculated by DEP using the combined water available from unconfined sources



Table 5.2.3. Water Consumption and Availability in Somerset County Subwatersheds

HUC11	Gain/Loss at Peak Use Rates as of 2015 (mgd)	Primary Use at Peak Rates	Available Remain. Water at Peak Use (mgd)	WMA	WMA Name	Est. Net Water Avail. in 2020 (mgd)	Remain. Avail. Water if Use Full Allocation (mgd)
02030105050	3-10 loss	Potable	Limited	08	North and South Branch Raritan	8.5	-3.6
02030105060	0-10 gain	Non-Agricultural Irrigation	0-1	08	North and South Branch Raritan	8.5	-3.6
02030103010	>10 loss	Potable	Limited	06	Upper Passaic, Whippany, and Rockaway	2.6	-19.8
02030105070	0-3 loss	Potable	0-1	08	North and South Branch Raritan	8.5	-3.6
02030105120	>10 loss	Potable	Limited	09	Lower Raritan, South River, and Lawrence	26.8	-62.9
02030105080	0-3 loss	Potable	0-1	09	Lower Raritan, South River, and Lawrence	26.8	-62.9
02030105040	0-3 loss	Agricultural Irrigation	0-1	08	North and South Branch Raritan	8.5	-3.6
02030105030	0-3 loss	Non-Agricultural Irrigation	Limited	08	North and South Branch Raritan	8.5	-3.6
02030105110	0-10 gain	Non-Agricultural Irrigation	5-10	10	Millstone River	7.2	-5.6

Source: New Jersey Department of Environmental Protection, New Jersey Water Supply Plan 2017-2022, Figures 3.6, 3.7, and 3.10, and Table 3.2.

of supply and surface waters based on the stream low flow margin method, the approved safe yields of existing reservoir systems, and the total permitted allocations in the confined aquifers.

- For each WMA, the amount of water that would remain if instead of projected use all existing water allocations were maximized.
- Of the nine HUC11s in Somerset County, seven are currently experiencing loss at peak use rates and four have limited remaining available water for new uses. Those areas with losses are generally located in the middle and the eastern side of the county, with all or portions of Bernardsville, Bernards, Warren, Watchung, North Plainfield,

Green Brook, Bridgewater, Bound Brook, South Bound Brook, and Franklin experiencing the highest level of loss at more than 10 millions of gallons per day.

While all of the WMAs located entirely or partially in Somerset County are projected to have sufficient net water availability for current levels of use in 2020, if the full granted water allocations were used, they would be operating at a deficit. This issue is further discussed in Section 10, Natural Resource Conservation.



Hereford beef cattle grazing on a preserved farm in Hillsborough Township, which is among Somerset County municipalities with the greatest amount of preserved farmland. While the pleasing land use patterns on display across Somerset County may have evolved from deep colonial roots, today those patterns are retained, or altered, in part through the actions of municipal planning boards.

E. Farmland Assessment and Census of Agriculture Statistics and Trends

Number of Farms and Farms by Size

Figure 5.2.C shows trends in the number of Somerset County farm operations over the past 35 years, with data coming from the USDA Census of Agriculture. In that time, the number of farms has grown by 9 percent from 414 to 452. However, it has not been a steady upward trend and in between 1982 and 2017 there was a peak in the late 1990s when the number of farms reached 486. The number of farms rose by 13 percent between 2012 and 2017.

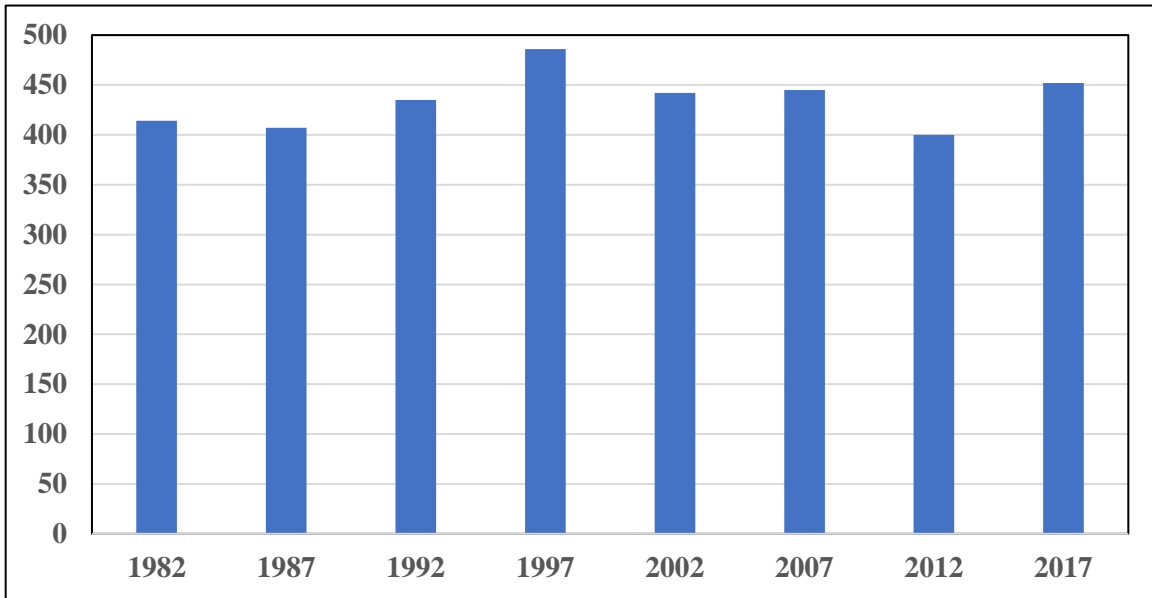
Figure 5.2.D breaks this trend down further, showing the size of the farms in Somerset County for each census year. While the total count has held relatively

steady over the 35-year period, the size of farms has shifted with the number of smaller farms growing while medium-to-large farm counts have declined. Farms that are 500 or more acres in size dropped by 35 percent from 23 to 15. Those between 50 and 499.9 acres fell by 43 percent or 68 farms. On the other hand, the number of farms that are 10 to 49.9 acres grew from 168 to 225 (34 percent), and the number of farms smaller than 10 acres nearly doubled from 65 to 122 (88 percent).

Because of their growth relative to other farm sizes, between 1982 and 2017 farms less than 10 acres

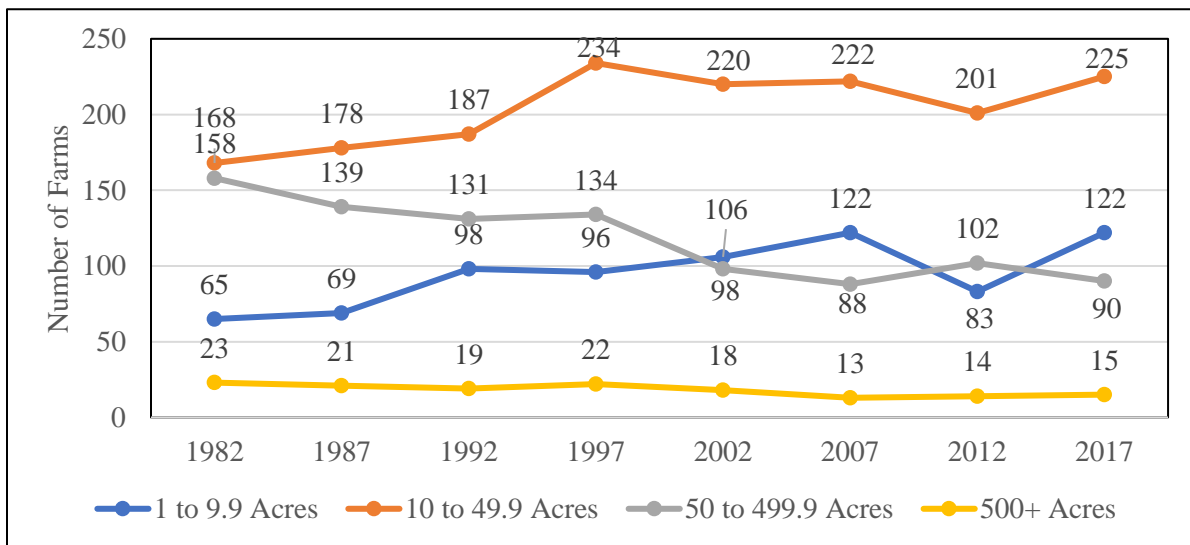


Figure 5.2.C. Somerset County Total Farm Operations, 1982-2017



Source: USDA Census of Agriculture

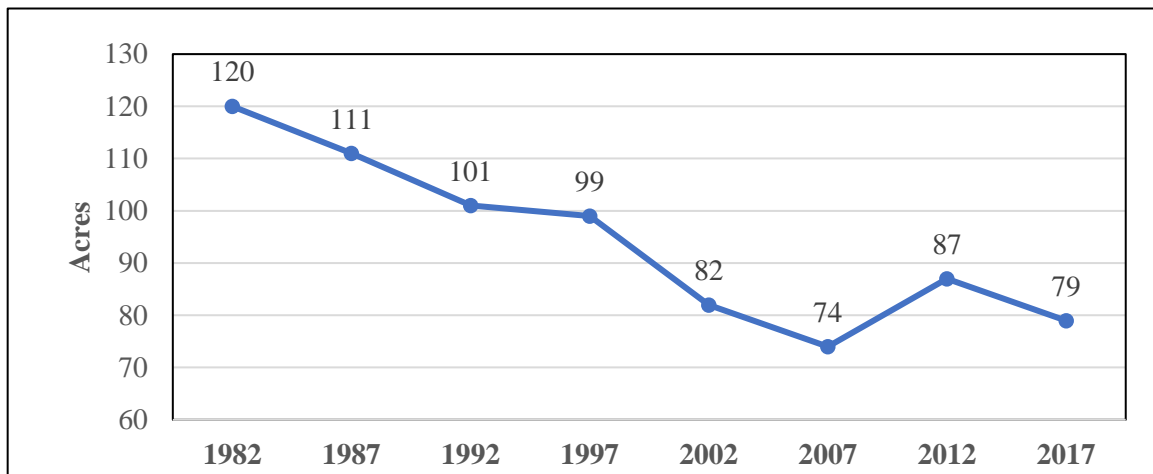
Figure 5.2.D. Somerset County Farm Operations by Size, 1982-2017



Source: USDA Census of Agriculture

in size grew from 15 percent of all Somerset County farms to 27 percent of farms. The increasing prominence of small farms in Somerset County reflects national trends. Just as farms smaller than 10 acres grew as a portion of all county farms, farms of the same size grew from 9 percent of U.S. farms

to 13 percent between 1997 and 2017. In its research, USDA has determined that the growth in small farm counts is due to a variety of factors, chief among them that a growing number of individuals are choosing to use small field crop operations as a

Figure 5.2.E. Somerset County Average Farm Size, 1982-2017

Source: USDA Census of Agriculture

Table 5.2.4. Somerset County Land in Farms by Land Use Type, 1987-2017

Acreage in Farms by Land Use	1987	1992	1997	2002	2007	2012	2017 ¹
Cropland, Harvested	22,951	21,316	22,471	15,931	15,184	17,580	(D) ²
Pastured Land	10,142	8,686	10,694	7,663	6,734	4,554	
Woodlands, not pastured	3,882	5,044	7,296	5,770	5,468	5,564	(D)
Other Croplands	5,741	4,916	3,859	3,675	2,743	2,475 ⁵	1,943 ³
Other Agricultural Land	2,474	4,027	3,979	3,198	2,592	3,178	2,795 ⁴
Total Land in Farms, 1987-2012	45,190	43,989	48,299	36,237	32,721	34,735	35,862
Permanent pasture and rangeland, other than cropland and woodland pastured						5,272	6,100
Total Cropland						20,241	19,869

Source: USDA Census of Agriculture

NOTES: (1) Ag Census 2017 data found at https://www.nass.usda.gov/Statistics_by_State/New_Jersey/index.php. (2) Ag Census explanation: "In keeping with the provisions of Title 7 of the United States Code, no data are published that would disclose information about the operations of an individual farm or ranch. All tabulated data are subjected to an extensive disclosure review prior to publication. Any tabulated item that identifies data reported by a respondent or allows a respondent's data to be accurately estimated or derived, was suppressed and coded with a 'D'."

https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1,_Chapter_2_County_Level/New_Jersey/
 (3) Defined in 2017 Ag Census as "Cropland idle or used for cover crops or soil improvement, but not harvested and not pastured or grazed; cropland on which all crops failed; and cropland in summer fallow. The 2017 Ag Census states that Somerset's 2012 acreage in this category was 2,475, not 3,859 as reported by the Ag Census in 2012. (4) Defined in 2017 Ag Census as "Land in farmsteads, homes, buildings, livestock facilities, ponds, roads, wasteland, etc."



Table 5.2.5. Somerset County Acreage in Farms by Municipality by Land Use Type, 1997-2015

Municipality	Cropland Harvested		Cropland Pastured		Permanent Pasture		Woodland		Other	
	1997	2015	1997	2015	1997	2015	1997	2015	1997	2015
Bedminster	3,317	3,370	1,129	514	2,385	1,478	4,119	3,659	99	149
Bernards	568	243	45	53	191	98	1,180	769	11	14
Bernardsville	373	368	70	60	162	223	844	1,149	1	6
Bound Brook	0	0	0	0	0	0	0	0	0	0
Branchburg	2,612	1,618	295	119	781	290	762	519	3	1
Bridgewater	237	71	29	6	210	38	262	340	0	0
Far Hills	334	370	44	26	215	233	461	734	1	20
Franklin	4,263	2,360	408	155	499	414	2,405	1,794	9	30
Green Brook	8	1	0	0	0	0	17	52	0	0
Hillsborough	7,838	4,975	783	315	2,199	1,724	4,537	3,238	45	28
Manville	50	0	0	0	0	0	0	0	0	0
Millstone	113	40	0	0	0	0	21	28	0	0
Montgomery	3,664	2,248	741	211	453	579	2,074	1,472	28	39
North Plainfield	0	0	0	0	0	0	0	0	0	0
Peapack-Gladstone	651	375	45	34	243	242	813	909	31	9
Raritan	0	0	0	0	0	0	0	0	0	0
Rocky Hill	30	10	0	0	0	0	0	0	0	0
Somerville	0	0	0	0	0	0	0	0	0	0
South Bound Brook	0	0	0	0	0	0	0	0	0	0
Warren	385	125	69	38	213	84	1,026	604	2	2
Watchung	8	0	0	0	0	0	0	43	0	0
Somerset County	24,451	16,174	3,658	1,531	7,551	5,403	18,527	15,310	230	296

Source: New Jersey Farmland Assessment, 1997-2015

supplement to their off-farm job.¹ In addition, part of the growth in small-farm counts might be a direct result of how farm numbers are determined. Congress has defined a farm as “a place that produces, or normally could produce, at least \$1,000 worth of agricultural commodities in a year.” As farm commodity prices rise with inflation, more and more

small operations that did not meet this threshold in the past are now counting as farms.

Average and Median Farm Size

Figure 5.2.E displays another view of farm size data, showing how the average size of farms in Somerset County has changed through time. Between 1982 and 2017, the average size fell from 120 acres to 79

¹ MacDonald, J., Korb, P., and Hoppe, R. (2013). *Farm Size and the Organization of U.S. Crop Farming*. Economic Research Service, USDA. P. 6. Retrieved

from: https://www.ers.usda.gov/webdocs/publications/45108/39359_err152.pdf.



Alpacas at their leisure on a preserved farm near Skillman, Montgomery Township. Not only are these animals entertaining for visitors to any farm devoted to agritourism, but they provide local fiber for regional artists and crafters and are considered a specialty crop in their own right.

acres, or 34 percent. However, 2017 was not the lowest point in the trend line. In 2007, average farm size reached its smallest at 74 acres. Unsurprisingly, the median size of farms in Somerset County has tended to follow the trends of average farm size. While earlier data is unavailable from USDA, the median size was 21 acres in 2002 and dipped slightly to 20 by 2017.

With this decline in average farm size, Somerset County stands counter to national trends. Over time, average farm size has grown in the U.S. partly because larger farms tend to perform better financially than smaller farms due to economies of scale.² Somerset County farms are also smaller on average than farms in the remainder of the U.S. In 2017 the U.S. average farm size was reported at 441 acres, more than five times the average size of a farm in the county. Average size does vary widely around the U.S., with western states tending to have larger farms which have only grown larger in recent years.

New Jersey has continually ranked in the bottom five of states in farm size, and Somerset County's average size is slightly higher than that of New Jersey (74 acres in 2017).

The root of Somerset County's decline in farm size can be clearly seen when reviewing the trends in farmland acreage from Figure 5.2.1. While the count of farms has trended upward over the past 35 years, Figure 5.2.A showed that these farms have been operating on a shrinking stock of available farmland. As a result, Somerset County is increasingly becoming a place with numerous small farms intermingled with suburban and commercial areas. This not only can result in increased conflicts between neighbors – farms and neighborhoods – but also makes it more difficult for farmers to make a living since efficiencies of scale tend to make larger farms more profitable than smaller ones.

² MacDonald, J., Korb, P., and Hoppe, R. (2013), p. 16.

Land Use in Farms by Type

Table 5.2.4 breaks down the agricultural land shown in Figure 5.2.A by land use. Over the past 25 years, the breakdown of different land uses has remained largely unchanged. As of 2012, 48 percent of the farmland in Somerset County was harvested cropland, by far making up the largest listed category of agricultural land. Most of the farmland decrease over the past 25 years has been in harvested cropland (5,371 acres) and pastured land (5,588 acres). Table 5.2.5 breaks this trend down by municipality using Farmland Assessment data. Following are notable trends:

- Harvested cropland decreased by more than a thousand acres in Franklin, Hillsborough, and Montgomery, and of the three Franklin saw the largest decrease in percentage of harvested cropland (45 percent).
- Bedminster actually saw a slight increase in harvested cropland between 1997 and 2015, growing by 2 percent or 50 acres. Pastured cropland dropped by more than half county-wide, with the largest drop in



Bedminster Township (615 acres or 54 percent).

- Bedminster Township also saw the largest decline in permanent pastureland, losing 907 acres or 38 percent.
- Of the land uses, woodland declined the least (only 17 percent). It also grew in a number of municipalities (Bernardsville, Bridgewater, Far Hills, Green Brook, Millstone, Peapack-Gladstone, and Watchung).
- Hillsborough saw the greatest decline of woodland acreage, at 1,299 (29 percent).

F. Conclusion

This section has covered trends in the agricultural land base and farm characteristics through time as well as key attributes affecting that land, including available soil and water. Agricultural land has actually rebounded by 3,141 acres or 10 percent in the last decade. The following section on trends in the agricultural industry is an important companion discussion of Somerset County's existing conditions for farming and agricultural development.

5.3. Somerset County's Agricultural Industry

This section of the plan details larger trends in the agricultural industry of Somerset County. In general, the county has seen a shift from an industry where milk cows were a major economic driver to a more diversified mixture of livestock and crops.

Agricultural sales were at a high point in 2012; 2017 saw a 13 percent decline in sales and livestock counts and crops harvested are down in almost every category when compared to 1997. In fact, the net profits of county farms have moved from positive in the late 1990s to negative in 2017.

To adapt, many farmers have moved into areas of the agriculture industry more suited to serving suburban lifestyles. Direct marketing has surged both in the county and nationwide. Agritourism is appearing, with activities that attract local and tourist visitors to spend additional money on farms. Horticulture sales continue to see strong growth, representing more than half of crop sales.

A. Introduction

The farming industry remains an important component of Somerset County's local economy. In 2017, agricultural income totaled \$20.1 million. While this may only be a small portion of the county's overall economic output, the ripple effects of the agricultural industry are felt by such other businesses as the stores, equipment suppliers, and veterinary services that depend upon the commerce of farms

B. Trends in Market Value of Agricultural Products Sold

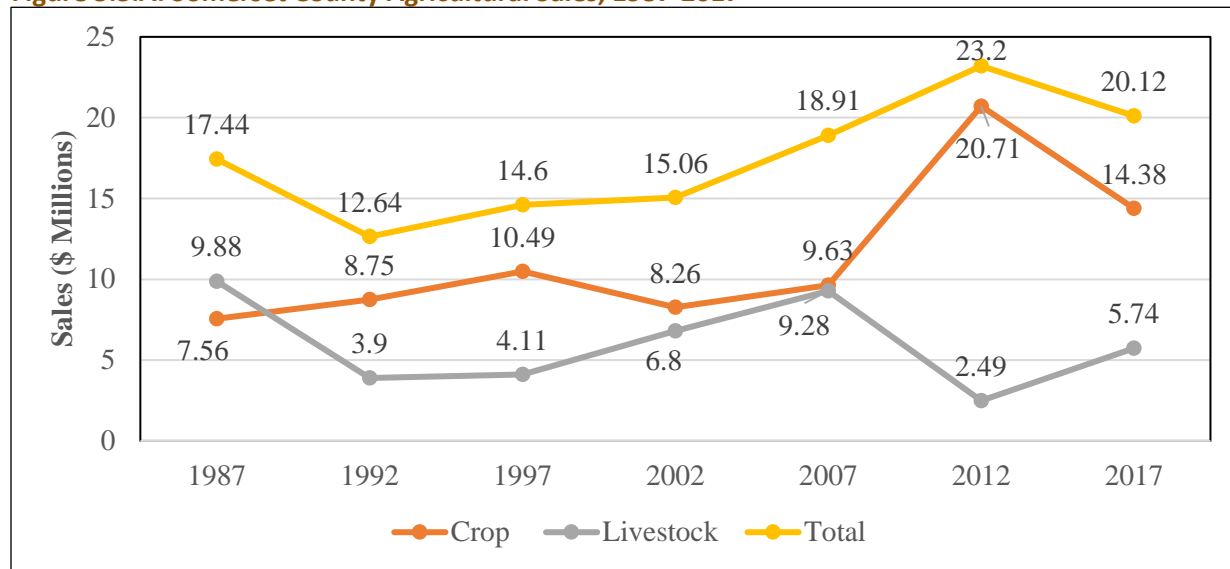
The USDA Census of Agriculture groups agricultural activities into two primary categories: "crops, including nursery and greenhouse" and "livestock, poultry, and their products." Figure 5.3.A shows sales trends in these two categories over three decades. Between 1987 and 2017, sales in "crops, including

nursery and greenhouse" saw an overall 90 percent increase. Over the same period, "livestock, poultry, and their products" sales declined by a total 42 percent. As a percentage of all agricultural sales in Somerset County, crops reached 71.5 percent of sales in 2017 compared to only 43.3 percent in 1987.

The results of the 2012 Census seem to be somewhat of an outlier, with crop sales spiking and livestock sales dropping, likely explained by a drought in that year that hit livestock producers particularly hard due to skyrocketing crop prices. Nonetheless, over the past 30 years, crop sales have been on an upward trend while livestock has been on a slow decline. It appears that Somerset County is joining



Figure 5.3.A. Somerset County Agricultural Sales, 1987-2017



Source: USDA Census of Agriculture, 1987-2017

statewide trends, as in New Jersey crop sales have recurrently represented more than 85 percent of statewide farm sales.

Crop Agricultural Sales

Table 5.3.1 further breaks down the growth in crop sales in the past 15 years, showing subcategories of crop sales from 2002 through 2017. Vegetables, field crops, grain, and horticulture (comprising the nursery, greenhouse, and sod subsectors), all saw strong growth over the 15-year period. Vegetable sales saw

the largest growth both in terms of value (\$2.2 million) and percentage (1,289%), likely driven by an increase in direct sales, discussed later in this section. Horticulture consistently represented the more than half of crop sales in Somerset County over the past 15 years, reflecting a national trend of increased interest in gardening. The National Gardening Association (NGA) has reported that as of 2014 35 percent of U.S. households participated in gardening either at

Table 5.3.1. Somerset County Crop Sales, 2002-2017

Crop Sold	2002	2007	2012	2017
Cut Christmas Trees & Short Term Woody Crops	\$248,000	\$75,000	\$43,000	\$114,000
Fruit & Trees	\$249,000	\$308,000	\$249,000	\$211,000
Vegetables	\$173,000	\$370,000	\$965,000	\$2,403,000
Field Crops, Excluding Grain	\$748,000	\$1,063,000	\$1,849,000	\$2,665,000
Grain	\$757,000	\$1,471,000	\$3,028,000	\$1,794,000
Horticulture	\$6,089,000	\$6,344,000	\$14,577,000	\$7,196,000
Total Crop Sales	\$8,264,000	\$9,631,000	\$20,711,000	\$14,383,000

Source: USDA Census of Agriculture, 2002-2017. Note: Data at this level was not available by county in the Census prior to 2002.

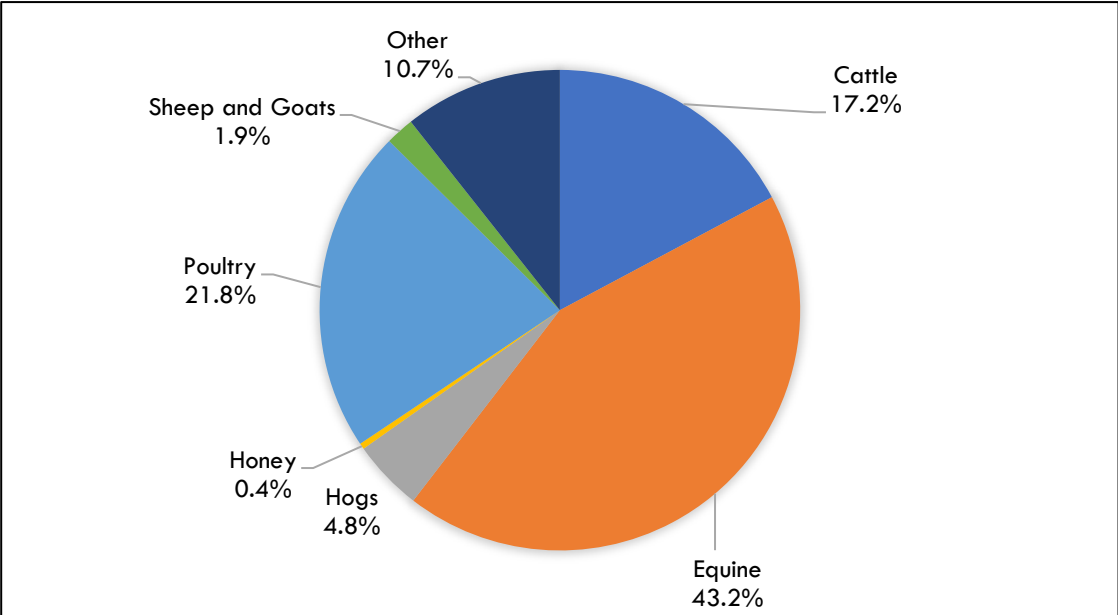
home or in a community garden lot.³ This is a 17 percent jump in five years, and one which is largely driven by millennials.

Even though there has been a national trend in the growing importance of horticulture, the fact that horticulture represented 50 percent of farm sales in Somerset County in 2017 is somewhat surprising. Only 15 years before in 2002, the county's horticulture sector comprised only 40.4 percent of agricultural sales, which was slightly low compared to the statewide share, 47.6 percent of sales. By 2017, Somerset County's percentage of horticulture crop sales grew to match the state, with both at about 50 percent.

nearby and the market for nursery products should be strong. In addition, congested highways make it difficult to move farm equipment for grain production and the prevalence of residential subdivisions creates conflict with intensive animal operations. Fortunately, county agricultural sales have been on the rise in almost every crop category, so it does not appear that horticulture is completely crowding out other types of operations.

Sales figures do have the potential to overstate the importance of the nursery/greenhouse subsector to agriculture in Somerset County. While a majority of the county's agricultural sales in 2017 are

Figure 5.3.B. Somerset County Livestock Sales by Type, 2017



Source: USDA Census of Agriculture, 2017

Horticulture is a rational move for farmers in a wealthy, suburbanized county. The customers are

³ National Gardening Association (2014). *Garden to Table; A 5-Year Look at Food Gardening in America*.

Retrieved from <https://garden.org/special/pdf/2014-NGA-Garden-to-Table.pdf>.



Among livestock in the county, horses are inventoried at the largest number of farms, 23 percent. More than half of the county's municipalities reported having equine stock in 2015.

attributable to horticulture, only 61 or 13 percent of farms in the county contained nursery/ greenhouse operations. This is actually a lower number than in 2002 when there were 93 horticulture operations, representing 21 percent of county farms. In addition, nursery and greenhouse crops tend to be more expensive to produce, meaning that the net revenue of those operations may be less than the growing sales figures suggest.

Livestock Agricultural Sales

Although livestock sales have declined as a percentage of total sales in the county, its importance to agriculture in Somerset County should not be discounted. Per the *2008 Comprehensive Farmland Preservation Plan of Somerset County*, the livestock industry provides the demand for part of the field crop production as grain

and hay produced in the county is sold to local livestock farmers for feed. In addition, some livestock farmers grow their own grain in order to minimize feed costs, and such grain would not be reported in Census sales figures. Figure 5.3.B displays 2017 livestock sales in Somerset County broken down by category of livestock.

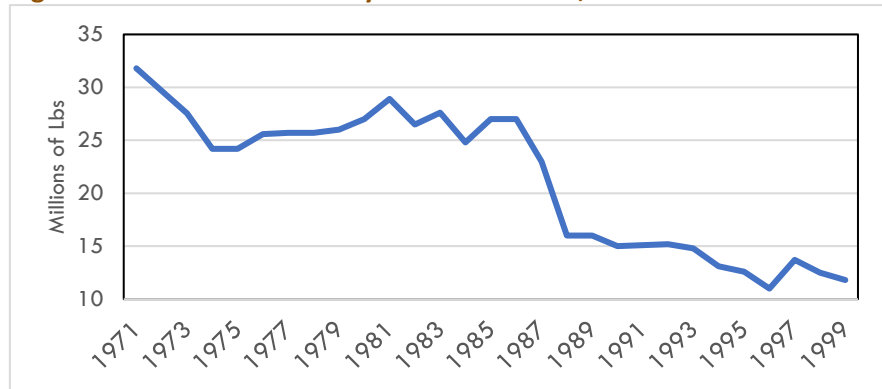
In 2017, equine sales represent by far the largest portion of livestock sales, totaling \$2.5 million or 43 percent of livestock sales in the county. The horse is the state official animal in New Jersey and has long been a part of the state's culture. A 2007 study found that the equine industry had a \$1.1 billion annual impact in the state and generated 13,000 jobs.⁴ Horses are found in every New Jersey county, and the state has the highest concentration of horses in the U.S.⁵ Somerset County is no exception, and the equine industry is a meaningful component of the county's economy and culture.

Among livestock in the county, horses are inventoried at the largest number of farms (23 percent of all farms) and over half of the municipalities reported having equine stock in 2015.

According to 2015 New Jersey Farmland Assessment data, 275 of the 38,715 agricultural acres in the county were committed to the equine industry. Of this, 143 acres are committed to boarding, 11 acres are for rehabilitation, 103 acres for training, and the remainder for miscellaneous non-specified uses. Unsurprisingly, the two municipalities with the most reported horse stables and horse

⁴ Rutgers Equine Science Center. (2007). *The New Jersey Equine Industry 2007 Economic Impact*. Retrieved from: <http://esc.rutgers.edu/wp-content/uploads/2014/11/2007EconomicImpact.pdf>.

⁵ Astudillo, C. (2018). "Jersey's packed with people. Turns out, it's got a ton of horses, too." Retrieved from: http://www.nj.com/data/2018/02/there_are_way_more_horses_in_new_jersey_than_you_d.html

Figure 5.3.C. Somerset County Milk Production, 1971-1999

Source: USDA National Agricultural Statistics Service Surveys

farms are Bedminster and Hillsborough, the two that had the largest stock of equine in Figure 5.3.B above.

The equine-related businesses found in Somerset include the following:⁶

- Boarding Stables/Livery Yards;
- Breeding Farms;
- Dressage Stables;
- Horse Leasing Stables;
- Horse Training Stables;
- Hunter Jumper Stables;
- Lesson Stables;
- Pony Parties/Birthday Parties;
- Reining Stables; and
- Summer Horse Riding Camps.

This preponderance of equine sales, followed by poultry and non-milk cattle, is a significant change from historical trends in Somerset County where, prior to the past two decades, dairy production was the primary staple of livestock agriculture. Even as of

1992, milk sales remained about half of livestock sales in the county, but by 2012 no milk sales number was even reported in the Census.

Figure 5.3.C shows the large decline in county milk production between 1971 and 1999, the last year where a number was reported in the USDA's National Agricultural Statistics Service (NASS) Surveys. During that time, production fell from 31.8 million pounds of milk to only 11.8 million pounds, a 63 percent drop.

The *2008 Comprehensive Farmland Preservation Plan of Somerset County* attributed this trend to a number of factors. Beginning in the 1980s, local development pressures drove up property values and thus taxes. This had a detrimental impact on the bottom line of land-intensive agriculture operations like dairy farms. In addition, inflation increased the costs of inputs, milk prices were volatile and did not keep up with inflation, and several weather-created losses occurred, combining to make market conditions very unfavorable for milk production. In a

⁶ Somerset County, *New Jersey Horse Stables and Horse Farms Directory*. Accessed on February 18, 2018, from:

<https://www.ohorse.com/stables/local/north-america/united-states/new-jersey/somerset-county/page/2/>.



worldwide market, milk prices rise and fall, sometimes dramatically, and many dairy farms lack the resources to weather a long economic downturn. Finally, refrigeration and shipping enhancements during that time period meant that New York City no longer needed to rely on a local dairy supply. Thus, Somerset County's farmers faced competition from around the country or even the world. With dairy farming looking less viable as a career, farmers sold their land or transitioned to other forms of agriculture.

Table 5.3.2 provides another presentation of livestock agricultural sales in Somerset County, this time measured by the number of livestock sold. The value of sales per head of different livestock varies widely but, unsurprisingly based on the sales data above, cattle, poultry, and equine all reported significant sales in 2017.

Agricultural Profitability

When analyzing sales information, it is important to take into consideration whether those sales are sufficient to cover the costs of operating agricultural operations. Table 5.3.3 compares Census reported sales totals to expense totals to get an idea of the net profit for farmers in Somerset County. The result is a negative trend, where over a 20-year period profits countywide declined from positive \$1.8 million to a loss of \$11.5 million.

C. Agricultural Production Trends over the Last 20 Years

Crop Production

The Census of Agriculture does not capture information on the counts of the quantity of produced vegetables, fruit, or horticultural products. However, it does collect data regarding production of field crops, grain, and Christmas trees as presented in Table 5.3.4. In addition, the USDA's annual NASS

Surveys captures production data for field crops and grain, shown in Table 5.3.8.

While direct comparison of weight produced may not be appropriate between hay and grains since hay is harvested as a whole plant versus corn, soybeans, and wheat, where only the grain is harvested, the exhibits do point to hay being a dominant agricultural product in the county with an upward production trend. Grown on 37 percent of county farms in 2017, hay is a low-intensity crop that requires fewer inputs in terms of fertilizer, irrigation, or labor compared to other field crops. In fact, as of 2012, Somerset County was ranked fourth out of the twenty counties in New Jersey for production of "other crops and hay."

Combined, field crops (predominantly hay) and grain (corn, soybeans, and wheat) made up a significant 18.5 percent of county agricultural sales discussed in the previous section of this Plan. And again, production shown in Table 5.3.7 provides a more holistic view of the importance of hay and grains in agriculture in Somerset County since the Census does not capture the sales value of crops used on-farm for livestock feed. Note that the counts from the USDA NASS Surveys in Table 5.3.8 indicate a decline in the various field crops produced in the past decade, and even lack hay counts since 2008. This is likely due to variance in the way survey results are reported, since Census data in Table 5.3.7 shows growth in all crop types produced between 2002 and 2017, with the exceptions of Christmas trees and wheat. According to Extension Agent Nick Polanin, there was a glut in the Christmas tree market in the mid-2000s which, combined with the recession at the end of the decade, led to a large decline in tree production. However, he has seen signs that Christmas tree production is returning,

Table 5.3.2. Somerset County Animal Sales Measured in Head, 1997-2017

Animal Sales	1997	2002	2007	2012	2017
Alpacas	*	*	27	*	33
Cattle, Including Calves	2,668	1,138	906	2,101	761
Chickens, Broilers (for meat)	*	*	*	3,422	*
Chickens, Layers (for eggs)	379	*	*	1,619	2,088
Equine, Horses & Ponies	*	70	75	62	132
Goats (including Meat and Milk)	*	50	59	115	113
Hogs	302	194	413	143	1,673
Llamas	*	*	5	*	*
Sheep (including Wool)	1,142	600	683	663	543
Turkeys	*	*	*	170	699

Source: USDA Census of Agriculture, 1997-2017 * Data not reported, or withheld by USDA to avoid disclosing data for individual operations.

Table 5.3.3. Somerset County Agricultural Operations Sales v. Expense (\$ millions), 1997-2017

	1997	2002	2007	2012	2017
Sales Totals	14.6	15.1	18.9	23.2	20.1
Expense Totals	12.8	14.2	20.6	28.4	31.6
Net profit	1.8	0.9	-1.66	-5.2	-11.5

Source: USDA Census of Agriculture, 1997-2017. * Totals may not add due to rounding.

Table 5.3.4. Somerset County Crop Production, 1997-2017

Crop	Metric	1997	2002	2007	2012	2017
Corn, Grain	BU	274,129	88,158	261,966	237,916	153,720
Christmas Trees	Trees	*	7,567	2,650	1,874	2,445
Hay	Tons	*	14,119	13,983	19,366	20,669
Oats	BU	15,333	10,283	6,720	19,398	2,000
Rye	BU	2,326	6,172	1,682	5,082	*
Soybeans	BU	67,688	39,941	55,181	87,369	96,639
Wheat	BU	65,484	87,939	51,977	56,386	75,812

Source: USDA Census of Agriculture, 1997-2017. * Data not reported in relevant USDA survey.

with farmers asking for more advice on tree growth and marketing. The Christmas tree sales in 2017 proved him to be right.

The New Jersey Farmland Assessment does capture data regarding the acreage upon which all crop types are produced, including the categories for which the

Census does not have production data. Tables 5.3.5 and 5.3.6 present this data for crop categories in Somerset County. These exhibits tell a very similar story to the production charts above. Hay is produced on by far the largest number of acres in the county. As of 2015, it represented 63.8 percent of all Somerset County harvested cropland, an increase

from 50 percent in 1997. Soybeans come in second, representing 11.2 percent of harvested cropland in the county. All of the grain crops combined represent 22 percent of county cropland, a decline from the 31.3 percent they represented in 1997.

Of note, grain crops require a thousand acres or more to be economically viable for a full-time farmer. With the smaller farm sizes in New Jersey, most grain farmers have to lease land from one or more landowners. If a landowner is not a farmer, the agricultural use assessment is a good reason to lease. Most landowners prefer to lease to grain or hay producers since they require few visits to the farm to raise their crops.

Beyond hay and grain, fruits, vegetables, and Christmas trees are also produced on small but significant acreage in the county.

Per the Census, fruit and trees made up \$211,000 in sales in 2017. The Farmland Assessment data in Table 5.3.5 shows that fruit was grown on 92 acres in 2015. Fruit orchards have very strong sales per acre compared to most agricultural products and are often used for value-added products such as jams and baked goods.

Vegetable sales totaled \$2.4 million in 2017, a 1,289 percent increase over sales in 2002. Vegetables, like fruit trees, have high sales values relative to the land area required to grow them. However, they require more expense in terms of fertilizer, pesticides, irrigation, and labor compared to fruit orchards. Therefore, vegetable operations in Somerset County tend to be smaller, with 23 out of 34 vegetable farms in 2012 harvesting less than 5



acres and only two harvesting more than 25 acres (per Census data). As shown in Table 5.3.6, land used for vegetables increased by 140 acres from 2005 to 2015, a significant increase. However, this is still a decline from 1997 when the acreage was 496 for vegetables.

Finally, Christmas trees were grown on 251 acres in the county in 2015, but sales were down to \$114,000 in 2017 compared to \$248,000 in 2002. This sales decline may be due to the cyclical nature of tree sales, as trees require several years of growth before reaching maturity.

Table 5.3.7 shows another view of cropland trends in Somerset County, this time by municipality. As of 2015, a full third of the municipalities – Bound Brook, Manville, North Plainfield, Raritan, Somerville, South Bound Brook,

and Watchung – had no reported harvested cropland. Notable trends shown by Table 5.3.7 include:

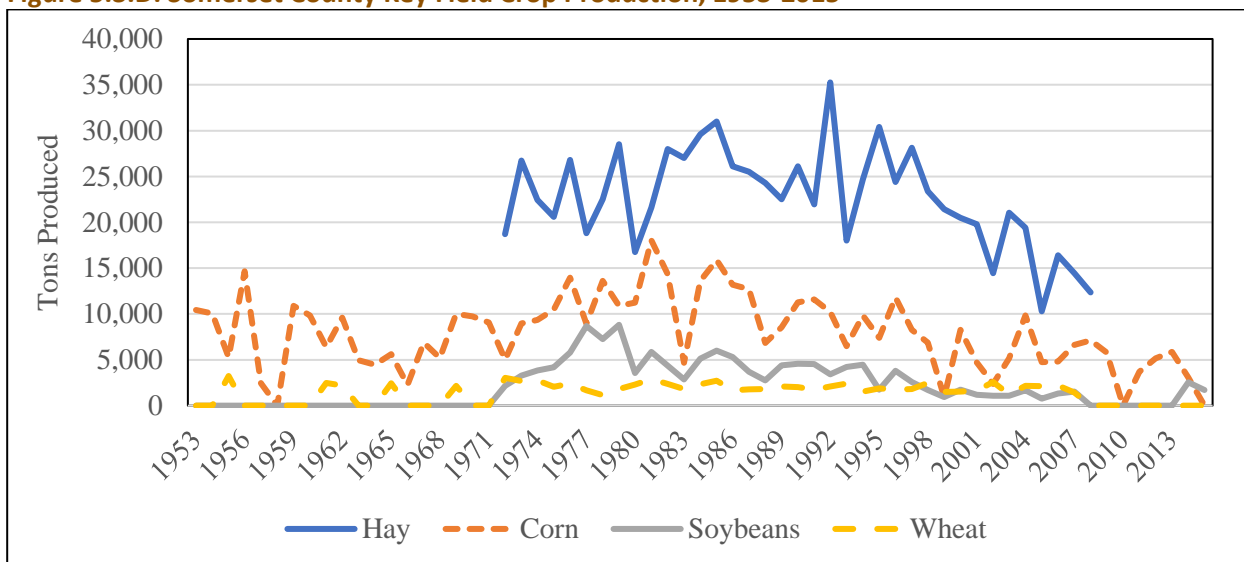
- 91 percent of field crops acreage is located in five municipalities: Hillsborough (4,188),
- Bedminster (3,516), Franklin (1,936), Montgomery (1,874), and Branchburg (1,602).
- Only Far Hills saw an increase in field crop acreage between 1997 and 2015.
- 52 percent of vegetable acreage was located in Hillsborough as of 2015.
- Both Franklin Township (91 acres) and Warren Township (111 acres) saw significant declines in vegetable acreage between 1997 and 2015.

Table 5.3.5. Somerset County Crop Acreage, Field Crops and Nursery, 1997-2015

	1997	2000	2005	2010	2015
Barley for Grain	41	21	39	95	52
Corn for Grain	3,614	2,182	2,077	1,474	880
Corn for Silage	742	658	412	352	65
Alfalfa Hay	2,639	2,605	1,534	1,957	1,729
Other Hay	9,596	8,170	7,883	8,747	8,594
Oats for Grain	449	132	89	80	172
Rye for Grain	331	522	354	295	149
Sorghum	151	81	142	65	81
Soybeans	2,011	1,242	1,177	1,285	1,816
Wheat	1,207	1,942	1,129	799	484
Other Field Crops	108	126	29	136	33
Total Field Crops	20,889	17,681	14,865	15,285	14,055
Bedding Plants	29	20	36	17	30
Cut Flowers	20	14	59	13	17
Trees & Shrubs	788	658	671	533	466
Cultivated Sod	436	416	334	218	146
Christmas Tree	449	344	308	243	251
Other Ornamental Crop	9	13	13	4	15
Total Nursery	1,731	1,465	1,421	1,028	925
Total Harvested Cropland	24,451	21,767	18,737	18,225	16,174

Source: New Jersey Farmland Assessment, 1997-2015

Figure 5.3.D. Somerset County Key Field Crop Production, 1953-2015



Source: USDA National Agricultural Statistics Service (NASS) Surveys, 1953-2015



Table 5.3.6. Somerset County Crop Acreage, Vegetables, Fruit, Berries, and Other, 1997-2015

Crop	1997	2000	2005	2010	2015
Asparagus	1	0	3	1	5
Lima Beans	0	1	0	0	6
Snap Beans	8	4	0	1	0
Cabbage	9	9	3	1	2
Carrots	1	0	0	0	0
Sweet Corn	232	140	59	57	46
Cucumbers	7	7	3	2	5
Eggplant	4	5	2	1	5
Lettuce	3	2	1	10	3
Onion	0	0	0	1	1
Peas	1	0	2	0	0
Bell Pepper	12	12	7	10	9
White Potato	2	0	0	5	3
Sweet Potato	0	1	0	0	0
Pumpkins	73	111	49	39	38
Spinach	1	0	0	0	6
Squash	5	24	3	4	12
Tomatoes	24	17	18	14	46
Melons	8	1	1	3	4
Mixed Other Veg	105	62	33	74	135
Total Vegetables	496	396	184	223	324
Apples	99	102	89	76	73
Peaches	33	31	14	13	13
Cherries	0	0	0	1	1
Nectarines	0	0	0	1	1
Pears	1	8	0	1	2
Other Fruit	46	21	26	21	2
Non-Bearing	0	0	1	7	0
Total Fruit	179	162	130	120	92
Blueberries	2	1	1	3	8
Cranberries	0	0	0	0	0
Strawberries	9	9	6	1	6
Blackberries/Raspberries	0	0	2	0	5
Other Berries	4	4	0	2	0
Total Berries	14	14	9	6	19
Grapes	5	0	24	11	12
Tree Nuts	0	3	0	2	7
Total Harvested Cropland	24,451	21,767	18,737	18,225	16,174

Source: New Jersey Farmland Assessment, 1997-2015

Table 5.3.7. Somerset County Harvested Crop Area by Municipality, 1997 versus 2015

Municipality	Field Crops		Vegetables		Fruits		Berries		Nursery	
	1997	2015	1997	2015	1997	2015	1997	2015	1997	2015
Bedminster	3,516	3,140	10	20	24	23	0	0	73	42
Bernards	325	187	29	5	61	29	0	0	117	17
Bernardsville	354	344	2	2	17	3	1	0	9	23
Bound Brook	0	0	0	0	0	0	0	0	0	0
Branchburg	2,199	1,602	4	4	6	2	0	0	97	78
Bridgewater	172	49	20	3	16	2	0	0	16	14
Far Hills	282	347	0	0	8	13	0	0	3	4
Franklin	3,163	1,936	138	47	14	7	4	15	576	189
Green Brook	0	0	0	0	0	0	0	0	8	1
Hillsborough	6,928	4,188	138	169	12	2	10	1	418	213
Manville	0	0	0	0	0	0	0	0	50	0
Millstone	102	40	0	0	0	0	0	0	0	0
Montgomery	3,111	1,874	18	42	15	6	0	2	206	256
North Plainfield	0	0	0	0	0	0	0	0	0	0
Peapack-Gladstone	513	259	0	14	6	5	0	1	111	74
Raritan	0	0	0	0	0	0	0	0	0	0
Rocky Hill	26	10	2	0	0	0	0	0	2	0
Somerville	0	0	0	0	0	0	0	0	0	0
South Bound Brook	0	0	0	0	0	0	0	0	0	0
Warren	198	79	129	18	0	0	0	0	43	14
Watchung	0	0	6	0	0	0	0	0	2	0
Somerset County	20,889	14,055	496	324	179	92	15	19	1,731	925

Source: New Jersey Farmland Assessment, 1997 and 2015

- Just four municipalities saw an increase in vegetable acreage, with Hillsborough experiencing the largest growth at 31 acres (22 percent).
- Only Bedminster (23 acres), Bernards (29 acres), and Far Hills (13 acres) have more than 10 acres of fruit as of 2015. These municipalities combined make up 71 percent of the fruit acreage in the county. Far Hills Borough was the only municipality that experienced an increase in fruit acreage between 1997 and 2015.
- Franklin Township represented 15 acres out of 19 acres of county berry cropland in 2015. Only four municipalities had reported growth of fruit in 2015 (Franklin, Hillsborough, Montgomery, and Peapack-Gladstone).
Montgomery (256 acres), Hillsborough (213 acres), and Franklin (189 acres) are the only municipalities in the county with more than 100 acres in nurseries in 2015. The only one of these with growth from 1997 to 2015 was Montgomery (50 acres).



Table 5.3.8. Somerset County Animal Inventory, 1997-2015

	1997	2000	2005	2010	2015
Beef Cattle	3,643	3,175	1,724	1,384	1,405
Mature Dairy	423	234	420	23	31
Young Dairy	350	255	168	156	72
Equine	1,223	1,323	1,347	1,440	1,214
Sheep	1,487	1,257	1,258	1,229	1,132
Swine	179	218	424	344	493
Beehives	140	102	160	338	282
Ducks	231	284	2,175	1,108	258
Fur Animals	49	34	32	230	56
Goats	121	208	284	435	312
Meat Chickens	1,665	1,473	101,482	125,906	72,444
Egg Chickens	2,512	2,165	6,871	6,495	9,678
Turkeys	437	372	1,836	5,324	3,569
Other Livestock	53,064	50,990	49,680	32,743	19,733

Source: New Jersey Farmland Assessment, 1997-2015

Livestock Production

Turning to the livestock sector of the agricultural industry in Somerset County, Table 5.3.8 and Table 5.3.9 display two depictions of data highlighting the diversity of animal operations in the county. Table 5.3.8 shows the Farmland Assessment data regarding the net inventory of the county’s livestock and Table 5.3.9 displays Agriculture Census information regarding how many operations there are of each animal category.

As Table 5.3.8 shows, the five largest animal inventories in the county are chicken (72,444 for meat and 9,678 for eggs), turkeys (3,569), beef cattle (1,405), equine (1,214), and sheep (1,132). The numbers are unsurprising given that these are mostly categories that sold significant quantities of animals in recent years. As was noted before, cattle sales alone make up 67 percent of animal sales in the county. Beyond these largest inventories, Tables 5.3.8 and 5.3.9 demonstrate that farms in Somerset County contain a large diversity of animal operations,

ranging from poultry of all types to honey to hogs to llamas, etc. Numbers in the tables highlight a few cattle industry trends of note. First, USDA Census data reiterates the declining number of milk cow operations in the county, reaching only four in 2017. Second, 52 percent of the cattle in the county are located at six farms with between 100 and 199 head of cattle, demonstrating that cattle farms in the county tend towards larger operations. Finally, the number of cattle operations is declining in the county, falling by almost half between 1997 and 2017.

Other notable trends include:

- The primary categories seeing significant growth in stock between 1997 and 2015 were meat chickens (70,779 or 4,251 percent), egg chickens (7,166 or 285 percent), turkeys (3,132 or 717 percent), swine (314 head or 175 percent), and beehives (142 or 101 percent).

Table 5.3.9. Somerset County Animal Operation Counts, 1997-2017

Operation	1997	2002	2007	2012	2017
Alpacas	*	*	10	5	16
Aquaculture	*	1	*	*	3
Cattle, Including Calves	120	95	76	67	63
(1 to 9 Head)	62	63	46	32	35
(10 to 19 Head)	14	3	11	8	10
(20 to 49 Head)	21	17	6	17	8
(50 to 99 Head)	12	7	9	3	4
(100 to 199 Head)	6	2	3	1	6
(200 to 499 Head)	3	2	*	6	*
(500 or More)	2	1	1	*	*
Cattle, Cows, Beef	76	27	59	46	43
(1 to 9 Head)	*	5	41	22	22
(10 to 19 Head)	*	9	8	11	9
(20 to 49 Head)	*	10	8	13	7
(50 to 99 Head)	*	2	2	*	4
(200 to 499 Head)	*	1	*	*	1
Cattle, Cows, Milk	16	5	6	5	4
Equine, Horses & Ponies	*	123	111	140	105
Equine, Mules & Burros & Donkeys	*	2	12	9	34
Hogs	28	11	11	7	22
(1 to 24 Head)	25	7	9	5	16
(25 to 49 Head)	2	3	*	1	3
(50 to 99 Head)	1	1	*	1	1
(100 to 199 Head)	*	*	1	*	*
(200 to 499 Head)	*	*	1	*	2
Honey, Bee Colonies	*	2	14	21	42
Llamas	*	5	6	2	6
Chickens, Broilers (for meat)	4	10	6	5	9
(1 to 1,999 Head)	*	8	5	4	4
(2,000 to 59,999 Head)	*	2	*	1	4
(100,000 to 199,999 Head)	*	*	1	*	1
Chickens, Layers (for Eggs)	58	32	55	67	95
(1 to 9 Head)	*	24	43	53	71
(50 to 99 Head)	*	4	9	6	8
(100 to 199 Head)	*	2	1	6	9
(400 to 3,199 Head)	*	*	1	1	7
(3,200 to 9,999 Head)	*	2	1	1	*
Ducks	*	5	5	2	7
Emus	*	*	1	*	3
Geese	*	4	2	2	3

(Continued on page 38)

Table 5.3.9. Somerset County Animal Operation Counts, 1997-2017, cont'd

Operation	1997	2002	2007	2012	2017
Guineas	*	*	*	4	10
Peafowl, Hens, & Cocks	*	*	*	1	9
Pheasants	*	2	8	*	1
Pigeons & Squab	*	1	1	*	3
Quail	*	2	2	*	3
Turkeys	4	1	9	6	5
Rabbits, Live & Pelts	*	1	3	2	3
Sheep, Including Lambs	48	42	69	48	67
Goats	*	15	30	32	30

Source: USDA Census of Agriculture, 1997-2017. * Data not reported, or withheld by USDA to avoid disclosing data for individual operations.

- Horses are inventoried at the largest number of farms (23 percent of all farms). The only types of operations showing meaningful growth in number between 1997 and 2017 (limited to categories with data in the 1997 USDA Census) were chickens (layers) and eggs. In fact, the majority of the growth in chicken operations appears to be in operations with fewer than 10 chickens.

Table 5.3.10 shows another view of animal inventory trends in Somerset County, this time by municipality. As of 2015, a nearly half of the municipalities – Bound Brook, Green Brook, Manville, Millstone, North Plainfield, Raritan, Rocky Hill, Somerville, South Bound Brook, and Watchung – had no reported agricultural livestock. Significant trends shown by the table include:

- The vast majority of meat chickens in the county (98 percent) were in Franklin in 2015.
- Four municipalities – Montgomery (4,819), Hillsborough (1,774), Franklin (1,034) and Bedminster (983) – made up 89 percent of the egg chickens in the County in 2015.

- Franklin Township makes up 99 percent of the turkey count in the county and was one of only two municipalities with reported turkeys in 2015.
- Bedminster Township has the largest count of beef cattle at 463 in 2015. However, it has also seen by far the largest decline, dropping from 1,653 in 1997, a drop of 72 percent.
- Only Peapack-Gladstone saw an increase in beef cattle between 1997 and 2015.
- Franklin (574), Hillsborough (228), Montgomery (111), and Franklin (106) are the only municipalities with more than 100 equine. However, over half of the municipalities have reported equine in 2015.
- Bedminster Township saw by far the largest increase in equine between 1997 and 2015, growing by 214 or 59 percent.

Sheep are spread relatively evenly among related municipalities, with the largest counts at Bedminster (199), Hillsborough (195), Far Hills (143), Peapack-Gladstone (141), and Franklin (100). Far Hills saw

Table 5.3.10. Somerset County Livestock Inventory by Municipality, 1997 versus 2015

Municipality	Chicken (Meat)		Chicken (Eggs)		Turkey		Beef Cattle		Equine		Sheep	
	1997	2015	1997	2015	1997	2015	1997	2015	1997	2015	1997	2015
Bedminster	0	142	104	983	0	44	1,653	463	360	574	117	199
Bernards	53	0	76	249	0	0	90	13	55	44	12	17
Bernardsville	20	0	138	99	50	0	132	110	0	3	83	66
Bound Brook	0	0	0	0	0	0	0	0	0	0	0	0
Branchburg	100	0	189	90	0	0	211	65	109	67	403	10
Bridgewater	40	10	119	110	0	0	314	44	8	1	132	92
Far Hills	0	9	48	178	0	0	232	30	37	45	10	143
Franklin	73	71,132	802	1,034	351	3,525	175	48	129	106	101	100
Green Brook	0	0	0	0	0	0	0	0	0	0	0	0
Hillsborough	1,182	750	560	1,774	4	0	371	208	293	228	222	195
Manville	0	0	0	0	0	0	0	0	0	0	0	0
Millstone	0	0	0	0	0	0	0	0	0	0	0	0
Montgomery	109	352	110	4,819	10	0	354	214	148	111	129	79
North Plainfield	0	0	0	0	0	0	0	0	0	0	0	0
Peapack-Gladstone	28	4	20	180	2	0	93	203	45	28	127	141
Raritan	0	0	0	0	0	0	0	0	0	0	0	0
Rocky Hill	0	0	0	0	0	0	0	0	0	0	0	0
Somerville	0	0	0	0	0	0	0	0	0	0	0	0
South Bound Brook	0	0	0	0	0	0	0	0	0	0	0	0
Warren	60	45	346	162	20	0	18	7	39	7	151	90
Watchung	0	0	0	0	0	0	0	0	0	0	0	0
Total Somerset County	1,665	72,444	2,512	9,678	437	3,569	3,643	1,405	1,223	1,214	1,487	1,132

Source: New Jersey Farmland Assessment, 1997 and 2015

Table 5.3.11. Count of Agricultural Support Services by Category in and near Somerset County, NJ

Category	Number
Aerial Applicators	1
Agricultural Testing Labs	1
Animal Removal	1
Certified Crop Advisors	1
Construction	3
Crop Insurance Agents	1
Custom Slaughterhouses	6
Equine Equipment and Supplies	2
Equipment (New, Used, Parts, Service)	6
Feed	33
Fertilizers, Lime, Chemicals, Supplies	6
Financial Services	3
General Supplies	1
Greenhouse & Nursery Supplies	3
Hay and Straw	2
Hoof Trimmers and Farriers	5
Irrigation	2
Large Animal Veterinarian	11
Poultry	1
Seed Suppliers	4
Sheep Shearers	5
Starter Plant Services	1
Total	99

Source: Rutgers Cooperative Extension of Salem County. Green Pages. Online at: <https://salem.njaes.rutgers.edu/anr/>

the largest growth in sheep count from 1997 to 2015, jumping from 10 to 143 sheep.

- While not shown in Table 5.3.10, Hillsborough Township is the only municipality with substantial dairy remaining, counted at 16 mature dairy cattle and 51 young dairy cattle in 2015.

Support Services within Market Region

Table 5.3.11 displays the number of agricultural support services by category within an approximately 30-minute drive of locations within Somerset County.

The list is based on the Green Pages guide compiled by Rutgers Cooperative Extension of Salem County, with some updates based on currently available online information. The figure shows that Somerset

Table 5.3.12. Farmers' Markets in and near Somerset County, NJ

Name	County	Location	Phone
Bedminster Farmers' Market	Somerset	3055 River Rd, Bedminster	(908) 212-7000 Ext 404
Bernardsville Farmers' Market	Somerset	Rt. 202 & Claremont Rd, Bernardsville	(908) 953-0161
Bound Brook Farmers' Market	Somerset	Main St & Hamilton St, Bound Brook	(908) 472-4127
Bridgewater Farmers' Market	Somerset	1 Vogt Drive, Bridgewater	(908) 722-4900
Duke Farms' Farm to Table Market	Somerset	1112 Dukes Parkway West, Hillsborough S	(908) 547-9226
Franklin Township Community Farmers' Market	Somerset	Corner of DeMott Lane and Amwell Rd, Franklin Township	N/A
Indoor Farmers Market of Hillsborough NJ	Somerset	379 South Branch Rd, Hillsborough	(908) 625-4886
Manville Farmers Market	Somerset	Main St, Manville	(908) 722-0121
Montgomery Friends Farmers' Market	Somerset	1340 Rt. 206 S. Village Shopper, Skillman	(908) 359-4787
North Plainfield Farmers Market	Somerset	Somerset & Race St North Plainfield	(908) 723-1480
Watchung Farmers' Market	Somerset	Across the street from 7 Valley Rd, Watchung, NJ	(908) 756-0080
Liberty Village Premium Outlets Farmers Market	Hunterdon	Church St, Flemington	(908) 782-8550
Capital City Farmers' Market	Mercer	Barrack & Lafayette St, Trenton	(609) 393-8998
Trenton Farmers' Market	Mercer	960 Spruce St, Trenton	(609) 695-2998
Highland Park Farmers' Market	Middlesex	221 S. Raritan Ave, Highland Park	(732) 819-3787
Metuchen Farmers' Market	Middlesex	Central & Middlesex Ave, Metuchen	(732) 548-2964
Englishtown Auction Sales	Monmouth	90 Wilson Ave, Englishtown	(732) 446-9644
Highlands Farmers' Market	Monmouth	Bay Ave, Atlantic Highlands	(732) 946-2711
Red Bank Farmers' Market	Monmouth	W. Front St & Shrewsbury Ave, Red Bank	(732) 530-7300
Madison Farmers' Market	Morris	170 Ridgedale Ave, Madison	(973) 593-8496
Morristown Farmers' Market	Morris	Spring St & Morris Ave, Morristown	(973) 656-3114
Elizabeth Farmers' Market	Union	2nd Ave, Elizabeth	(908) 965-0660
Rahway Farmers' Market	Union	East Milton Ave & Irving St, Rahway	(732) 396-3545
Roselle Park Farmers' Market	Union	Chestnut St & East Grant Ave, Roselle Park	(908) 245-0666
Scotch Plains Farmers Market	Union	Park Ave, Scotch Plains	(908) 322-5733
Summit Farmers' Market	Union	Forrest Ave & Beachwood, Summit	(908) 522-0357
Westfield Farmers' Market	Union	South Ave Parking Lot, Westfield	(908) 233-3021

Source: Rutgers Cooperative Extension of Salem County. Green Pages. Online at: <https://salem.njaes.rutgers.edu/anr/>



Table 5.3.13 Roadside Markets in Somerset County, NJ

Name	Location	Phone
Alan Ames	175 Mountainview Road, Bell Mead	(908) 359-1249
Bardy Farms and Greenhouses	149 Washington Valley Rd., Warren	(732) 356-4244
Bridgepoint Run Farm	301 Bridgepoint Rd., Belle Mead	(908) 448-8873
Catalpa Farm	15 Old Vliet Road , Franklin Park	(732) 672-5176
Cichowski Farms	100 Bennetts Lane, Somerset	(732) 236-3651
English Farm	3625 Valley Rd., Liberty Corner	(908) 647-0004
Fama's Nursery & Landscaping	1613 Highway 27, Somerset	(732) 545-8070
Griggstown Quail Farm	Bunkerhill & Canal Rds., Griggstown	(908) 359-5218
Hillsboro Farm	219 Hillsborough Rd., Hillsborough	(908) 500-0803
Linda's Farm Stand	831 Rt 202/206, Bridgewater	(908) 725-1555
Marion Farm	3281 Valley Rd., Basking Ridge	(908) 626-9333
Melick's Town Farm	351 Rout 28, Bridgewater	(908) 725-0225
Norz Hill Farm & Market	120 South Branch Road, Hillsborough	(908) 371-COWS
Snyder's Farm	586 So. Middlebush Rd., Somerset	(732) 496-0441
Suydam Farms	1803 Route 27 & Skillman's Lane, Somerset	(732) 846-7139

Source: Jersey Fresh, Retrieved from <https://findjerseyfresh.com/users/>

County and surrounding areas in New Jersey contain a number of local supply stores, equipment stores, veterinarians, processors, etc., to support the needs of agricultural businesses in the county.

However, past surveys of county farmers including ones completed during the development of the last farmland preservation plan. have shown that gaps in services remain. This necessitates reliance of local farmers on mail order for certain supplies, as well as the development of skill sets so that they can maintain their own equipment.

Other Agricultural Related Industries and Current Trends

As dairies and larger farms began to disappear over the last few decades, farmers in Somerset County wishing to stay in the industry began to try new means to enhance their profits. During that time, the local food movement gained a foothold in New Jersey and nationwide. The popularity of local foods in the state is demonstrated by the New Jersey Department of Agriculture's most recent Jersey Fresh Consumer Awareness Study. The study included a poll showing that 72 percent of respondents are more likely to purchase food if it is labeled Jersey Fresh, the Department's brand for locally grown food.⁷ This is an all-time high.

The two main agricultural industry subsets that have gained popularity for their ability to generate farmer

⁷ New Jersey Department of Agriculture. (2018). *Press Release: Survey: Higher Percentage of Consumers Prefer to Purchase Jersey Fresh Produce.*

Retrieved from: <https://www.nj.gov/agriculture/news/press/2018/approved/press180111.html>.

income are direct sales to customers, driven by the popularity of local food, and agritourism.

Direct Sales

Direct marketing, or selling products straight to customers rather than through wholesalers, enables farmers to keep a larger percentage of the revenue from their product and sell at a price that actually reflects the cost of production.⁸ One study found that moving to direct marketing could increase a farm's production "from over 50 to 600 percent or higher, depending on the products sold and individual farm practices."⁹

Farmers' markets, where a number of farmers come together in a centralized location to sell their wares directly to consumers, are probably what most consumers think of when they are seeking to purchase local food. In the United States, the number of reported farmers' markets grew from only 1,755 in 1994 to 8,144 in 2013, a 364 percent surge.¹⁰ This trend was also seen in New Jersey, which had 12 farmers' markets in 1980 and 156 as of 2012.¹¹

Table 5.3.12 lists the farmers' markets in Somerset County and the surrounding counties, all of which serve as a direct link to local customers and a means to enhance farm profits. The number of CSAs in the U.S. has blossomed from only two in the mid-1980s to several thousand

to enhance farm profits. Table 5.3.13 lists the roadside farm stands in the county, which provide individual farms a direct link to their customers. Since markets are usually only open one or two days a week seasonally, farm stands, which tend to be open more days a week, can provide additional opportunities for profit. Also, farm stands that are adjacent to a farm are easier to both stock and staff than farmers' markets that are offsite. However, roadside stands lack the coordination benefits of markets where different farms offering varying products can come together to meet the grocery demands of an increased number of customers. In addition, individual farm stands require their own marketing (a skillset and knowledge base that many small farms lack) as opposed to farmers' markets that are supported by jurisdictions that can assist with marketing.

Another innovation in direct marketing in Somerset County is community supported agriculture (CSA), where customers buy a "share" of the produce from a farm and then receive the produce throughout the growing season. Because CSA members typically pay in full ahead of the season, some of the inherent production risks are lessened for the farmer.

⁸ O'Hara, J. (2011). *Market Forces; Creating Jobs Through Public Investment in Local and Regional Food Systems*. Union of Concerned Scientists. p. 7. Retrieved from <https://www.ucsusa.org/resources/market-forces>.

⁹ Local Economies Project of the New World Foundation. (2013). *Hudson Valley Food Hubs Initiative: Research Findings and Recommendations*, p. 8. Retrieved from <https://www.pattern-for-progress.org/reports/>

¹⁰ Tropp, D. (2014). *Why Local Food Matters: The rising importance of locally-grown food in the U.S. food system*. USDA Agricultural Marketing Service. p. 9. Retrieved from <https://www.ams.usda.gov/>

¹¹ Rutgers School of Planning and Public Policy. (2012). *New Brunswick Food Hub II; Food Security and Community Economic Development*, p. 27. Retrieved from <https://rwv.rutgers.edu/food-security/>

today.¹² There have been seven reported CSAs in Somerset County in recent years:

Brown Leaves Farm: Located at 65 Somerset Terrace in Bedminster, this small farm grows salad greens,



okra, potatoes, radishes, turnips, and herbs. Although not technically a CSA, the farm offers online ordering and delivery within a 16-mile radius (free within six miles; and arrangements can be made for more than 16 miles). More information at brownleaves.farm.

Dogwood Farms NJ, LLC: Recently moved to the County-preserved English Farm, 3625 Valley Road,



Liberty Corner, in Bernards Township, this farm offers shares to members of high-quality vegetables or meats during weekly/monthly pickups. Their vegetables are certified organic grown, and they offer a variety of memberships based on the varying needs of customers. The farm also offers milk, eggs, and value-added products. More information at dogwoodfarmsnj.com.

Flipside Farm CSA: The farm's address is 1500 Larger Cross Road North in Far Hills. Certified organic, the farm is also the headquarters for Just Farmed, a program that allows a "market-style CSA with more flexibility." Members can pick up at the farm, but through its Just Farmed delivery service, which began in 2013, patrons can "enjoy selected fruits, vegetables, herbs, mushrooms, foraged items and farm products that change with the local harvest



schedule." The program offers weekly delivery in Union, Somerset, Middlesex, Morris, Essex, Mercer, Hunterdon and Monmouth Counties in NJ, and Bucks County, PA. More information at flipsidefarmnj.com.

Greenflash Farm: Located at 324 Mountain View Road, Skillman. A small, diversified farm utilizing only sustainable, regenerative farming techniques, it offers subscription boxes with meat, vegetables, fruit, and flowers. The website is greenflashfarm.com.

Lima Family Farms: Situated at 826 Amwell Road in Hillsborough; memberships in the farm are in the form of discounts and credit on purchases at their on-site farm store as opposed to a standard share received weekly. The farm offers a combination of pasture-raised meats, eggs, and vegetables, and its store also includes value-added products. More information at limafamilyfarms.com.

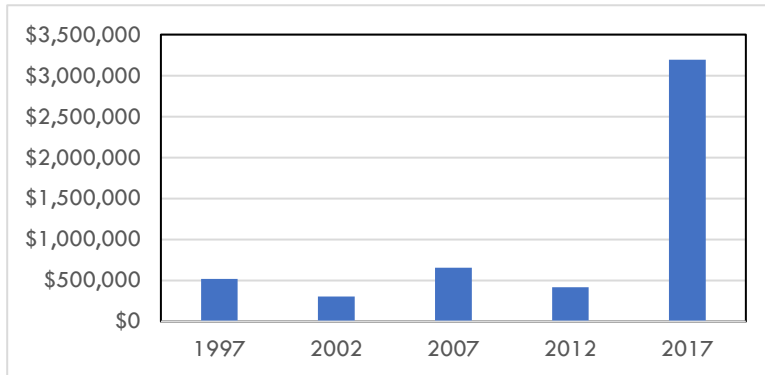
Natirar: The farm's address is 2 Main Street, Peapack and Gladstone. This farm last included a CSA program in 2018 with vegetables, berries, herbs, flowers, eggs, and honey, but now focuses on growing for its on-site restaurant, which also hosts a cooking school and events, and its farm market. More information at natirar.com.

Windsong Farm: Found on the site of the first organic vegetable operation in New Jersey, the farm's address is 31 King George Road in Warren Township.

¹² Regional Agricultural Workgroup. (2012). What Our Region Grows; A Look at Agricultural Production and Demand in the Washington Area Foodshed! Retrieved

from: <https://www.mwcog.org/uploads/committee-documents/bF1cXVpZ20121025124048.pdf>

Figure 5.3.E. Value of Direct Sales in Somerset County, 1997-2017



Source: USDA Census of Agriculture, 1997-2017

The farm remains organic certified, growing heirloom tomatoes, cherry tomatoes, lettuce, kale, spinach, sweet peppers, hot peppers, zucchini, basil, cilantro, parsley, snow peas, eggplants, green beans, garlic, carrots, watermelon, cucumbers, winter squash, ground cherries, chard, bok choy, salad turnips, red and golden beets, arugula, radishes, pumpkins, broccolini, herbs, etc. More information at windsongorganicfarm.com.



The USDA Census of Agriculture collects information on “the value of agricultural products sold directly for human consumption,” displayed in As of 2017 direct sales made up \$3.2 million of agricultural income in the county, or 16 percent of all agricultural sales. This is a significant increase since 1997 when direct sales totaled \$522,000 or 3.6 percent of all agricultural sales. County trends follow national ones, where direct sales increased by more than double between 2012 and 2017. More discussion on trends and opportunities in direct sales can be found in Section 8 of this plan.

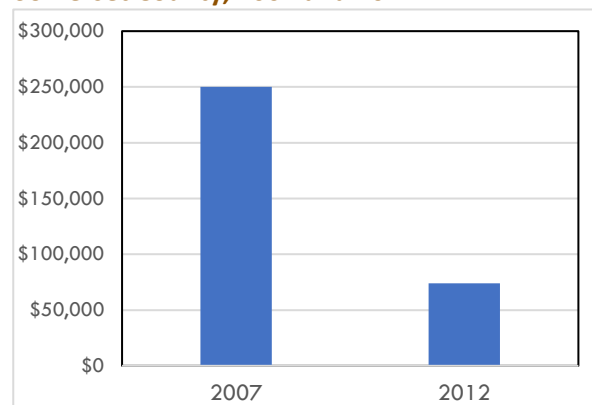
Agritourism

Agritourism is when farmers add experiential programming on-site (i.e., corn mazes, pumpkin patches, apple picking, pony rides) to draw visitors

and tourists to their farm. With profits from product sales declining or becoming unreliable, farms in the United States are increasingly turning to these additional programs to generate supplemental income. Nationwide, the number of farms with income from agritourism grew from 23,350 to 28,575 between the 2007 and 2017 Agriculture Census. Profits from agritourism also grew, from \$567 million to \$949 million. In 2017, agritourism sales represented 5.6 percent of all agricultural income in the nation, up from 3.8 percent in 2012.

As of the 2017 Census of Agriculture, farms in New Jersey earned \$18.6 million from agritourism, making up 24 percent of all agricultural income in the state. Eight percent of New Jersey farms reported income from agritourism compared to only 4 percent nationwide. This is not surprising since agritourism activities tend to be more successful in urban, higher income areas. Figure 5.3.F displays the value of agritourism sales in Somerset County in 2012

Figure 5.3.F. Value of Agritourism Sales in Somerset County, 2007 and 2012



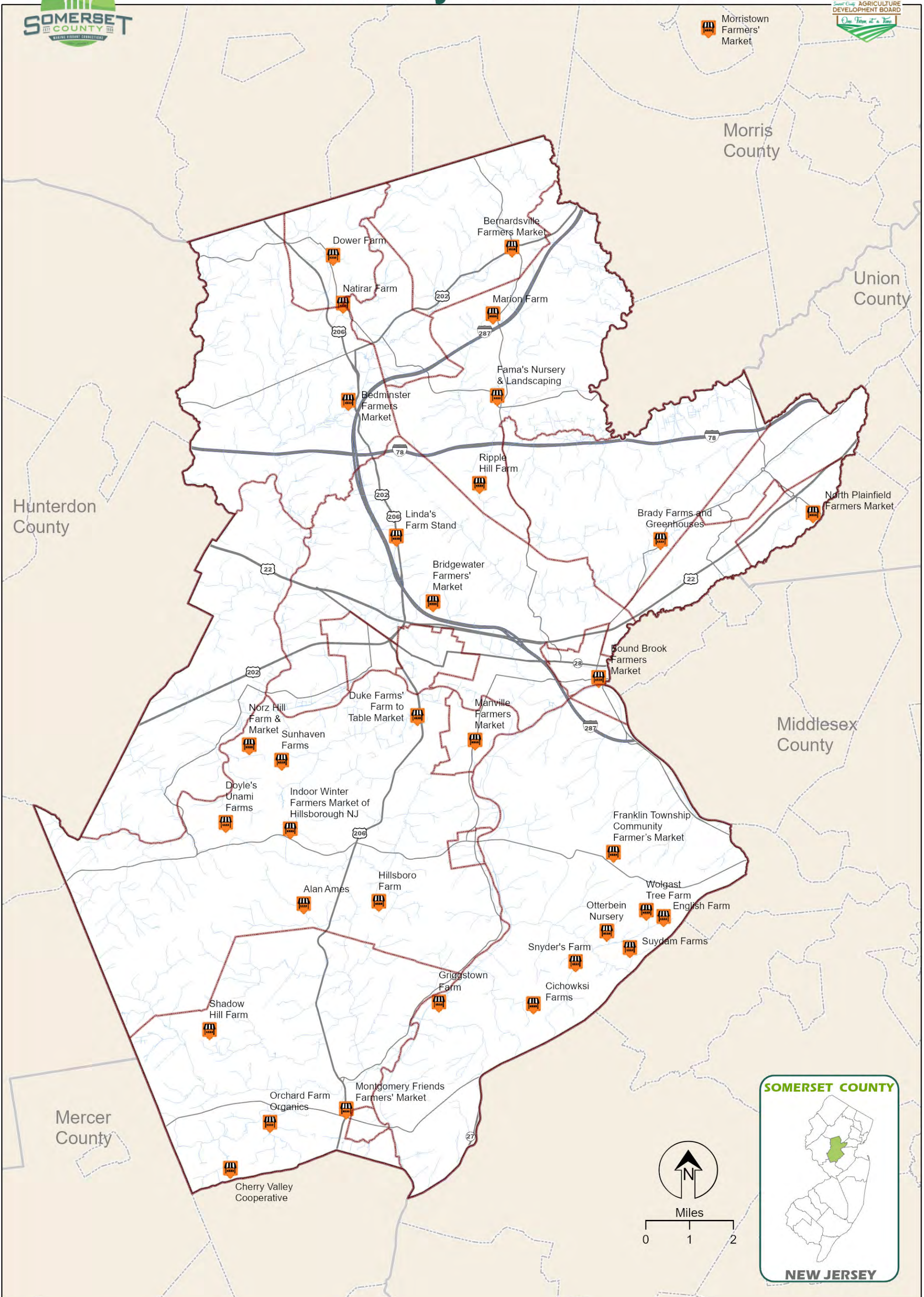
Source: USDA Census of Agriculture, 2007 and 2012. Note: No data is available from the Census on this item prior to 2007 and 2017 data has not been released as of the date of this plan.



Table 5.3.14. Agritourism Businesses in Somerset County, NJ

Name	Category	Location/Description	Phone
Cherry Valley Cooperative	Community Supported Agriculture	Location: 619 Cherry Valley Rd., Montgomery CSA: "Local, nutrient-dense food grown with ecological integrity."	(609) 610-6621
Dower Farm	Christmas Tree Farm	Location: 4 Todd Avenue, Peapack Activities: Choose and cut trees at farm	(908) 781-6203
Doyle's Unami Farms	Pick-Your-Own, Farm Activities	Location: 771 Mill Lane, Hillsborough Pick Your Own: Pumpkins, gourds, corn, zinnias Also Available: Corn Maze, hayrides, sheep shearing and cow milking demonstrations, scarecrow building,	(908) 369-3187
Hillsboro Farm	Pick-Your-Own, Farm Activities	Location: 219 Hillsborough Rd., Hillsborough Pick Your Own: Pumpkins, gourds Also Available: Fall pumpkin patch featuring hayrides, corn maze, October Family Fun Days, cider, corn stalks, hay, straw, donuts, pies	(908) 500-0803
Natirar Farm	Events	Location: 2 Main Street, Peapack & Gladstone Events: Hosts weddings, meetings, etc. Also includes a cooking school and wine school.	(908) 901 9500
Norz Hill Farm & Market	Pick-Your-Own, Farm Activities	Location: 120 South Branch Road, Hillsborough Pick Your Own: Pumpkins, gourds, winter squashes. Fall Festival: Hayrides, Farm Tours, 5-acre Corn Maze, Kids Bale Maze, Pony Rides, Birthday Parties (if booked in advance), fresh pies, cider, Fall crafts, and more. Scare Farm: Haunted hayride and Haunted Corn Trails. Open Friday, Saturday and some Sunday nights in September and October.	(908) 371-COWS
Orchard Farm Organics	Community Supported Agriculture	Location: 1052 Cherry Hill Road, Montgomery CSA: Crops are certified organic by the NJ Department of Agriculture. The farm uses biodynamic practices.	609-203-7134
Otterbein Nursery	Christmas Tree Farm	Location: 310 Skillman's Lane, Somerset Activities: Choose and cut trees at farm, decorations, ornaments, stands, wreaths, holly greens, garland, and grave blankets	(732) 821-1999
Ripple Hill Farm	Pick-Your-Own	Location: 181 Mountain Rd., Basking Ridge Pick Your Own: Apples	(908) 647-1300
Snyder's Farm	Pick-Your-Own	Location: 586 So. Middlebush Rd., Somerset Pick Your Own: Strawberries, blueberries, vegetables	(732) 496-0441
Sunhaven Farms	Pick-Your-Own	Location: 1018 Orchard Dr., Hillsborough Pick Your Own: Strawberries; sweet peas (June); peppers; green beans; eggplant; tomatoes; plum tomatoes (August); broccoli; cauliflower; garden mums (Sept.)	(908) 369-6504
Suydam Farms	Pick-Your-Own	Location: 1803 Route 27 & Skillman's Lane, Somerset Pick Your Own: Pumpkins	(732) 846-7139
Shadow Hill Farm	Christmas Tree Farm	Location: 213 Grandview Rd., Skillman Activities: Choose and cut trees at farm, wreaths, holly greens, and garland	(609) 466-3596
Wolgast Tree Farm and Apiary	Christmas Tree Farm	Location: 176 Bennetts Lane, Somerset Activities: Choose and cut trees at farm, decorations, ornaments, stands, wreaths, holly greens, and garland	(732) 466-3596

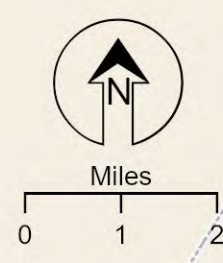
Source: Jersey Fresh website http://www.visitnjfarms.org/find_farms/, accessed February 17, 2018; and Somerset County Office of Planning, Policy and Economic Development.



Select Agribusinesses

Map of agribusinesses including farmer's markets, farm stands, tree farms and produce farms

Agribusiness





Somerset County's historic agricultural landscape is rich with many kinds of historic resources that evolved to support the farm industry. Such key elements as mills, lime kilns, forges, railroads, bridges, and even the Delaware and Raritan Canal enabled farmers to produce their goods and get them to market. Pictured here are the Moses Craig Lime Kilns, recently restored in Peapack (c. 1860); and Kline's Mill, a rare surviving early sawmill now serving as a residence, occupying a site known to host a water-powered mill since 1744. (Photos courtesy Somerset County Cultural & Heritage Commission)



compared to 2007 (2017 data is not available). There was a significant decline from \$250,000 to \$74,000. However, the number of farms reporting agritourism income grew from eight to 11 over the same five-year period.

Table 5.3.14 lists the 12 farms in Somerset County that advertise agritourism activities online. In addition to farm-specific agritourism, there is an annual three-day Somerset County 4-H Fair held in August at North Branch Park in Bridgewater. The fair is offered free to the public and annually draws an

audience of more than 60,000. It highlights the 4-H projects found in the county, offers food by community organizations, and includes exhibits by other organizations in the county including Somerset County Government, Raritan Valley Community College, and the Rutgers Cooperative Research & Extension. Featured in the displays are the variety of agricultural opportunities found in the county, with tents housing petting areas for dairy cows, beef, alpaca, horses, dogs, herpetology, sheep, goats, poultry, rabbits, and small animals.



In terms of coordination between open space and farmland preservation, the preservation of farms magnifies the impact of open space as "breathing room." Farmed open lands in an otherwise forested or suburban landscape provide visual relief and variety in scene. Not only do residents find this appealing, but so do visitors and potential residents and investors. (Photo by Katelyn Katzer, Somerset County Planning Division)

When discussing agritourism opportunities, it is important to note that this relatively recent trend in agriculture is a means of supplementing farmer income but has not proven to be foundational for farm profitability. Most farms in the U.S. report earning \$15,000 or less from agritourism operations.¹³ More discussion on trends and opportunities in agritourism can be found in Section 5.9.G.

D. Conclusion

This section and the preceding one have provided an overview of existing conditions to support

agriculture in Somerset County. A hundred years of landscape change has led to a decline in the number of farms and farm acres, and accompanying economic changes have led to shifts in the makeup of Somerset County's agricultural industry. Despite these challenges, farming persists in the county and contributes to the diversity of its economy. The next two sections of this plan cover the basic powers of local government to influence those landscape changes and the extent of the County's farmland preservation program, including criteria and geographic focus.

¹³ Rozier Rich, S., Standish, K., Tomas, S., Barbieri, C., and Ainely, S. (2016). *The Current State of Agritourism Research in the United States*. Tourism Travel and Research Association:

Advancing Tourism Research Globally. Retrieved from: <http://scholarworks.umass.edu/ttra/2010/Visual/12>.

5.4. The Land Use Planning Context in Somerset County

In the last hundred years, the county's landscape has evolved from one dominated by farms and forests to one in which just over half is urban or suburban. Yet, farmers still keep their fields, much of the county's natural legacy is still in evidence, and fine, well-kept buildings and landscapes reflect the county's many decades of history.

The conversion of land to widespread urban and suburban development, however, in Somerset County and across the state has led the State of New Jersey, Somerset County, and its municipalities to undertake a number of land use planning initiatives aimed at improving quality of life and preserving open space and farmland. This section provides an overview of these land use planning initiatives.

A. Introduction

Agriculture laid down the first land use patterns discernable across Somerset County's present-day landscape, as described in detail in Chapter 2, Landscape Context, of the Somerset County Preservation Plan. The next large change, hundreds of years after European colonization in the 17th century, was caused by the arrival of the automobile, highways, and suburbanization over the course of the twentieth century.

The pages that follow review land use trends in the county, including population growth; and introduce statewide, regional, county, and municipal planning programs affecting farmland and agriculture.

B. Overview of Land Use and Trends

As suburban development has spread throughout the county, it has had both positive and negative consequences for the agricultural industry. On the one hand the increased local population at close

proximity provides those farmers who have changed with the times with a larger consumer base for niche agricultural products, such as locally grown foods, organic goods, and equine services. On the other hand, conversion of land for development has meant that farmland has grown increasingly scarce (and expensive), and that conflicts between farms and adjacent communities are more likely to arise.

While the landscape of Somerset County was dominated by agriculture a century ago, today most of the county has become suburban in nature. Map 5.4.1 displays county land use by category and Table 5.4.1 shows county land use trends over the past 30 years. Table 5.4.2 shows 2017 land use information by municipality. Between 1986 and 2017, agricultural land decreased from 24 percent of the county to 14 percent, while developed land rose from 33 percent to 46 percent. Note that the agricultural land in these numbers differs in



Table 5.4.1. Somerset County Land Use, 1986-2017

Land Use	1986		1995		2002		2007		2017	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Agriculture	47,404	24%	36,949	19%	30,396	16%	28,790	15%	27,358	14%
Barren Land	3,907	2%	3,321	2%	3,166	2%	2,315	1%	2,195	1%
Forest	51,459	26%	51,459	26%	50,503	26%	48,542	25%	48,654	25%
Developed	65,097	33%	73,449	38%	82,483	42%	87,141	45%	89,215	46%
Wetlands	24,915	13%	27,702	14%	26,332	13%	25,753	13%	25,111	13%
Water/Other	2,384	1%	2,286	1%	2,286	1%	2,625	1%	2,633	1%
TOTAL	195,166		195,166		195,166		195,166		195,166	

Source: Somerset County Data, 2017

definition from the farmland that will be discussed in Chapter 6, excluding the barren, forest, and wetland portions of farmland parcels. That is, Somerset County has more land designated as agricultural than indicated here.

Map 5.4.1 and Table 5.4.2 show that most of the remaining agricultural land in Somerset (from a land use perspective) can be found in its western half. Significant concentrations of agricultural land remain within the Neshanic Valley in Hillsborough, in Bedminster, and along the Millstone River between Franklin and Hillsborough townships. Bernards, Bridgewater, Franklin, Hillsborough, and Montgomery all contain a large quantity of developed land, each with more than 8,000 acres. The municipalities with the highest percentage of urban land are Bound Brook, Manville, North Plainfield, Raritan, Somerville, and South Bound Brook, all at more than 70 percent urban.

Development Pressures and Population Growth

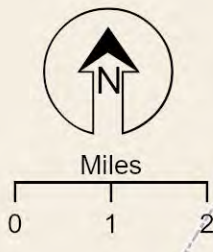
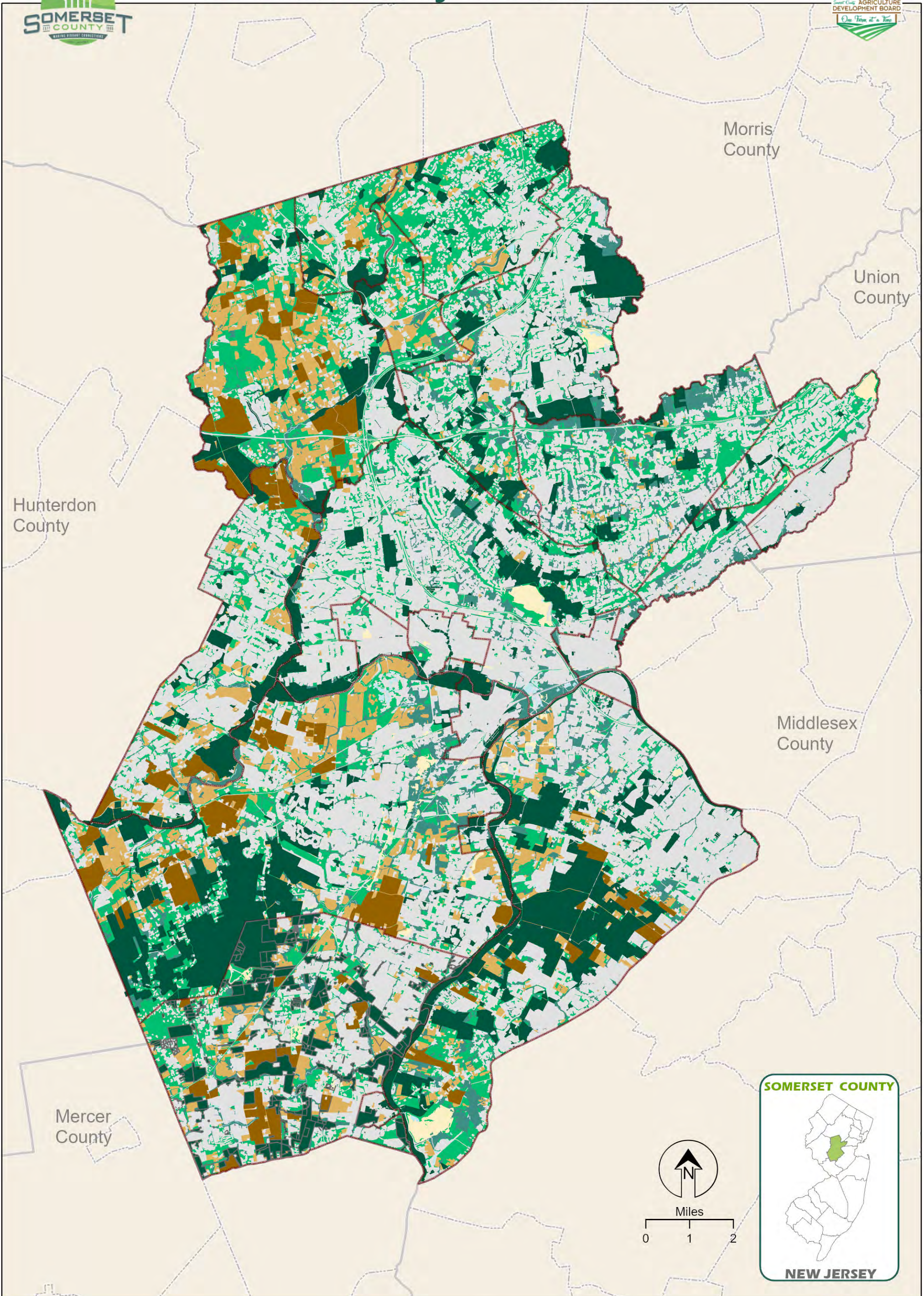
New Jersey's draft Statewide Comprehensive Outdoor Recreation Plan for 2018-2022 (SCORP) states that Somerset County now considered the tenth most densely settled county in the state, at a density of 1,110 people per square mile.¹⁴ With the next U.S. Census, population growth countywide is estimated to grow about 3%, or fewer than 10,000 people. As of the 2018 Census estimate, however, the county's population was 331,164, a 3.7% increase from the 2010 Census.¹⁵ Somerset County is projected to grow at 13.6% overall between 2010 and 2030, the third-highest projected percentage for the state. The SCORP projects approximately 45,000 more residents by 2034, from 333,751 in 2016 to 378,700 in 2034.¹⁶

Somerset County is a highly desirable place to live and work, and that has led to a strongly growing population and to the development of land to

¹⁴<https://www.nj.gov/dep/greenacres>

¹⁵<https://www.nj.gov/state/dos-reports-2020-census-report.shtml>

¹⁶ <https://www.nj.gov/dep/greenacres>



Land Use Land Cover with Preserved Farmland and Open Space

- Barren
- Water
- Wetlands
- Forest
- Agriculture
- Developed
- Preserved Open Space
- Preserved Farmland

Table 5.4.2. Somerset County Land Use by Municipality, Acres, 2017

Municipality	Agriculture	Barren Land	Forest	Developed	Wetlands	Water	Total
Bedminster Township	5,817	26	6,173	3,587	1,053	223	16,879
Bernards Township	498	163	3,607	8,318	2,837	149	15,573
Bernardsville Borough	572	16	3,833	3,612	162	71	8,266
Bound Brook Borough	0	5	21	883	150	26	1,084
Branchburg Township	2,425	30	2,367	6,638	1,273	239	12,973
Bridgewater Township	269	390	4,194	12,851	2,640	360	20,704
Far Hills Borough	583	10	1,420	830	254	53	3,150
Franklin Township	4,937	516	5,912	13,289	4,811	440	29,904
Green Brook Township	6	14	632	1,689	464	15	2,821
Hillsborough Township	7,300	594	9,056	12,593	5,324	421	35,288
Manville Borough	0	8	40	1,213	251	56	1,568
Millstone Borough	81	0	60	190	105	8	444
Montgomery Township	3,898	154	5,268	8,805	2,484	183	20,793
North Plainfield Borough	3	2	36	1,620	123	22	1,805
Peapack-Gladstone Borough	677	13	1,522	1,371	62	52	3,697
Raritan Borough	2	26	146	1,050	45	29	1,298
Rocky Hill Borough	45	0	46	285	16	5	397
Somerville Borough	0	12	83	1,241	142	24	1,501
South Bound Brook Borough	1	4	5	346	59	37	451
Warren Township	237	52	3,146	6,366	2,705	70	12,576
Watchung Borough	8	160	1,088	2,438	149	25	3,868
Somerset County	27,358	2,195	48,654	89,215	25,111	2,633	195,166

Source: Somerset County Data, 2017

support this population. Development pressures in the area of northern New Jersey means that land use in the county is increasingly trending toward urbanization. Table 5.4.3 shows trends in population growth in the county over the past nine decades, broken down by municipality.

Figure 5.4.A further displays countywide population growth by decade. Overall, the county's population has grown more than 400 percent since 1930, with the fastest growth seen first in the 1940s through 1970s, then in the 1990s and 2000s.

Since 1990 alone, Somerset County's population has risen by 37 percent or 88,415. The municipalities with the largest growth are Bridgewater, Franklin, Hillsborough, and Montgomery, all with an increase of more than 10,000 residents in that time. As Table 5.4.4 displays, these are also the four municipalities with the largest number of residential building permits issued during that time, each with more than 3,000 issued. Of these jurisdictions, Franklin Township has seen both the largest population growth (over 21,000 since 1990) and the largest number of



Table 5.4.3. Somerset County Population by Municipality, 1930-2014

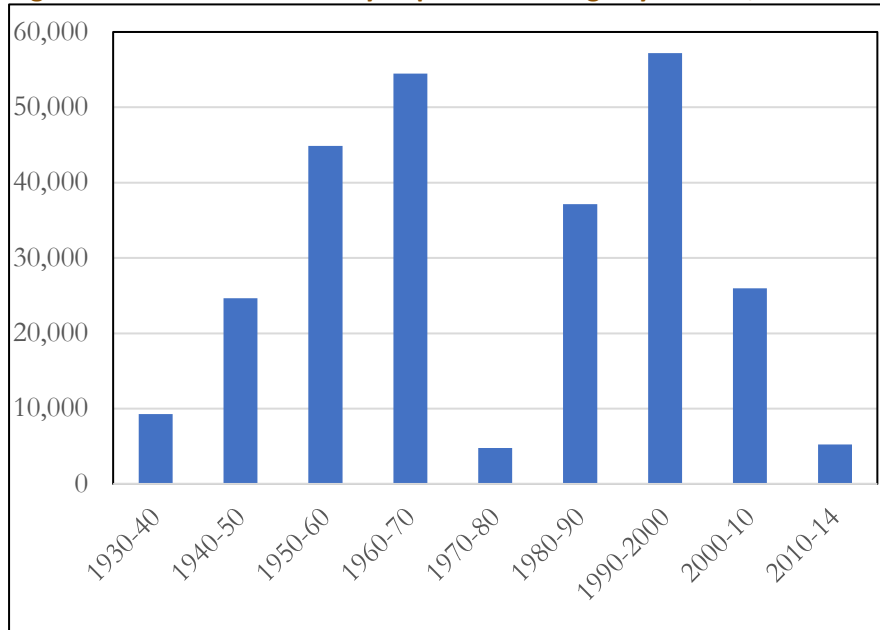
Municipality	1930	1940	1950	1960	1970	1980	1990	2000	2010	2014
Bedminster	1,374	1,606	1,613	2,322	2,597	2,469	7,086	8,302	8,165	8,221
Bernards	2,293	4,512	7,487	9,018	13,305	12,920	17,199	24,575	26,652	26,849
Bernardsville	3,336	3,405	3,956	5,515	6,652	6,715	6,597	7,345	7,707	7,766
Bound Brook	7,372	7,616	8,374	10,263	10,450	9,710	9,487	10,155	10,402	10,607
Branchburg	1,084	1,231	1,958	3,741	5,742	7,846	10,888	14,566	14,459	14,547
Bridgewater	3,352	4,934	8,234	15,789	30,235	29,175	32,509	42,940	44,464	44,845
Far Hills	560	574	600	702	780	677	657	859	919	1,101
Franklin	6,039	6,299	9,601	19,858	30,389	31,358	42,780	50,903	62,300	64,243
Green Brook	544	763	1,155	3,622	4,302	4,640	4,460	5,654	7,203	7,183
Hillsborough	2,283	2,645	3,875	7,584	11,061	19,061	28,808	36,634	38,303	39,064
Manville	5,441	6,065	8,597	10,995	13,029	11,278	10,567	10,343	10,344	10,426
Millstone	187	252	289	409	630	530	450	410	418	461
Montgomery	2,648	3,360	3,819	3,851	6,353	7,360	9,612	17,481	22,254	22,529
North Plainfield	9,760	10,586	12,766	16,993	21,796	19,108	18,820	21,103	21,936	22,056
Peapack-Gladstone	1,273	1,354	1,450	1,804	1,924	2,038	2,111	2,433	2,582	2,580
Raritan	4,751	4,839	5,131	6,137	6,691	6,128	5,798	6,338	6,881	7,318
Rocky Hill	512	404	537	528	917	717	693	662	682	554
Somerville	8,255	8,720	11,571	12,458	13,652	11,973	11,632	12,423	12,098	12,175
South Bound Brook	1,763	1,928	2,905	3,626	4,525	4,331	4,185	4,492	4,563	4,585
Warren	1,399	2,139	3,316	5,386	8,592	9,805	10,830	14,259	15,311	15,729
Watchung	906	1,158	1,818	3,312	4,750	5,290	5,110	5,613	5,801	5,855
Somerset County	65,132	74,390	99,052	143,913	198,372	203,129	240,279	297,490	323,444	328,694

Source: U.S. Census Bureau, 1930-2014

building permits issued. Also of note, the period where the county saw the largest drop in farmland in the last 25 years, 1997-2002 at more than 12,000 acres, was also the period with the largest number of residential building permits issued since 1990. This supports the analysis in “Transportation Choices: Somerset County Circulation Plan Update” issued in 2003 by the Somerset County Planning Board, which noted that much of the development in the county has tended to be on large lots in rural areas, with open space and farmland converted to new residential, commercial, retail, and office areas.

Land Value Trends

In addition to (and related to) mounting development pressures in Somerset, land values have also grown in the county. While such data is not available at the county level, Figure 5.4.B shows how farmland values have trended both in New Jersey and in the United States as a whole. Numbers there indicate not only similar, proportionate increases in residential land values, but the rising costs of governmental and nonprofit acquisitions to preserve

Figure 5.4.A. Somerset County Population Change by Decade, 1930-2014

Source: U.S. Census Bureau

farmland in New Jersey has grown from an average of \$7,100 per acre to \$12,800 per acre. In Somerset County, the cost is even greater: prior to 2000 the average cost per acre of preserving farmland in the county was below \$9,200 while costs since 2010 have averaged more than \$25,000 per acre. While values have declined since their peak prior to the Great Recession that began in 2008, they are still 80 percent higher than values in the 1990s. In 2017, New Jersey actually had the second-highest values for farmland in the nation.

This trend of increased land values has the negative impacts of (a) incentivizing the sale of land by farmers, (b) pricing out new farmers seeking to purchase land for farming in the county, and (c) increasing the price of purchasing development rights for farmland preservation. This last issue is discussed further in later sections of this Farmland Preservation & Agricultural Development Plan.

C. New Jersey Land Use Planning Context

When recommending land use planning techniques to encourage farmland preservation, it is important to consider the levels of government at which these techniques would be adopted. Under New Jersey's Municipal Land Use Law (MLUL; NJ Rev Stat § 40:55D-70 (2013)), land use and zoning oversight is largely in the hands of municipalities. It is at this lower level where the power to enact detailed master plans and zoning ordinances resides. At the county level, planning efforts are broader, dealing with issues that span municipalities and providing municipalities with general guidance and support. Finally, the state provides more general guidance and oversight on issues regarding mass transit, regional natural resources, highways, and the state economy.

In 2012, the draft of a new State Plan was released, titled the State Strategic Plan: New Jersey's State Development & Redevelopment Plan. This draft



Table 5.4.4. Somerset County Residential Building Permits Issued, 1990-2016

Municipality	1990-94	1995-99	2000-04	2005-09	2010-14	2015-16	Total
Bedminster Township	330	270	28	17	9	5	659
Bernards Township	790	1,657	433	91	83	27	3,081
Bernardsville Borough	98	117	91	44	28	8	386
Bound Brook Borough	33	20	14	242	712	458	1,479
Branchburg Township	864	478	109	70	22	30	1,573
Bridgewater Township	1,838	2,003	451	289	126	3	4,710
Far Hills Borough	45	40	26	6	1	0	118
Franklin Township	1,233	1,768	3,584	1,462	1,800	463	10,310
Green Brook Township	174	496	339	50	17	4	1,080
Hillsborough Township	1,040	1,135	346	517	487	423	3,948
Manville Borough	41	60	35	37	22	7	202
Millstone Borough	0	0	0	1	2	1	4
Montgomery Township	799	2,248	1,497	70	230	194	5,038
North Plainfield Borough	15	16	13	5	1	18	68
Peapack-Gladstone Borough	43	63	13	22	21	9	171
Raritan Borough	95	161	34	725	821	447	2,283
Rocky Hill Borough	6	0	1	1	2	0	10
Somerville Borough	18	10	14	38	11	173	264
South Bound Brook Borough	4	7	13	484	296	194	998
Warren Township	619	436	424	178	253	60	1,970
Watchung Borough	50	76	408	84	52	22	692
Somerset County	8,135	11,061	7,873	4,433	4,996	2,546	39,044

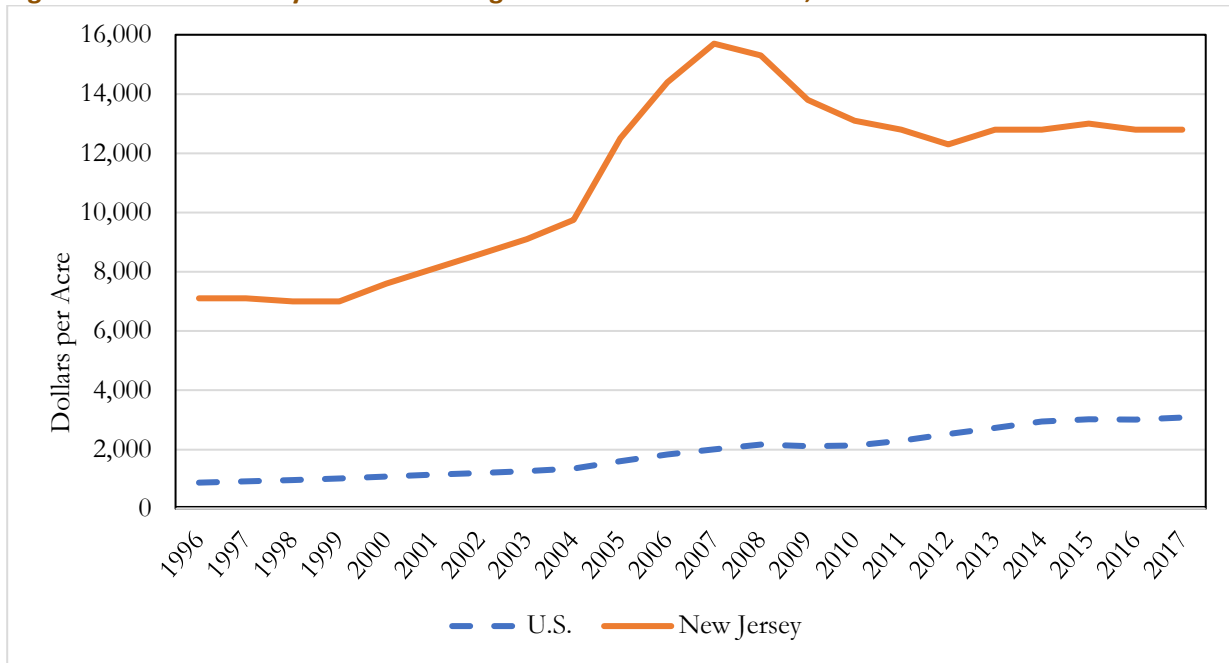
Source: U.S. Census Bureau, Manufacturing & Construction Division, 2017

plan eliminates the Planning Areas and instead establishes “Investment Areas” for growth or preservation policies and funding, determined by a series of criteria applied during funding decisions rather than by a state map. The state held hearings on the revised plan throughout 2012 but it was never finalized and approved. Therefore, the 2001 plan remains in effect. However, the draft plan did have an impact on the Somerset County planning process as similar ideas formed the basis for the County’s Investment Framework (discussed later in this section).

D. Regional Planning

New Jersey’s Highlands Region

According to the SDRP, a Special Resource Area is “an area or region with unique characteristics or resources of statewide importance which is essential to the sustained well-being and function of its own region and other regions or systems – environmental, economic, and social – and to the quality of life for future generations.” (p.171) The single designated Special Resource Area in Somerset County is the portion of the county located in the Highlands Region.

Figure 5.4.B. New Jersey and U.S. Average Farm Real Estate Value, 1996-2017

Source: USDA, Economics, Statistics, and Market Information System, 1996-2017

Shown in Map 5.4.2, the Highlands Region in northern New Jersey serves as the drinking water source for more than half of the state. This combined with the area's sensitive natural resources led the Governor to establish a Highlands Task Force in September 2003, charged with studying how best to promote conservation efforts, smart growth, regional planning, and water resource protections in the Highlands Region. The result was the Highlands Water Protection and Planning Act, signed into law in August 2004 (Highlands Act, P.L. 2004, c. 120).

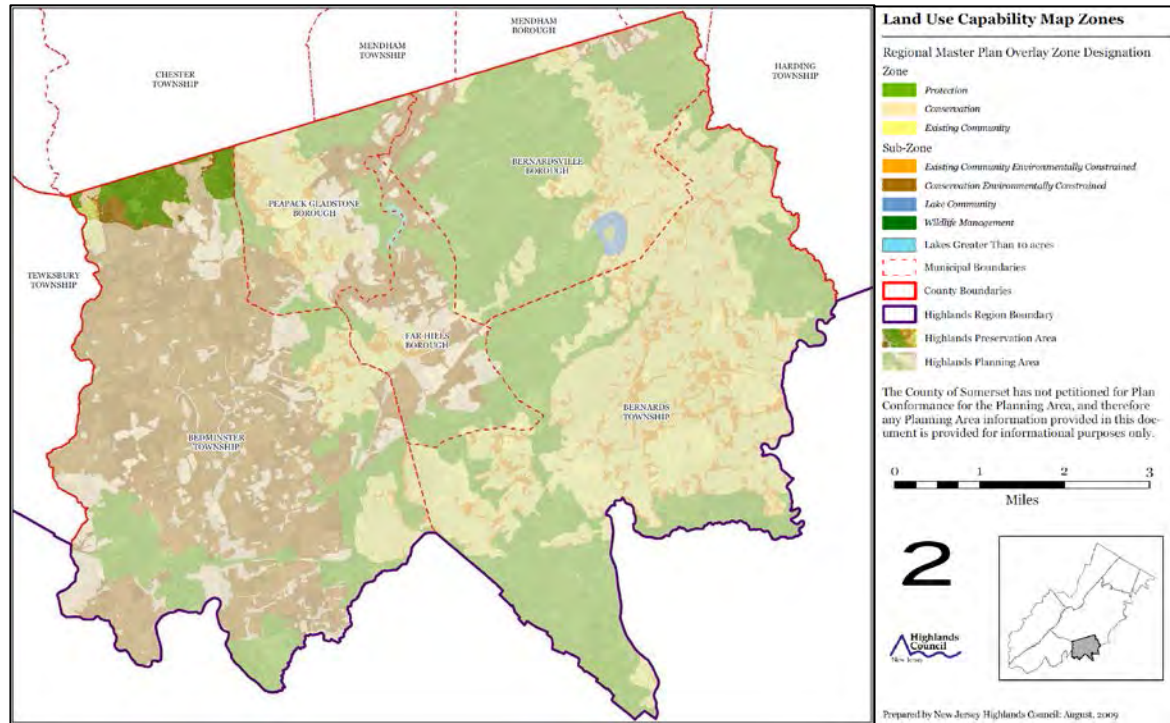
Preservation and Planning Areas

Under the act, the Highlands Region is divided into Preservation and Planning Areas. In the Preservation Area, development, water use, and other activities that impact water quality are subject to strict land use controls overseen by the State Department of Environment Protection and the Highlands Water Protection and Planning Council. Specifically, the act expands mandatory buffers around the area's

streams and water bodies, sets limits on impervious coverage for individual properties, and requires master plans for local governments within the Preservation Area to conform to Highlands regulations. Regarding farms, if an agricultural operation in the Preservation Area seeks to increase impervious cover by three percent or more of its total land area it must develop and implement a "farm conservation plan" approved by the local Soil Conservation District (SCD). If the operation seeks to increase impervious cover by nine percent or more, then it is required to prepare and implement a "resource management systems plan."

Table 5.4.5 details, by municipality, the land area in Somerset County that falls within the Highlands region. Only Bedminster Township falls within the Preservation Area and thus is susceptible to increased land and water use regulations. In total, 47,555 acres or approximately 24 percent of the county is in the Highlands region.

Map 5.4.2. Highlands Regional Master Plan Land Use Zones in Somerset County



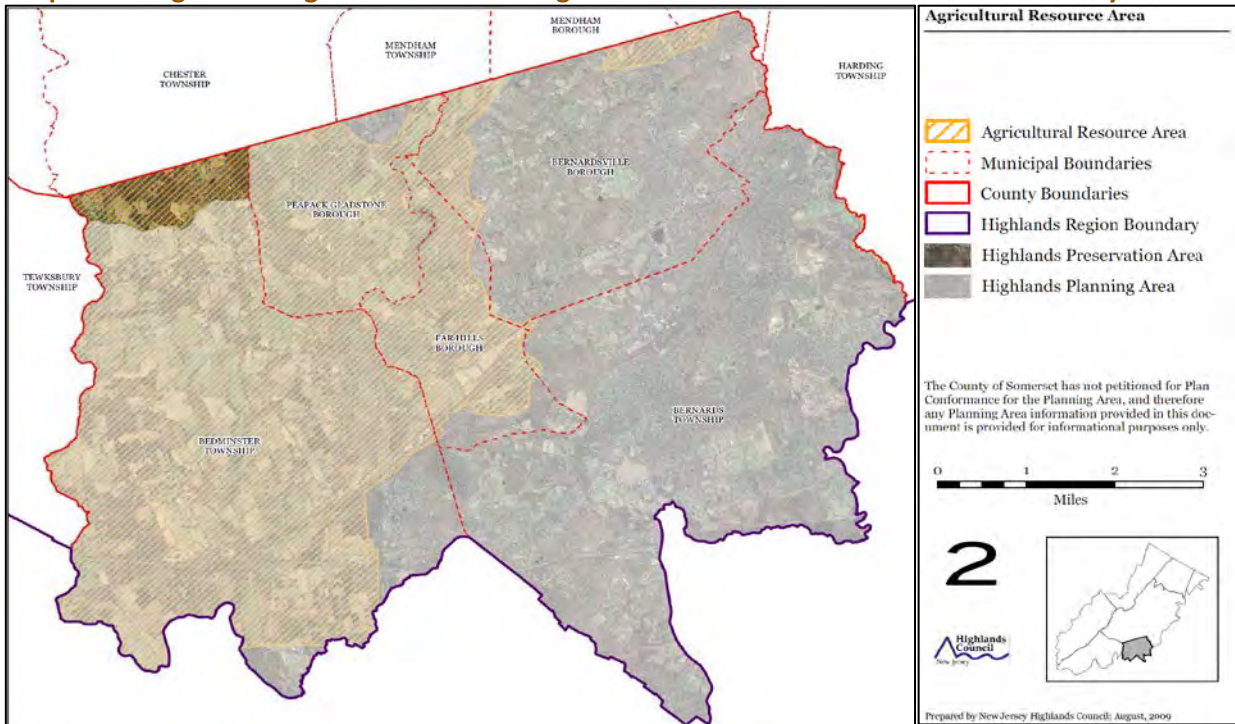
Source: New Jersey Highlands Council Environmental Resource Inventory, 2011, *Farmland Preservation in the Highlands*

Regional Master Plan and Land Use

The Highlands Act required that the Highlands Council create a Regional Master Plan (RMP) order to ensure the act's implementation. On July 17, 2008, the council adopted the Highlands RMP. The RMP establishes a framework for future land use that directs development away from environmentally sensitive and agricultural lands. Highlands land uses are defined using seven zones. Map 5.4.2 displays the RMP Land Use Zones in Somerset County's Highlands Region:

- The **Protection Zone** consists of lands with the highest quality resource value, where preservation should be prioritized and development severely limited. A Wildlife Management Sub-Zone designates lands managed by the federal and state governments for wildlife.
- The **Conservation Zone** is intended primarily for agricultural use and includes lands of agricultural importance as well as natural resource lands that are next to agricultural land. Development is to be limited in this zone. An Environmentally Constrained Sub-Zone consists of particularly significant environmental features within the Conservation Zone.
- The **Existing Community Zone** includes areas that are already developed, have comparatively few natural resource constraints than the other zones, and are currently served or will be more easily served by public infrastructure. This zone is an area of opportunity for future growth and development. This zone includes two sub-zones, for significant environmentally

Map 5.4.3. Highlands Regional Master Plan Agricultural Resource Areas in Somerset County



Source: New Jersey Highlands Council Environmental Resource Inventory, 2011

constrained features and community development within 1,000 feet of lakes.

Conformance

The Highlands Act requires that each county located wholly or partially in the Preservation Area must submit revisions to its county master plan and associated regulations – as applicable to the development and use of land in the Preservation Area – in order to conform with the RMP. Somerset

County and Bedminster Township have both submitted petitions for plan conformance, and those petitions were approved by the Highlands Council in 2011. Conformance is voluntary for the other municipalities, as they are located entirely within the Planning Area.

Table 5.4.5. Somerset County Acreage in the Highlands Region by Municipality

Municipality	Planning Area	Preservation Area	Total
Bedminster Township	15,866	1,009	16,875
Bernards Township	15,570	0	15,570
Bernardsville Borough	8,265	0	8,265
Far Hills Borough	3,149	0	3,149
Peapack-Gladstone Borough	3,696	0	3,696
Total	46,546	1,009	47,555

Source: Highlands Regional Master Plan Addendum A, January 4, 2011, p. 3

Of note for this plan, one of the RMP's primary objectives is preservation of farmland and the farming industry. Specifically, the RMP contains the following farmland preservation-related goals and policies:

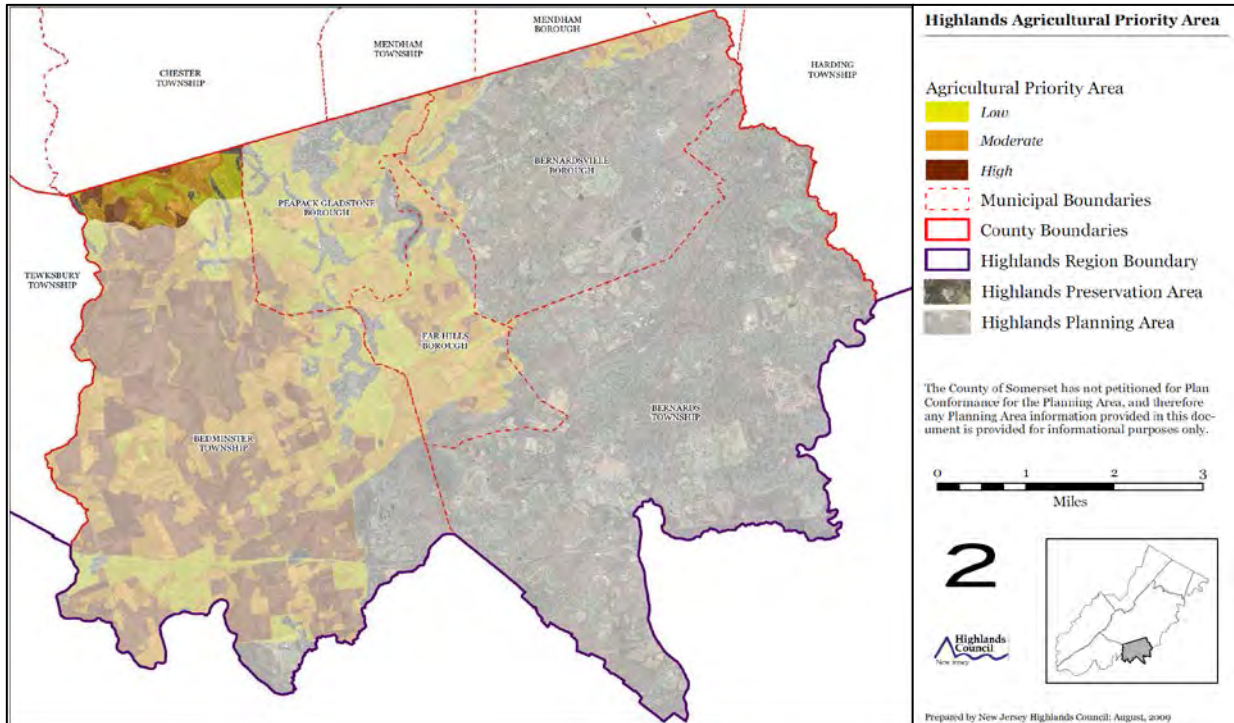
- **Goal 3A:** Protection and enhancement of agricultural resources and the agricultural industry in the Highlands Region.
 - **Policy 3A1:** To create and maintain an inventory of preserved farms, farmland assessed lands, other lands in agricultural use, and undeveloped vacant lands which contain soils which are highly suitable for agricultural use in the Highlands Region.
 - **Policy 3A2:** To consider Prime, Statewide Importance, Unique, and Locally Important soils as Important Farmland Soils which are critical agricultural resources of the Highlands Region.
 - **Policy 3A3:** To delineate Agricultural Resource Areas (ARAs) in the Highlands Region as those areas of contiguous and the most concentrated agricultural uses, using Important Farmland Soils as a critical factor.
 - **Policy 3A4:** To promote farmland preservation and limit non-agricultural uses within the ARAs and accord priority to the preservation of agricultural lands within Agricultural Priority Areas, through fee simple acquisition, easement acquisition, TDR



[transfer of development rights], and other agricultural land conservation techniques.

- **Policy 3A5:** Where it is not feasible to preserve agricultural lands within the ARA by such methods as fee simple acquisition, easement acquisition, or a TDR Program, require mandatory clustering through Municipal Plan Conformance, local development review and Highlands Project Review for residential development in an ARA.
 - **Policy 3A6:** To permit through local development review and Highlands Project Review limited development, including family and farm labor housing in ARAs which are necessary to support the viability of the agricultural operation, in coordination with the NJDA [New Jersey Department of Agriculture] and the SADC [State Agriculture Development Committee], and subject to compliance with the resource management and protection requirements of the RMP.
- **Policy 3A7:** To implement programs which encourage owners and operators of farmland with woodlots within Agricultural Resource Areas to prepare and implement approved Forest Management Plans that conform to the resource management and protection requirements of the RMP.
- **Policy 3A8:** To serve as a regional clearinghouse for information regarding agriculture preservation and

Map 5.4.4. Highlands Regional Master Plan Agricultural Priority Areas in Somerset County



Source: New Jersey Highlands Council Environmental Resource Inventory, 2011

- stewardship funding and programs, protection and enhancement of the agricultural industry, and technical assistance for public and private organizations in order to maximize agriculture preservation efforts in the Highlands Region.
- **Goal 3B:** Protection and enhancement of agricultural sustainability and viability of the agricultural industry within the Highlands Region.
 - **Policy 3B1:** To encourage private and public owners of lands within an ARA to lease open lands to farmers and/or to manage open space lands in a manner which is compatible with adjoining agricultural uses.
 - **Policy 3B2:** To promote research and study, and support proposals to enhance the long-term viability of the agricultural industry in the Highlands Region through innovative programs including, but not limited to, health care, banking practices, housing, food distribution, education, energy, and labor.
 - **Policy 3B3:** To seek additional funding from any and all state and federal funding programs to maintain and enhance sustainability and continued viability of the agricultural industry within the Highlands Region.
 - **Policy 3B4:** To support incentives and funding opportunities for the control of invasive species, white-tailed deer reduction programs, and the water

value of well-managed agricultural lands.

- o **Policy 3B5:** To promote and enhance innovative agricultural practices and programs that promote long-term viability of the agricultural industry including, but not limited to, direct marketing, organic farming, agri-tourism such as farmers markets and road side stands, niche markets, and community sup-ported agriculture.

- **Goal 3C:** Minimize construction of non-agricultural development-inducing water and wastewater infrastructure in Agricultural Resource Areas.



- o **Policy 3C1:** To prohibit through Plan Conformance, local development review and Highlands Project Review the development of additional water and wastewater infrastructure in an ARA within the Conservation and Protection Zones of the Planning Area, unless they will maximize the preservation of agricultural lands within the ARA.
- **Goal 3D:** Protection and enhancement of surface and ground water quality and natural resources in the Highland Region and Agricultural Resource Areas.
 - o **Policy 3D1:** To work with the SADC and the GSPT [Garden State Preservation Trust] to establish incentives for any landowner in the Highlands Region seeking to preserve

land under the farmland preservation program that would be provided in exchange for the landowner agreeing to permanently restrict the amount of impervious surface and agricultural impervious cover on the farm to a maximum of 5% of the total land area of the Farm Management Unit.

- o **Policy 3D2:** To require any agricultural or horticultural development in the Preservation Area and the Planning Area which involves new agricultural impervious cover, since enactment of the Highlands Act, to the total land area of a Farm Management Unit (either individually or cumulatively) of greater than 3% but less than 9%, to develop and implement a Farm Conservation Plan prepared by the USDA NRCS, Technical Service Provider (TSP), appropriate agent, or NJDA staff, and approved by the local SCD.
- o **Policy 3D3:** To require any agricultural or horticultural development in the Preservation Area and the Planning Area which involves new agricultural impervious cover, since enactment of the Highlands Act, to the total land area of a Farm Management Unit (either individually or cumulatively) of 9% or greater to develop and implement a Resource Management System Plan prepared by the USDA NRCS, TSP, appropriate agent, or NJDA staff, and approved by the local SCD.

- **Policy 3D4:** To promote the use of appropriate alternative and innovative wastewater treatment systems to provide enhanced protection of surface and ground water quality in ARAs of the Conservation Zone.
 - **Policy 3D5:** To promote efforts to increase the use of USDA NRCS and Farm Service Agency cost-share programs, Integrated Pest Management, and Integrated Crop Management programs and other innovative management techniques, in coordination with the NJDA and Rutgers Cooperative Extension, that reduce pesticide and fertilizer use and promote Best Management Practices in conjunction with agricultural activities.
 - **Policy 3D6:** To identify subwatersheds with elevated nitrate levels and develop and implement management plans to enhance water quality in these subwatersheds while maintaining and enhancing agricultural viability.
-
- **Policy 3E1:** To prepare technical guidelines for the preparation of an Agriculture Retention/Farmland Preservation Plan (AR/FPP) element for inclusion in municipal and county master plans and development regulations.
 - **Policy 3E2:** To require conforming municipalities and counties to include an AR/FPP element consistent with the RMP in municipal and county master plans and development regulations.
 - **Policy 3E3:** To require conforming municipalities and counties, with farmland preservation programs or a significant agricultural land base, to incorporate Right to Farm provisions, in accordance with N.J.S.A. 4:1C-1 et seq. and N.J.A.C. 2:76-2, in their master plans and development regulations.
 - **Policy 3E4:** To address agricultural or horticultural development and agricultural or horticultural use through Plan Conformance in accordance with the Right to Farm Act, N.J.S.A. 4:1C-1, and in coordination with the NJDA, the SADC, and the CADB (County Agriculture Development Board).
- As stated in Policy 3A3 and mentioned throughout the other goals and policies, the delineation of an Agricultural Resource Area (ARA) within the Highlands Region is central to the implementation of the RMP. In the ARA, non-agricultural uses are limited to those that support the preservation of farmland, avoid conflicts with agriculture, maintain and enhance the sustainability and continued viability of the agricultural industry, protect Important Farmland Soils, and meet the resource management and protection requirements of the RMP. Where it is not feasible to preserve agricultural



Together North Jersey's Plan Supports Agricultural Businesses, Urban Farming, and Agritourism

Strategy 3.4 of Together North Jersey's long-range plan, finalized in 2015, states:

Support and expand agricultural businesses, urban farming and agritourism. Our region is home to more than 6,000 farms covering more than 366,000 acres. More than 20 percent of the region's farmland assets - 80,000 acres - are permanently preserved. In fact, there are farms in every one of our region's counties except Hudson. While many farms - especially those in the western parts of the region - continue larger-scale operations producing feed corn, alfalfa hay, other grains and livestock production, the number of smaller niche market farms is growing. These smaller operations produce vegetables and fruit, flowers, herbs and a variety of other specialty products. The increased popularity of locally-sourced food, organic farming and small-scale food processing has allowed smaller farming operations to flourish and remain economically viable. To support and expand the agricultural sector in our region, we should continue efforts to permanently preserve farmland through existing acquisition programs.

In addition, our region's economic development and tourism organizations should partner with the Rutgers Cooperative Extension, the N.J. Department of Agriculture, the N.J. Farm Bureau, the N.J. Farmer's Direct Marketing Association and others to develop a coordinated marketing campaign and strengthen farm-to-table initiatives. We should also build partnerships between farmers and community leaders in our region's cities to foster growth in urban farming and improve urban residents' access to healthy, locally-grown foods.

Source: <https://togethernorthjersey.com/wp-content/uploads/2019/06/TNJ-Plan-v5-5-16-for-website-small.pdf>, p. 2.

lands, residential development in the ARA is subject to mandatory clustering.

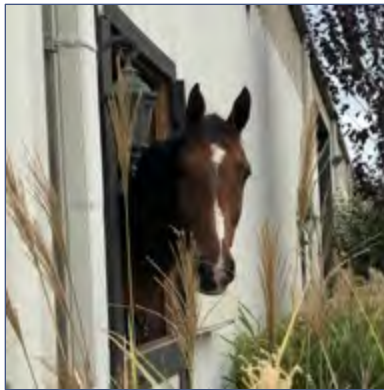
The Highlands Council used the following criteria to determine which areas to include in the ARA: (1) the extent to which farms have Important Farmland Soils, (2) the contiguous nature of farming landscapes, (3) the extent to which lands adjoining a farm are in agricultural use, and (4) the concentration of existing preserved farmland. As indicated by Policy 3A4, portions of the ARA are further delineated into three Agricultural Priority Areas (APA) ranked either Low, Moderate, or High to indicate the prioritization for preservation activities. The seven indicators used to determine categorization within the APA were: (1) ARAs, (2) Important Farmland Soils - Undeveloped, (3) preserved farms, (4) contiguous farms greater than 250 acres, (5) agricultural uses 10 acres or greater, (6) 50% or greater prime soils, and (7) quarter mile proximity to Preserved Farms.

Map 5.4.3 displays the ARA in Somerset County and Map 5.4.4 shows the APA in the county. Somerset County contains 22,418 acres of Agricultural Resource Areas, of which 20,493 acres are Agricultural Priority Areas. Large concentrations of high-priority APAs are located throughout Bedminster Township, with smaller areas located in Peapack-Gladstone and Far Hills.

For information about the Highlands Council land protection programs and recent preservation of farmland with financial assistance from the Highlands Council, see Subsection 5.10.C, Highlands Open Space Protection.

E. Together North Jersey

Together North Jersey (TNJ) was created in 2011 to help develop a regional plan for North Jersey.¹⁷ TNJ brought together a coalition of nearly 100 diverse partners – counties, municipalities, educational institutions, nonprofits, businesses, and other groups – to develop the first comprehensive plan for sustainable development for the thirteen northern New Jersey counties: Bergen, Essex, Hudson, Hunterdon, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, Union, and Warren. The goal of the plan is to create a more competitive, efficient, livable, and resilient North Jersey region. The plan is comprehensive, including a broad range of topics such as housing, economic development, education, land use, energy, water, historic preservation, the arts, stewardship, and transportation.



About farmland, the TNJ plan states, “Long-term investments in transportation infrastructure, open space and farmland protection, arts and cultural institutions and other tourism assets such as our beaches and boardwalks provide an important foundation for targeted economic development activities that can strengthen and grow our region’s economy.”¹⁸ (See sidebar)

F. Somerset County Planning

Somerset County’s Master Plan

The New Jersey County and Regional Planning Enabling Act requires county planning boards to

adopt master plans to guide the physical development of their county. Somerset County’s Master Plan was adopted in 1987 and, while portions of the plan have been updated in the years since, it continues today as the primary document guiding the county’s future. The following elements of the Master Plan relevant to farmland preservation and agricultural development have since been updated:

- County Investment Frame-work, which replaced the Land Use Management Map, discussed below (adopted 2014);
- Comprehensive Economic Development Strategy (adopted 2014);
- Comprehensive Farmland Preservation Plan Update (adopted 2008; this Pres-ervation Plan is the update);
- Trends and Indicators Report, adopted as a background element of the Master Plan in 2014.

Somerset County’s Master Plan and Farmland Preservation

The 1987 Master Plan sets as a goal the retention of the remaining agricultural regions in the county. The plan states that agricultural preservation is a means of (a) preventing sprawl that leads to the inefficient provision of resources, (b) economic development related to agricultural jobs and products, and (c) protecting natural resources and preserving the open character of the county. The plan further identified four Rural Preservation Areas where preservation should be targeted: the Mill-stone Valley,

¹⁷ <https://togethernorthjersey.com/>

¹⁸ <https://togethernorthjersey.com/wp-content/uploads/2019/06/TNJ-Plan-v5-5-16-for-website-small.pdf>, p. 42

Sourland Mountain, the Neshanic Valley, and the Upper Raritan Watershed. The plan outlined the following planning strategies to achieve further preservation in these areas:

- Preserve prime agricultural land and essential support facilities through local planning and zoning efforts and county agricultural districts and purchases of conservation easements purchases. This is to be overseen by municipalities and the county.
- Discourage the construction or extension of centralized sewerage systems and water supply into areas deemed inappropriate for intensive development, while at the same time promoting public and quasi-public investments in those systems meeting the broad goals and development objectives of the County Master Plan. To be overseen by the county and state.
- Relate proposed development activity and future land use to the essential public utilities and services required to support it, in both economically and environmentally sound ways. To be overseen by the county.
- Adopt a variation of the Transfer of Development Rights (TDR) concept at the local level in order to require mandatory open space “set asides” and transfer the development rights to appropriate building sites elsewhere in the community. To be overseen by municipalities.
- Integrate new development into rural areas through clustering and special site design techniques so that the values and heritage of the rural countryside and existing

villages are preserved and enhanced. To be overseen by municipalities.

In addition, the Master Plan includes the following planning strategies to retain agricultural practices in the county:

- Encourage the county, through its Agricultural Development Board, to enhance the agricultural industry in Somerset County. To be overseen by the county.
- Urge the state to provide funding for soil and water conservation projects and for the purchase of conservation easements. To be overseen by the county.
- Encourage municipalities to provide a favorable climate for agricultural operations through their local planning and zoning efforts. To be overseen by the county.

County Development Regulations

New Jersey’s County Planning Act gives county planning boards the authority to review and approve subdivision and site plans that affect county road systems and stormwater facilities. The Somerset County Planning Board has a land development review process in place for this review and approval. The New Jersey County and Regional Planning Enabling Act, which requires the development of master plans, also states that land development in the state should be in conformance with the policies in related master plans. As part of its review process, the Somerset County Planning Board outlines inconsistencies with the Somerset County Master Plan, and these comments are submitted in a development review report for consideration by the municipality and applicant.

Finally, any applicant for a “major” plan submitted to the County, defined to mean three or more new lots or a nonagricultural site plan of 20,000 square feet or greater, is required by the Planning Board to prepare an Agricultural Impact Statement if any part of the site is within 1,000 feet of a farm currently preserved or under contract. The county must provide this Agricultural Impact Statement to the Somerset County Agriculture Development Board for review and comment prior to county approval.

Somerset County Investment Framework

The Somerset County Planning Board adopted the Somerset County Investment Framework as an element of the Master Plan in October 2014, replacing the 1987 Land Use Management Map. The Investment Framework serves to coordinate land use planning efforts at the state, county, and municipal governmental levels. Municipalities participated extensively; conformance is voluntary but high. The Investment Framework map is shown in Map 5.4.5 and the program is described in more detail in the Somerset County Preservation Plan, Chapter 3, Land Use Context. Relative to farmland preservation, the Investment Framework defines Priority Preservation Investment Areas (PPIAs), which consist of agricultural land and environmentally sensitive natural resources, where farmland and open space preservation is preferred. PPIAs total 97,600 acres, or about half of the county.

A tenet of the Investment Framework is that directing growth towards growth-designated areas of the county will help the preservation areas to



remain rural. More PPIA-specific strategies related to Investment Framework implementation include:

- Encouraging private organizations, non-profits, and the public sector to coordinate and leverage resources towards preservation.
- Reinforcing government open space and capital improvement plans.
- Promoting implementation of best management practices (BMPs) for land management.

Somerset County Comprehensive Economic Development Strategy

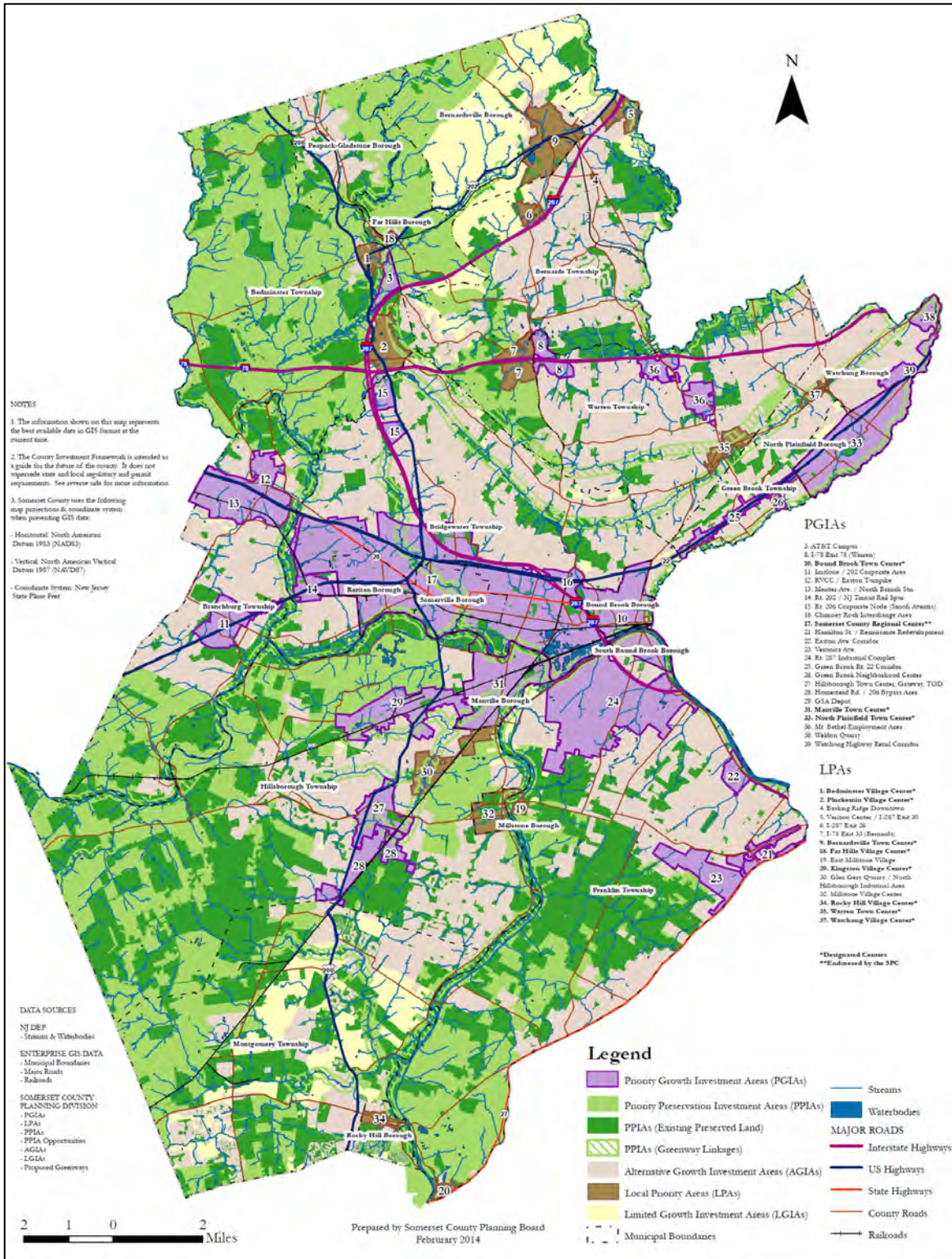
In 2014, Somerset County adopted a Comprehensive Economic Development Strategy (CEDS) entitled *Investment Somerset: A*

Collaborative Blueprint for Economic Growth. The CEDS includes agriculture development among nine priorities identified for action. The CEDS is described further in Section 5.8 of this Farmland Preservation & Agricultural Development Plan.

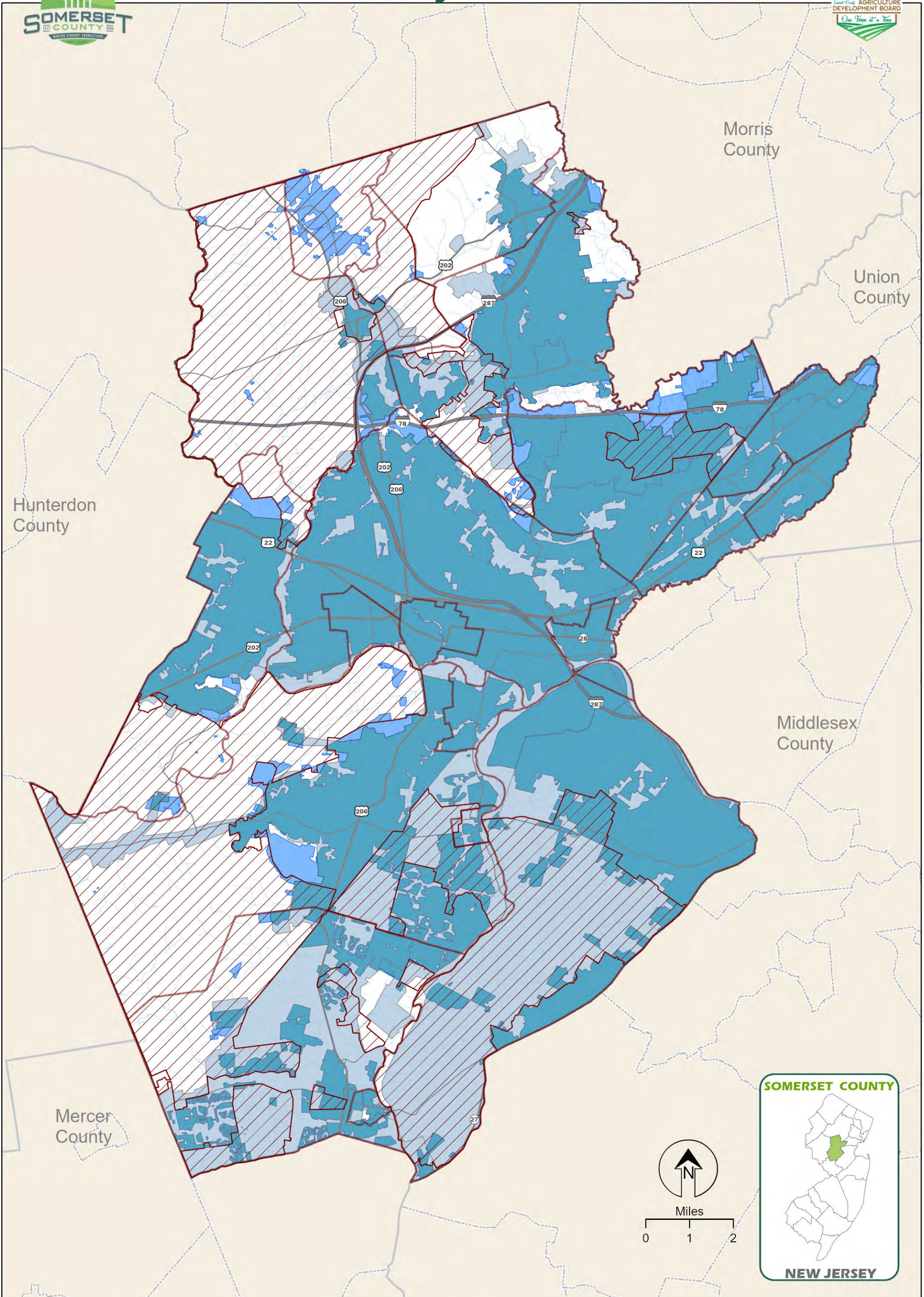
Sewer Service Areas / Public Water Supply Service Areas

Sixty-six percent (129,349 acres) of Somerset County is served by public water, and 46 percent (90,675 acres) is covered by sewer service areas (not all of which are completely served). The preservation of farmland within these public water and sewer service areas is less than ideal as it creates a conflict in public investments, increases farmland easement acquisition costs due to development value, and reduces the efficiency of the infrastructure investment.

Map 5.4.5. Somerset County Investment Framework



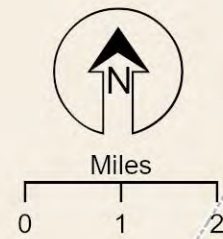
Source: Somerset County Planning Board, 2014



Public Utility Service Areas

Service areas for public water and sewer shown with agriculture developments areas

- Agriculture Development Areas
- Public Water and Sewer Service Area
- Sewer Service Area Only
- Public Water Service Area Only



However, in a suburban county like Somerset such overlap is largely unavoidable. When the Somerset County Agricultural Development Board (SCADB) and Planning Board staff were working to designate Somerset's Agricultural Development Areas (ADAs – focus areas for farmland preservation investment discussed further in Section 54, Somerset County's Farmland Preservation Program), some farmland that was already preserved was located in service areas and much of the valuable and eligible farmland that remained for preservation was located adjacent to existing subdivisions. As a result, 60 percent of the acreage in ADAs in Somerset County is served by public water and 22 percent is in a sewer service area. Map 5.4.6 shows the overlap of ADAs, public water, and sewer service areas in the county.



Wastewater planning is an ongoing, iterative process in the State of New Jersey, as required by the New Jersey Water Quality Planning Act (N.J.S.A. 58:11A-1 et seq) and Section 208 of the federal Clean Water Act. This planning process ensures that federal, state, regional, and local water resource protection, regulations, and land use planning goals are all considered together in a holistic, collaborative process. The New Jersey Department of Environmental Protection (DEP) is tasked with overseeing this process, and has delegated Wastewater Management Plan (WMP) development to county commissioners. These county WMPs project the long-term wastewater treatment needs of the residents of their jurisdiction, offer solutions for capacity constraints, and are an opportunity for expanding or altering any planned sewer service areas.

In 2016, the DEP adopted new rules for water quality management planning, necessitating that counties adopt new WMPs. Somerset County completed the first phase of its own WMP update process in 2013 by adopting a revised countywide Wastewater Service Areas Map. This map delineates the assigned sewer service areas associated with existing domestic and industrial wastewater treatment facilities located within the county. The Somerset County Office of Planning, Policy and Economic Development began the second phase in early 2017, updating the remaining components of the WMP, working with the municipalities, sewer authorities, and other stakeholders to complete the necessary analyses and develop recommendations. Somerset

County's long-standing policy is to coordinate land use and sewer planning so they reinforce each other, avoiding unwanted extensions of public sewers into the ADAs and specifically into land targeted for farmland preservation.

G. Municipal Planning

In the State of New Jersey, control over land use largely rests at the municipal level. Each municipality is authorized to have its own separate zoning regulations aligned with its master plan, giving it a high degree of control when directing development in its community. The MLUL permits a municipal governing body to "promote the conservation of historic sites and districts, open space, energy resources and valuable natural resources...and to prevent urban sprawl and degradation of the environment through improper use of land."

Table 5.4.6. Somerset County Zoning Densities, Acres per Unit

Municipality	Non-Residential	Small (<1 acres)	Medium (1 to 5 acres)	Large (>5 to 10 acres)	Very Large (>10 acres)
Bedminster	1,983	624	496	13,772	0
Bernards	4,761	2,471	8,423	0	0
Bernardsville	169	703	4,406	2,987	0
Bound Brook	224	861	0	0	0
Branchburg	2,907	130	5,520	4,413	0
Bridgewater	5,740	3,367	11,473	7	0
Far Hills	0	69	83	2,998	0
Franklin	4,681	10,537	2,846	11,931	0
Green Brook	1,052	1,466	303	0	0
Hillsborough	6,843	2,978	18,708	0	6,740
Manville	465	1,102	0	0	0
Millstone	194	89	160	0	0
Montgomery	4,565	538	13,622	2,063	0
North Plainfield	251	1,544	11	0	0
Peapack-Gladstone	381	232	1,420	1,662	0
Raritan	668	630	0	0	0
Rocky Hill	167	95	136	0	0
Somerville	477	1,024	0	0	0
South Bound Brook	168	306	0	0	0
Warren	1,024	1,209	9,267	1,100	0
Watchung	553	310	3,004	0	0
Total	37,273	30,285	79,878	40,934	6,740

Source: Somerset County Office of Planning, Policy and Economic Development, 2018

Municipality Zoning Densities

Of the land in Somerset County, 41 percent is zoned for densities between one and five acres per development unit. When combined with lots smaller than one acre per unit, a full 56 percent of Somerset County is zoned for lot sizes of five acres or smaller. These lower- to mid-level densities are indicative of a subdivision-based, suburban development pattern that leads to loss of undeveloped land. Notably, three out of the four the municipalities with the most agricultural land – Hillsborough, Franklin, and Montgomery town-ships – have more than

40 percent of their land zoned in five acre or smaller lots. Table 5.4.6 provides details.

Innovative Planning Techniques

Beyond standard zoning density categories that require larger lots and deter development in rural areas, municipalities in Somerset County have employed a number of innovative planning techniques to promote the preservation of farmland and open space. Table 5.4.7 lists the municipalities and which strategies they employ. Note that the techniques described are all voluntary as currently implemented by municipalities in the county.

Table 5.4.7. Innovative Preservation Planning Techniques Used by Municipalities with Agricultural Land in Somerset County

Municipality	Cluster Zoning	Non-Contiguous	
		Cluster Zoning	Lot Averaging
Bedminster	-	-	Yes
Bernards	Yes	-	-
Bernardsville	-	-	-
Branchburg	Yes	-	-
Bridgewater	Yes	-	-
Far Hills	N/A	N/A	N/A
Franklin	Yes	Yes	Yes
Green Brook	N/A	N/A	N/A
Hillsborough	Yes	Yes	Yes
Millstone	N/A	N/A	N/A
Montgomery	Yes	Yes	Yes
Peapack-Gladstone	Yes	-	Yes
Rocky Hill	-	-	-
Warren	Yes	-	Yes
Watchung	-	-	-

Note: The planning team was unable to determine use of these techniques by Far Hills Borough, Green Brook Borough, and Millstone Borough. The following communities include no agricultural land: Bernardsville Borough; Bound Brook Borough; Manville Borough; North Plainfield Borough; Raritan Borough; Somerville Borough; and South Bound Brook Borough.

Source: Land Stewardship Solutions, 2018, compiled from recent municipal master plans, the 2008 Farmland Preservation Plan, and surveys of municipal staff.

However, mandatory options are available such as requiring clustering of lots should any jurisdictions choose to implement them in the future. The following section details specific examples of each technique.

Cluster Zoning

Cluster zoning permits one section of a site to be subdivided into smaller lots than is allowed under the zoning ordinance while the other portion of the site remains undeveloped for use in agriculture, common open space, recreation, or preservation in some other form. Usually, the overall site's net density cannot be exceeded under cluster zoning unless the developer offers additional benefit, such as maximizing the undeveloped land. It is assumed that developers have an incentive to use clustering because the cost of roads, utilities, and landscaping is less, but sometimes municipalities will offer density bonuses to further

encourage developers to use the technique. Following are examples of cluster zoning as implemented by municipalities in Somerset County

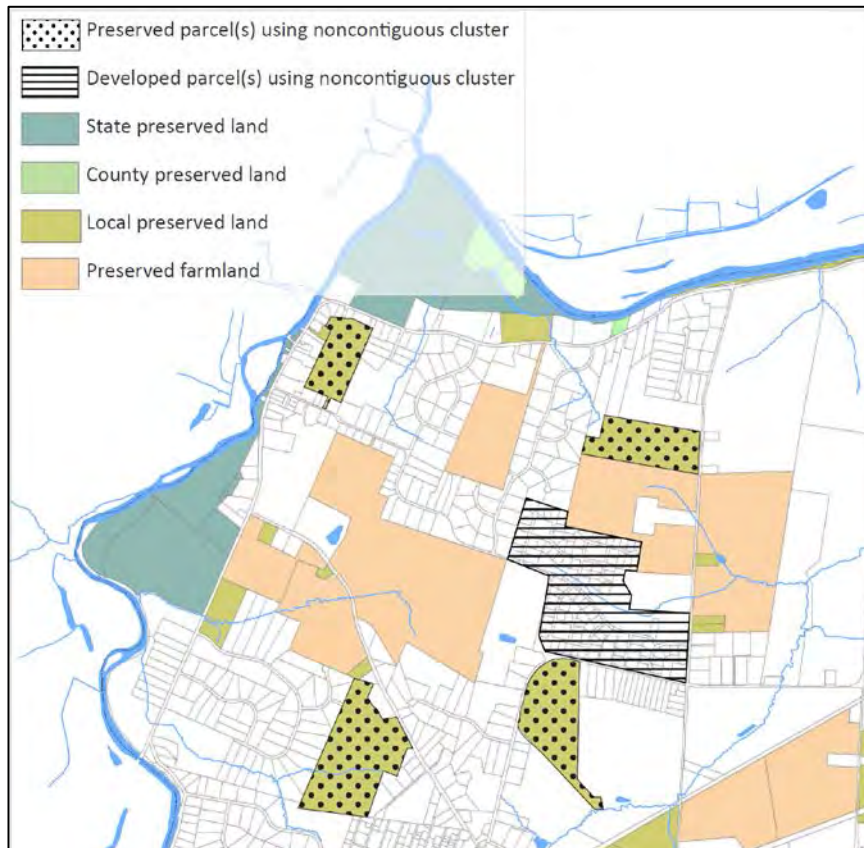
- **Bernards Township** has established Conservation Residential Districts (CR-1 and CR-2), comprising about 30 percent of the land in the Township, where subdivisions may increase density by 50 percent provided that at least 50 percent of the site remains in one "open-lands" parcel. This parcel must be deed-restricted to limit it to one single-family dwelling, and the remainder of the land must be used for agriculture or other conservation uses. Lots in the concentrated portion of a site can be as small as three acres.



The Van Doren Barn in the Millstone River valley (c. 1755), displaying the distinctive broad gable end of a Dutch-built barn. These barns are seen across the southern half of Somerset County, marking a pattern of Dutch settlement that began in the 17th century when Dutch families moved from New York to take up farming on the rich lands of the Millstone and Raritan rivers. (Photo by Ron and Pat Morris)

- In **Branchburg Township**, the Low Density Cluster Option Residential and Low Density Residential Cluster Affordable Districts both permit clustering of lots, with a minimum tract size of 10 acres and a minimum lot area of 0.33 acres.
- **Bridgewater Township** permits clustering of developments in any residential zoning districts, with a minimum lot size of 10 acres.
- **Franklin Township** has established a Natural Resource Preservation Cluster (NRPC) Option in its Residential-40 (R-40), Rural Residential (RR-3 and RR-5), and Agricultural (A) zones, which requires at least 40 percent of a tract to be preserved. In the same zones as well as the Cluster Residential (C-R) Zone, clustering is permitted on tracts of more than 200 acres with a required 50 percent open land set-aside. Franklin provides a density bonus to encourage the use of clustering.
- **Hillsborough Township** has created an open lands ratio in its Agricultural Zone, with a minimum residential lot size of 2 acres, minimum open lands lot size of 10 acres, maximum density of 0.15 unit/acre, with parcels less than or equal to 100 acres required to be contiguous (noncontiguous discussed below).

Figure 5.4.C. Hillsborough Township Preserved and Developed Land Using Noncontiguous Cluster Zoning



Source: Sturm, C., and N. Heater. "Preserving Land Through Compact Growth: Case Studies of Noncontiguous Clustering in New Jersey," report published by New Jersey Future, 2012. Retrieved from <https://www.njfuture.org/wp-content/uploads/2012/05/NJ-Future-Non-Contiguous-Clustering.pdf>.

- **Montgomery Township** adopted a cluster zoning provision in 1974 and, as of its 2010 Comprehensive Farmland Preservation Plan, five cluster developments had been created. However, all land eligible for cluster zoning has either been preserved or developed, and no further cluster developments are being considered.
- In the **Borough of Pea-pack and Gladstone**, Rural Estate (RE) and Rural Residential (RR-5) zoning districts permit clustering. In RE the minimum lot size is 10 acres but clustering can bring it down to five, and in

RR-5 the minimum overall is five acres but with clustering it can be three.

Noncontiguous Cluster Zoning

A variation of the same tool is noncontiguous clustering, where a jurisdiction permits a project that involves two or more separate parcels to preserve one or more of the lots and increase density in the other(s). Hillsborough Township (Figure 5.4.C) provides a noncontiguous clustering option in its agricultural zoning district, with a minimum residential lot size of 2 acres, minimum open lands lot size of 10 acres, maximum density of 0.15 unit/acre, and requiring that at least 50 acres of open land must

be contiguous. The township has successfully employed noncontiguous clustering to preserve 156 acres of farmland on four parcels. Of the preserved land, three parcels totaling 125 acres are leased out by Hillsborough for farming and the fourth, sized at 31 acres, is managed by the state as bird habitat.

Lot Size Averaging

With lot size averaging, the lot size in part of a project can be reduced as long as the entire site's average lot acreage is in line with that zone's density requirements. The following are examples of lot

averaging as implemented by municipalities in Somerset County:

- **Bedminster Township** permits lot averaging in its R-10 District, provided that total development averages as ten-acre lots. When determining the appropriateness of lot size averaging, the Township takes into consideration “stream corridor and wetlands preservation, steep slope protection, agricultural retention, overall site design, reduction in impervious coverage, traffic circulation, and the site’s natural features, topography, and relationship to open spaces on neighboring parcels.” (Bedminster Township Code, Ordinance # 13-401A.7)
- **Branchburg Township** created the Raritan River Corridor (RRC) District in 2008 to establish a riverfront corridor of low intensity development/conservation. In the district, the minimum lot size for a single-family residence is six acres but individual lots can be as small as 1.5 acres under lot averaging.
- In **Franklin Township**, lot size averaging is permitted in its Canal Preservation Zone (C-P) and Residential Rural (RR-3 and RR-5) Districts. In the C-P and RR-5 areas, lots can be reduced to three acres, compared to the otherwise six- and five-acre minimum respectively. For RR-3, on sites of 20 acres or more, lots can be reduced to two acres as long as the overall average lot size is at least a minimum of



three acres. In all instances, the excess open land created by averaging must be deed restricted from further development.

- In **Hillsborough Township**, both the Agricultural (AG) and Mountain Conservation (MZ) Districts offer lot size averaging as a means to encourage preservation. In AG, on tracts of 40 acres or more, lot sizes can be reduced to two acres provided the average remains at the minimum of 10 acres. In MZ, lot sizes can be reduced to five acres provided the average remains at the minimum of 15 acres.
- **Montgomery Township** permits Single-Family Conservation Subdivision Design in its R-5 and MR Districts. Through this design, individual residential lots may be as small as 1.25 acres providing the entire project averages to the higher overall minimum lot size requirement.
- **Warren Township** allows lot size averaging in its EP-250, CR-130/65, and R-20 (V) zones, using it as a flexible tool to encourage open space and agricultural preservation.

Transfer of Development Rights

Transfer of Development Rights (TDR) programs involve designating “sending areas,” where development is not suitable, and permitting the transfer of the rights to develop those areas to “receiving areas,” where infrastructure and other factors make development desirable. At the state level, the New Jersey State Transfer of Development Rights Act (N.J.S.A. 40:55D-140) authorized the



Beef cattle grazing on preserved farmland in Hillsborough Township provide a bucolic view for suburban neighbors. With approximately half of Somerset County in urban and suburban land use, the agricultural industry faces increasing competition for the remaining land base. Simply put, suburban residential development is crowding out the remaining county farmland because Somerset County is a highly desirable place to live. It is urgent to fund and execute as much farmland preservation as possible in the next ten years in order to build up a protected land base that assures a future for the entire industry.

creation of TDR programs by municipalities in the state.

Regionally, the Highlands Water Protection and Planning Act required the Highlands Council to develop a TDR program, leading to the establishment of the Highlands Development Credit Bank (HDC Bank) in June 2008. Under the act, owners' participation in a sending or receiving zone is voluntary. As of July 2018, Bedminster Township is the one municipality in the county that has had participation in the HDC Bank. In July 2016 a resident applied to preserve 39.46 acres of land and has been deemed eligible for the program and approved for HDC Bank purchase, but the transaction has yet to be completed.

At the municipal level, Bernards Township adopted a transferable density provision in 1984, whereby developments in the R-5 zone could send development rights from sensitive lowland areas to highland areas in the same zone. However, all upland portions of the R-5 zone were developed by 2010 without this provision ever being used.

Hillsborough Township's TDR ordinance was adopted in 1976 in response to a lawsuit by a landowner who wanted to transfer development rights from one of their properties in an environmentally sensitive area to another parcel they owned elsewhere in the Township. In the Township's ordinance, the sending parcel must be at least 25 acres in size. The exception to this requirement is when the sending parcel is located next to an already



preserved parcel of 25 acres or more, in which case the sending parcel must instead be at least five acres. Receiving sites can be any residentially zoned district, and the receiving parcel receives one credit for every dwelling unit that would otherwise be permitted in the sending parcel's district. Of note, the preserved land in the sending parcel must be deeded to the Township rather than the landowner retaining the deed.

H. Conclusion

This chapter is an introduction to the basics of the land use planning context that shapes farmland

preservation in Somerset County. Most of the ability to affect the future of agricultural land use through regulation lies with municipalities. Somerset County's farmland preservation program is thoroughly described in Section 5.5, followed by a description of funding programs in Section 5.6, Future Farmland Preservation Program. Even though Somerset County does not regulate land use, its program and funding are extensive for farmland preservation and have made a great deal of difference in the County's ability to shape growth through land preservation.

5.5. Somerset County's Farmland Preservation Program

The State of New Jersey, Somerset County, and its municipalities have made preserving farmland a priority in statutes, regulations, and planning documents. Farmland is an irreplaceable resource that is essential to the county's heritage, economy, and natural resources. For many residents and quite a few farms, the availability of local foods and other farm products (such as equine) is a vital part of the county's quality of life. As of July 2018, Somerset County has permanently preserved 8,373 acres of farmland. This section of the Farmland Preservation & Agricultural Development Plan describes the County's farmland preservation program and trends in acreage and cost.

A. Introduction: Agricultural Development Areas

In 1983, the New Jersey State Legislature passed the State Agriculture Retention and Development Act, which resulted in the creation of the State Agriculture Development Committee (SADC). The SADC administers funding for farmland preservation programs, establishes farmland preservation policy statewide, and operates the program in general. In April 1983, the Somerset County Board of Chosen Freeholders created the Somerset County Agriculture Development Board (SCADB), which oversees the preservation program in the county.

Under the act, county agricultural development boards are tasked with designating Agricultural Development Areas (ADAs) in their jurisdictions. An ADA is an area that has the potential for long-term agricultural viability.

ADA Designation Criteria

In order for land to be eligible for the state farmland preservation program, it must qualify for farmland tax assessment, be part of an ADA, and meet other minimum criteria described later in this section. Per

state statute (see State Agriculture Development Committee rules at N.J.A.C. 2:76-1), the following criteria are to be used by county boards and the SADC when designating an ADA:

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

The state statute further specifies the following factors to be considered when county boards develop criteria for ADAs:

Somerset County's ADA Project Areas

Bedens Brook ADA Project Area

This ADA is located in the very southwestern corner of Somerset County, and shares a border with Princeton and Hopewell Townships in Mercer County. It encompasses 1,989 acres, with 611 acres of farmland preserved to date.

Bedens East ADA Project Area

Situated between the Neshanic Valley, Bedens Brook, Pike Run, and Eastern Montgomery ADAs, Bedens East comprises a cluster of farmlands in south-central Montgomery Township. All 53 acres of farmland in the ADA have been preserved.

Bernards Dead River ADA Project Area

Located in Bernards Township, the Dead River ADA is sited in the southeastern corner of the municipality between the borders of Far Hills Borough and Warren Township. The ADA totals 3,940 acres, with 30 acres preserved to date.

Eastern Montgomery ADA Project Area

This ADA of 227 acres is situated in eastern Montgomery Township, adjacent to the Millstone Valley ADA. Of the 115 acres of active farmland in the ADA, 107 acres have been preserved.

Millstone Valley ADA Project Area (East, West)

The Millstone ADA encompasses Millstone Borough and portions of eastern Hillsborough Township and southern Franklin Township. It largely runs along the eastern side of the Millstone River but its northern section juts west through Hillsborough to touch the Neshanic Valley ADA. The ADA totals 21,506 acres and 1,585 acres of farms within have been preserved to date. The Millstone Valley West Project Area (4,502 acres) includes Millstone Borough and a portion of Hillsborough Township. Millstone Valley East (17,005 acres) is wholly within Franklin Township.

(Continued on page 80)

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
6. 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 within 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

Somerset County established the following criteria for ADAs in compliance with state statute:

1. Land is currently in agricultural production, has strong potential for agricultural production or is assessed as farmland through a woodland management plan.
2. Agriculture is the preferred but not necessarily the exclusive use.
3. Agriculture is a use permitted by current municipal zoning ordinance or is allowed as a nonconforming use.

Mapping Somerset County's ADA and Project Areas

The Somerset County ADA designation is largely distributed across the northwest and southern portions of the county where there is a concentration of high-quality farmland. One additional section of the ADA is located in Warren Township where there is another pocket of farmland. While there are other individual farms that can be found throughout the county, the ADA generally excludes isolated farms or those closer to areas of development. Portions or all of Bedminster, Bernards, Bernardsville, Branchburg, Far Hills, Franklin, Hillsborough, Millstone, Montgomery, Peapack-Gladstone, and Warren are included in the ADA.

During the development of the 2008 *Comprehensive Farmland Preservation Plan*, the SCADB identified 10 different subdivisions, three of which are further subdivided, making a total of thirteen project areas (Map 5.5.1). Project areas were determined through a combination of analysis of county soils and tillable land areas, review of existing preserved farmland clusters, and public input and comments. The project areas largely align with the boundaries of the subdivisions of Somerset County's ADA. The only exceptions are the three largest sections of the ADA (Millstone Valley, Neshanic Valley, and Upper Raritan) which the SCADB further divided to reduce the size of the project area and highlight the concentration and continuity of agricultural land in those parts of the ADA. All meet SADC statutory guidelines (N.J.A.C. 2:76-17.2), with each area containing some of the following:

- Targeted farms located within an ADA.
- Lands from which an application for the sale of a development easement has been granted final approval by the municipality, county, and/or SADC.

Somerset County's ADA Project Areas

(Continued from page 79)

Upper Raritan ADA Project Area (West, East)

The Upper Raritan ADA is located in the county's northwestern corner. Totaling 26,051 acres, it is the second largest ADA in the county and contains farmland in Bedminster, Bernardsville, Far Hills, and Peapack & Gladstone. It also borders regions of Hunterdon and Morris Counties that contain significant farmland acreage. In Upper Raritan, 2,419 acres of farmland have been preserved. The project area is divided along Route 206. The Upper Raritan West Project Area (17,177 acres) is situated in the northern part of Branchburg and includes Bedminster Township and the west portion of Peapack and Gladstone Borough. The Upper Raritan East Project Area (8,875 acres) includes the remainder of Peapack and Gladstone, Far Hills Borough, and the northern part of Bernardsville Borough.

Warren ADA Project Area

This ADA is located in the center of the Warren Township near the East County Reserve Park. The ADA totals 2,090 acres and none of the 75 acres of active farms within have been preserved to date.

- Lands from which development easements have already been purchased.
- Other land permanently deed-restricted for agricultural use.
- Lands enrolled in an eight-year farmland preservation program or municipally approved farmland preservation program.
- Other permanently preserved lands dedicated for open space purposes that are compatible with agriculture.

Tables 5.5.1 and 5.5.2 provide a summary of the ADA by subdivision and project area and the sidebars on



Table 5.5.1. Somerset County Agricultural Development Area Summary

ADA Subdivision/Project Area	Total ADA		Preserved Farmland		Candidate Farms		Active (Taxed) Farmland	
	Acres	Parcels	Acres	Parcels	Acres	Parcels	Acres	Parcels
Bedens Brook	1,989	422	611	26	97	8	413	60
Bedens East	450	263	53	1	219	7	32	65
Bernards Dead River	3,940	671	30	1	143	6	341	46
Eastern Montgomery	227	52	107	5	0	0	115	8
Millstone Valley	21,506 ¹	5,743	1,585	39	3,002	93	4,895	580
Millstone Valley East ²	17,005		843	25			2,956	310
Millstone Valley West	4,502		743	14			1,939	270
Neshanic	30,813	4,545	2,839	41	4,733	99	8,354	502
Neshanic North ³	24,288		2,462	34			8,348	387
Neshanic South	6,525		377	7			1,083	115
Northern Bernards	78	3	0	0	54	1	27	1
Pike Run	591	97	205	6	106	4	259	20
Upper Raritan	26,051*	2,889	2,419	34	7,168	175	13,644	536
Upper Raritan East	8,875		41	1			3,362	149
Upper Raritan West	17,177		2,378	33			10,855	387
Warren	2,090	602	0	0	25	2	75	51
Total	87,736	15,287	7,850⁴	153	3,864⁵	279	28,155	1,869

Source: Somerset County preservation data, as of 3/11/21.

NOTES: (1) The total of two ADA subdivisions that have been further subdivided do not match because of rounding. (2) Millstone Valley East does not include 3,037 acres of the state-owned Six Mile Run Reservoir Site, managed as part of the Delaware and Raritan Canal State, with much of it farmed under contract by local farmers. (3) Neshanic North does not include 502 acres at the state-owned Confluence area site, purchased by the state for reservoir use at the confluence of the South Branch and North Branch Raritan rivers, much of it also farmed under contract. (4) Does not match total reported acres preserved in the county, 8,373 acres, as some preserved land is outside of project areas. (5) Does not match total reported candidate farms in the county, 18,186, as some candidate farms are outside of project areas.

this page and page 84 briefly describe characteristics of each.

B. Minimum Eligibility Criteria for Preserved Farmland

The SADC has set minimum eligibility criteria for farmland that is to be preserved using state funding. In order to be eligible, the site must be developable, have soils capable of supporting agricultural or horticultural production, and meet minimum tillable land standards. (N.J.A.C. 2:76-6.20) More specifically, the criteria are as follows:

- For lands less than or equal to 10 acres:
 - The land must produce at least \$2,500 worth of agricultural or horticultural products annually; and
 - At least 75% or a minimum of 5 acres of the land (whichever is less) must be tillable; and
 - At least 75% or a minimum of 5 acres of the land (whichever is less) must be capable of supporting agriculture or horticulture; and

Table 5.5.2. Somerset County Project Areas, Characteristics Analysis (Acres)

Project Area	Total Acres in Project Area	Preserved Farmland	Candidate Farms	Open Space	Open Space Leased for Farms	Farmland Parcels with:		
						Productive Soils	Tillable Land	Soils & Tillable Land
Bedens Brook	1,989	611	97	531	0	560	765	234
Bedens East	450	53	219	14	0	194	226	128
Bernards Dead River	3,940	30	143	757	0	1,327	863	401
Eastern Montgomery	227	107	0	23	0	100	100	50
Millstone Valley East	17,005	843	1,929	5,933	84	6,766	7,621	4,346
Millstone Valley West	4,502	743	1,073	479	7	1,871	1,935	1,062
Neshanic North	24,288	2,462	4,317	6,646	507	10,128	12,068	6,694
Neshanic South	6,525	377	417	2,332	176	2,653	2,845	1,420
Northern Bernards	78	0	54	61	0	5	33	3
Pike Run	591	205	106	175	0	179	216	144
Upper Raritan East	8,875	41	912	1,067	104	2,968	2,796	1,271
Upper Raritan West	17,177	2,378	6,256	2,135	445	5,112	6,048	2,366
Warren	2,090	0	25	310	0	710	580	267
Total	87,736	7,850¹	15,547²	20,464	1,324	32,575	36,096	18,386

Source: Somerset County preservation data (as of 12/31/18 for open space; as of 3/11/21 for farmland) (1) Does not match total reported acres preserved in the county, 8,373 acres, as some preserved land is outside of project areas. (2) Does not match total reported candidate farms in the county, 18,186, as some candidate farms are outside of project areas.

- The land in question must exhibit development potential as defined by the SADC (based upon zoning, ability to be subdivided, less than 80% wetlands, less than 80% slopes of 15%); or
- The land must be eligible for allocation of development credits pursuant to a Transfer of Development Credits (TDR) program.
- For lands greater than 10 acres:
 - At least 50% or a minimum of 25 acres of land (whichever is less) must be tillable; and
 - At least 50% or a minimum of 25 acres of land (whichever is less) must have soils capable of supporting agriculture or horticulture; and
 - The land in question must exhibit development potential as defined by the SADC; or
 - The land must be eligible for allocation of development credits pursuant to a TDR program.

The SADC has defined “tillable” as lands classified in the state Farmland Assessment as cropland harvested, cropland pastured, and permanent pasture. “Cropland harvested” has had a crop harvested upon it in the past year. It also includes land under structures utilized for agricultural or horticultural production. “Cropland pastured” may not have been in active production in the past year but can be and often is used to produce crops.



“Permanent pasture” land is not cultivated because it is fully utilized for grazing or erosion control.

Any property included within Somerset County’s ADA can be eligible for preservation by the SADC providing that (a) at least one parcel within the property is on the candidate farm list, (b) the combined parcels in total meet SADC minimum standards, or (c) the SCADB provides evidence that the parcels were not previously targeted due to a specific mapping or other error.

There is a total of 16,879 acres of farm-assessed land in project areas that meets both the minimum eligibility criteria for soils and tillable land, constituting 79 percent of the active, tax-assessed farmland in these areas. All are unreserved candidate farms that meet both state and local requirements for preservation funding. Note that some candidate farms targeted by the County are actually outside of the project areas, since they were identified and grandfathered into the process before SADC guidelines were finalized.

C. County Ranking Criteria

The SCADB utilizes the state ranking criteria in order to prioritize each farm for preservation. In addition to state ranking criteria, when considering farms for county funding the SCADB has additional standards it applies, including:

- Each parcel must be at least 25 acres in size.
- Farms that are contiguous to already preserved farms are looked upon more favorably with the goal of creating contiguous farmbelts where possible.

- Farms of local or historical importance, and those that have unique values/ characteristics, are prioritized.

When evaluating individual applications, the SCADB first reviews the application and uses the SADC ranking sheets to evaluate the farm. Beyond minimal qualifications and the additional county priorities listed above, the board’s decision regarding a property depends on the number and quality of other applications and where the County stands in terms of funding. If there are too many applicants to fund them all, the highest ranked applications move forward and those that do not receive county funding are encouraged to go through an SADC, municipal, or nonprofit program.

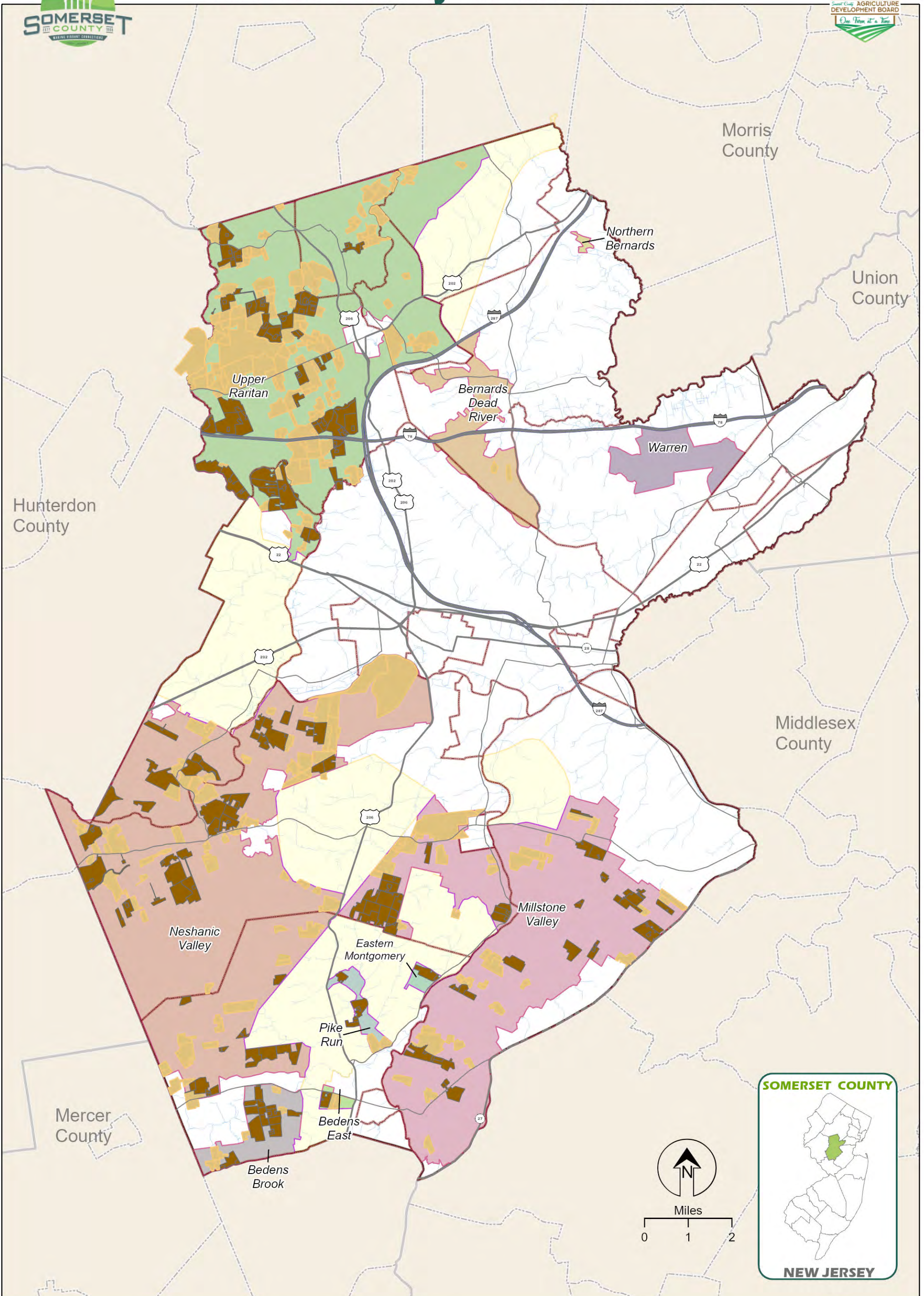
With this plan, the SCADB has determined that it will entertain the adoption a minimum of 15 acres, provided that the land meets all other state and county criteria. A rationale for this policy change is set forth below in Section 5.12, Goals & Strategies, Strategy 5.3.A, “Increase the number of Candidate Farms.” Additionally, the SCADB will entertain the acceptance of the SADC’s minimum size of 10 acres into the County PIG program where it makes the most sense to ensure contiguous preserved lands.

D. County Policies Related to Farmland Preservation Applications

The SCADB follows the New Jersey SADC’s policies regarding division of premises and exception areas. The following is a brief summary of the SADC’s policies for each of these issues.

Division of the Premises

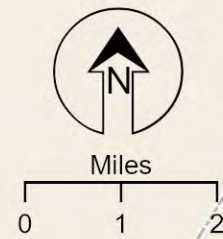
As the SADC seeks to preserve large tracts of farmland, it generally discourages the division of

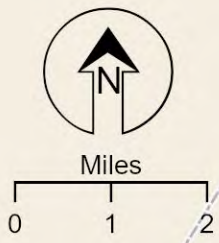
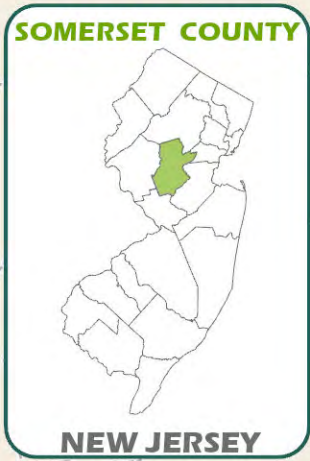
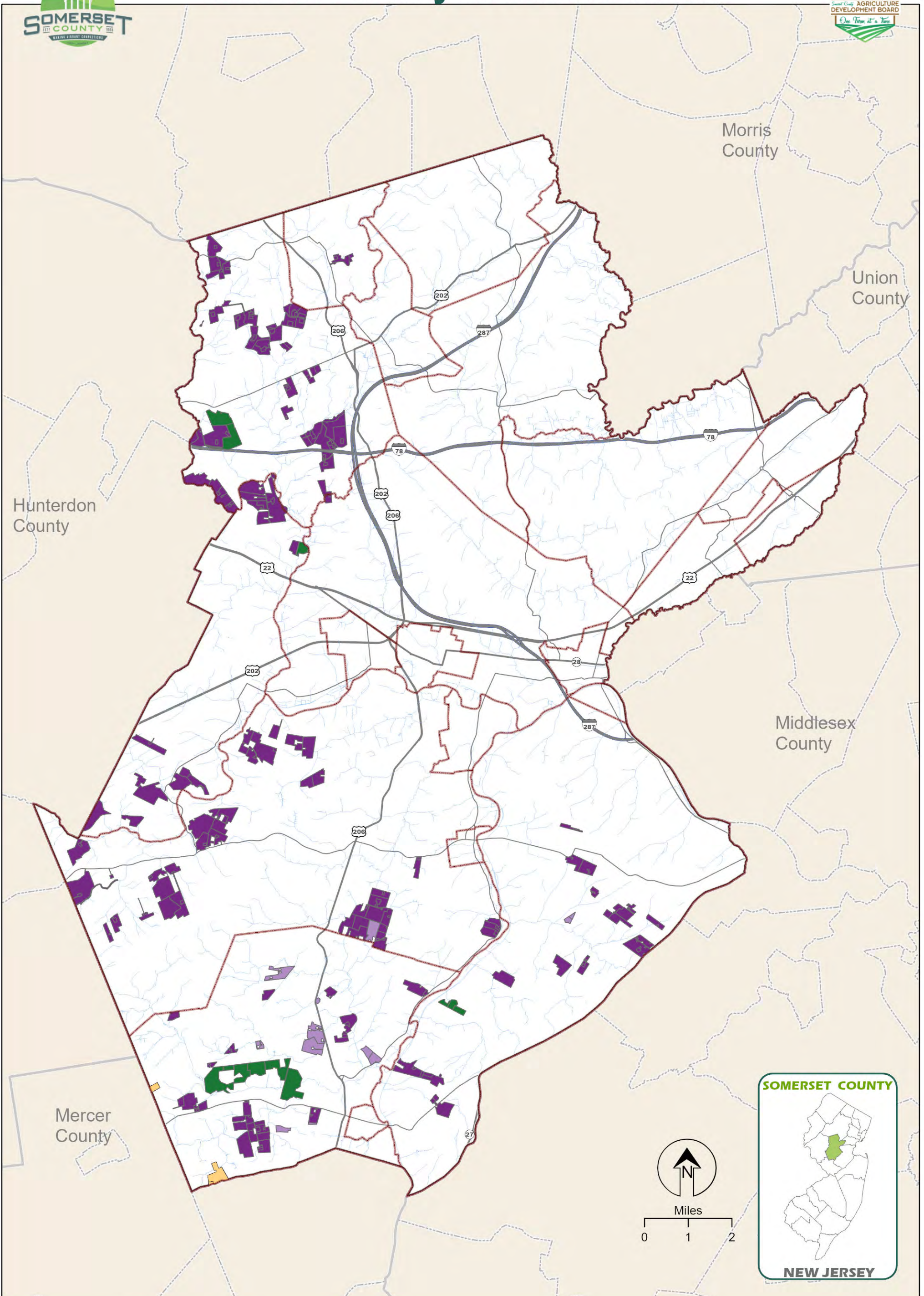


Farmland Preservation

Agriculture development areas shown with preserved farmlands and candidate farms for preservation

- Farm Belt
- Preserved Farmland
- Candidate Farms for Preservation
- Agriculture Development Areas (Shown with purple outline and unique color for each ADA)





Preserved Farmland by Protecting Agency

- State
- County
- Local
- Non Profit

premises by preserved farmland owners. If a farmer in Somerset County desires to divide preserved land, they must submit a written request for approval by both the SCADB and the SADC. In order for the request to be approved, the owner must meet the following requirements:

- The proposed division must be for an agricultural purpose, such as diversification.
- The division must result in agriculturally viable parcels, each capable of sustaining a variety of agricultural operations that produce reasonable economic return under normal conditions.
- Each resulting parcel must meet the minimum eligibility criteria for new applications to the preservation program.

Approval of Exceptions

Exceptions are portions of land that are not subject to the easement restrictions, delineated during the application process. The SADC discourages exceptions and, when they occur, recommends them to be as small as possible. When an exception is made, the landowner does not receive any compensation for the excepted area. The SCADB encourages at least one exception area on a property prior to preservation, thus ensuring some flexibility for the landowner in the future. There are two types of exceptions:

- **Severable:** These exceptions are excluded from easement restrictions and may be sold as separate lots in the future.
- **Non-Severable:** These exceptions are excluded from easement restrictions, but they cannot be sold separately from the rest of the preserved farm.

When evaluating a proposed exception, SADC staff consider the following:

- Is the size and location appropriate for, or necessitated by, the topography of the farm?
- How much land will be taken out of production?
- How does the land taken out of production affect the pattern and viability of farming? Does it fragment the operation?
- What is the local zoning? If the exception is severable, can it be further subdivided?
- Does the severable exception have its own access to a roadway?
- Are the number of housing opportunities within the exception area restricted?
- Has the suitability of the intended uses been explored (e.g., have percolation and water supply questions been resolved)?
- Is the total number of proposed housing units appropriate given the size of the farm and the tillable acreage available for agriculture on the farm?

Approval of Housing Opportunities

Most landowners seeking to create exception areas do so in proximity to their existing homes and infrastructure, thus retaining some flexibility around those buildings. The SADC does permit the replacement of a residence on permanently preserved land even if an exception is not on that location, but the replacement must be individually reviewed and approved by the SCADB and SADC with a goal of minimizing the impact on agricultural operations.

Table 5.5.3. Farmland Preservation in Somerset County, by Municipality

Municipality	Preserved Acres	Total Cost
Bedminster	1,864	\$43,273,062
Bernards	30	\$617,550
Branchburg	1,089	\$10,871,165
Bridgewater	22	\$652,464
Franklin	896	\$31,425,858
Hillsborough	3,498	\$34,999,084
Montgomery	2,282	\$15,878,483
Peapack-Gladstone	54	\$1,960,528
Somerset County	8,373	\$139,734,510

Source: Somerset County preservation data, acreage as of 3/11/21, dollars as of 1/29/16.

In addition, there are two types of exceptions related to the construction of additional housing on a preserved farm:

Agricultural Labor Housing: The SADC recognizes the need for such housing, and may approve its construction providing (a) there is proof for its need for farm production, (b) proposed occupants would be full-time employees (seasonal labor is permitted), (c) the structure is sized appropriately based on labor needs, and (d) the housing will not be used as a residence by the owner or any descendent of the owner.

- **Residual Dwelling Site Opportunities (RDSOs):** RDSOs are areas designated by a landowner as sites on a farm where they may construct housing at some point in the future. Related parcels must be at least 100 acres, and the density of the proposed residential development must not exceed one residential unit per 100 acres when including both existing and proposed buildings. The housing is limited to single-

family buildings, and at least one person living in the proposed residence must be actively engaged in the day-to-day production activities of the farm.

E. Farmland Preserved to Date by Program and Municipality

Through the County PIG Program, there are 122 permanently preserved farms in Somerset County in eight municipalities; Table 5.5.3 shows that, as of March 11, 2021, these farms incorporate 8,393 acres. This is 1,663 acres over the number reported in the 2008 agricultural preservation plan, an increase of 25 percent over the former number reported, 6,710 protected acres. In total, governmental partners have spent \$139.7 million to preserve agricultural land in the county, with Somerset County providing just under \$34 million or 24 percent of the cost. Map 5.5.2 shows preserved farmland by the holder of the easement; as Tables 5.5.3 and 5.5.4 amply demonstrate, most farmland is preserved by combining funds from multiple agencies.

Table 5.5.4. Farmland Preservation in Somerset County, by Year of Preservation

Purchase Year	Acres	Total Cost
1987	86	\$601,160
1989	59	\$815,708
1991	77	\$476,217
1992	249	\$2,967,273
1993	203	\$1,255,437
1994	569	\$3,941,450
1996	107	\$714,143
1997	413	\$3,897,602
1998	339	\$3,093,803
1999	142	\$1,006,496
2000	179	\$1,926,534
2001	1,228	\$6,914,681
2002	90	\$890,763
2003	721	\$7,738,321
2004	492	\$7,047,095
2005	814	\$16,247,712
2006	405	\$11,263,793
2007	183	\$6,744,046
2008	381	\$20,709,935
2009	272	\$9,293,626
2010	623	\$14,617,771
2011	75	\$1,719,003
2013	43	\$1,444,102
2014	99	\$1,267,000
2015	66	\$1,119,047
2016	216	\$7,063,127
Total	8,393	\$139,734,510

Source: Somerset County preservation data, acreage as of 3/11/21, dollars as of 1/29/16.

Of the jurisdictions, Hillsborough at 3,498 acres has the most farmland preserved. Montgomery follows at 2,281 acres preserved, then Bedminster follows with 1,864 acres preserved and Branchburg with 1,089 acres preserved. However, it is Branchburg that has the highest percentage of its tax-assessed farmland preserved, 43 percent. Montgomery follows at 38 percent, then Hillsborough at 36 percent

preserved, then Bedminster at 18 percent (for acreages, see Table 5.2.1, Somerset County Acres in Agricultural Land by Municipality, 1997-2019).

Table 5.5.4 presents a different snapshot of the preservation program, this time summarized by the year in which the preservation occurred. The table



Table 5.5.5. Farmland Preservation in Somerset County, Summarized by Program

Program	Acres	Total Cost	SADC Share	Federal Share	County Share	Municipal Share
ACEP	155	\$5,867,000	\$2,014,672	\$2,860,581	\$991,746	\$0
Ag & Conservation Easement	138	N/A	\$0	\$0	\$0	\$0
County EP	4,446	\$48,902,215	\$30,445,710	\$121,748	\$18,334,758	\$0
County PIG	272	\$5,961,416	\$3,500,924	\$514,605	\$1,945,886	\$0
County Purchase	83	\$1,484,919	\$0	\$0	\$1,484,919	\$0
Easement Donation	271	\$0	\$0	\$0	\$0	\$0
FRPP	99	\$1,267,000	\$0	\$721,408	\$545,592	\$0
Municipal PIG	1,350	\$38,444,497	\$20,298,781	\$2,753,066	\$5,503,229	\$9,889,421
Nonprofit - County Held	86	\$3,742,812	\$825,000	\$999,500	\$871,172	\$1,047,140
Nonprofit Direct Purchase	128	N/A	\$0	\$0	\$0	\$0
Nonprofit EP	158	\$3,958,010	\$1,959,383	\$0	\$1,105,409	\$125,000
SADC EP	819	\$24,075,151	\$15,497,175	\$438,747	\$2,000,000	\$6,139,229
SADC Fee Simple	107	\$714,143	\$714,143	\$0	\$0	\$0
Township Direct Purchase	19	\$358,680	\$0	\$0	\$179,340	\$179,340
Total	8,393	\$139,734,510	\$78,010,987	\$8,409,655	\$33,626,623	\$18,501,117

Source: Source: Somerset County preservation data, acreage as of 3/11/21, dollars as of 1/29/16 (SADC as of 6/6/19)
 ACEP=federal Agricultural Conservation Easement Program; EP=easement purchase; PIG=planning incentive grant;
 FRPP=federal Farm and Ranchlands Protection Program.

shows that the peak year for farmland preservation was 2001, with 1,228 acres preserved in that year alone. In fact, the first decade of this century was when the bulk of preservation occurred to date, with 64 percent of preserved acres in the county preserved between 2001 and 2010. This is not surprising given that these were also years during which state funding for the programs was highest (discussed further in Section 5.6, Future Farmland Preservation).

Finally, Table 5.5.5 shows a summary of funding programs that have been used to support farmland

preservation in Somerset County. Each program is described in further detail below.

County Easement Purchase (EP)

Easements purchased through this Somerset County-directed program are currently funded 60 percent by state funds, with the remainder provided by the County. Under the program, landowners sell the development rights of the land to the County, thus restricting their land to agricultural use in perpetuity. The landowners retain ownership and may sell or otherwise transfer the land just as they would without the restriction.



Neshanic ADA Project Area, West, Hillsborough Township.

Following submission of a landowner application for easement to the SCADB, the board oversees a site visit and two independent appraisals to determine the land's fair market value and its agricultural value. The difference between the land's market value and its agricultural value is the easement value as certified by the SADC.

Table 5.5.5 shows that 4,446 acres in Somerset County have been preserved through county easement purchase, representing 55 percent of the preserved farmland in the county. It is also the program where most of the funding has been spent on preservation, totaling \$48.9 million or 36 percent of total costs. The state covered 59 percent of these costs, the County 33 percent, and the federal government 9 percent.

County Planning Incentive Grants (PIGs)

County Planning Incentive Grants (PIGs) were established in July 2007 by the SADC, and are another easement-purchasing program. County PIGs are funded 60 percent by state funds, with the remainder provided by the County. The program has increased flexibility for the counties, such as year-round applications versus once a year in the traditional easement program and reduced timeframes. In exchange for this flexibility, jurisdictions receiving this funding must complete a comprehensive farmland preservation plan. In addition, in order to receive PIG funding, counties must have a dedicated source of funding or some alternative specified means to finance farmland preservation.

Municipal Planning Incentive Grants (PIGs)

Municipal Planning Incentive Grants are similar to county PIGs, with the same requirements for state



funding applying to the related municipality (farmland preservation plan, local agricultural advisory board, right-to-farm ordinance, and dedicated funding source). In Somerset County, 17 percent of the preserved farmland has been through the municipal PIG program, totaling 1,350 acres. Of the \$38.4 million spent on the program, 53 percent was provided by the state, 7 percent by the federal government, 14 percent by the County, and 26 percent by municipalities. Hillsborough (\$3.8 million), Franklin (\$3.4 million), Montgomery (\$1.8 million), and Bedminster (\$0.9 million) have all participated in the program.

SADC Direct Easement Purchase (EP)

Under this program, landowners can apply directly to the SADC to sell development rights. In most cases, the state pays the full cost for the easement. The land is still owned by the landowner, but it is restricted to agricultural purposes in perpetuity.

In general, the SADC approves only “priority farms” for direct easement purchase, or farms that exceed the county’s average acreage and quality score. The minimum acreage requirement for a priority farm in Somerset County is 61 acres. Quality scores are determined through a combination of factors, including soil quality, proportion of tillable acres, proximity to other preserved farms, and local support for agriculture. If a farm does not meet the criteria to be a priority, the SADC will consider approval on a case-by-case basis.

In Somerset County, 819 acres of farmland have been preserved through the SADC EP program, costing \$24.1 million. The state provided 64 percent of the funding, 2 percent was from the federal government, 8 percent from the County, and 26 percent from municipalities. The last SADC EP purchase in Somerset County was in 2008.

SADC Fee Simple

Through this program, the state buys properties outright to preserve farmland and then resells them via auction. This program also centers on the priority farms discussed above under SADC EP. Only one farm in Somerset County has been purchased through this program, in 1996, in Branchburg totaling 107 acres for \$714,143.

NRCS Programs (FRPP and ACEP)

Prior to 2014, the USDA Natural Resources Conservation Service (NRCS) managed the Farm and Ranchlands Protection Program (FRPP) with the goal of protecting farm and ranch lands from conversion to non-agricultural uses that contain prime, unique, or statewide and locally important soils, or historic and archaeological resources. The federal cost-share in the program was 20 percent but easements in the program faced additional impervious cover requirements that did not apply to standard easements. For example, farms with fewer than 50 acres were capped at one acre of impervious cover. In addition, landowners were required to implement a farm conservation plan on their highly erodible soils through cooperation with the NRCS. One property totaling 99 acres was preserved under FRPP prior to the program’s end, located in Hillsborough.

Created by the 2014 Farm Bill, the Agricultural Conservation Easement Program (ACEP) replaced the FRPP. The new program provides funding to purchase conservation easements on eligible agricultural lands and wetlands. Lands eligible for ACEP Agricultural Land Easements (ALE) include cropland, grassland, pastureland, and nonindustrial private forestland.

Under ACEP, NRCS can provide a cost-share of up to 50 percent of the easement purchase and, in

instances where grasslands are of special environmental significance, this cost-share can increase to 75 percent. Two properties in Bedminster were preserved in 2016 under this program, totaling 155 acres and costing \$5.9 million. The state provided 34 percent of the funding, 49 percent came from the federal government, and 17 percent from the County. In 2018, Somerset County used the program to protect 372 acres of grasslands on a significant farmland section of the Duke Farms, thereby providing a westerly buffer to the more recognized and publicly accessible area of Duke Farms.

Nonprofit Program

SADC provides nonprofit organizations with up to 50 percent of the costs for fee simple or easement purchases. In Somerset County, 421 acres of farmland have been preserved in coordination with nonprofits. Of these, nonprofits have purchased 128 acres without governmental assistance. The remainder of the preserved land cost \$7.7 million, with 10 percent of funding provided by nonprofits, 36 percent by the state, 13 percent by the federal government, 26 percent by the County, and 15 percent by municipalities.



Transfer of Development Rights

This program is discussed in Section 5.4, Land Use Planning Context, and involves (a) designating “sending areas,” where development is not suitable, and (b) permitting the transfer of the rights to develop those areas to “receiving areas,” where infrastructure and other factors make development desirable.

Donations/Bargain Sale

Landowners can always voluntarily donate an easement, either for the entire value of the preserved farm, or part of the value. When a landowner donates part of the value during a transaction also involving sale of an easement or development rights, this is called a bargain sale (that is, the easement was purchased at a bargain, so to speak). In return for their donation, landowners can take a tax deduction for a charitable contribution against their income taxes for the value for which they did not receive

compensation. Three parcels in Montgomery Township were donated in 2003, totaling 271 acres; in 2019, a 75-acre easement was donated to Bedminster and in a separate, nearby transaction, a 49-acre purchase involved a valuation of an associated easement under appraised value, helping the nonprofit with its match for its

state grant.

Installment Purchase

Instead of a lump sum payment from an agency purchasing development rights, occasionally a landowner accepts a payment plan for their development rights over time. This results in both stretching available county farmland preservation funds and providing the farmer with a stable source of income over the years of the installment plan. No farmland in Somerset County has been preserved through installment to date.

F. Consistency with SADC Strategic Targeting Project

The SADC’s Strategic Targeting Project prioritizes the preservation of farmland by targeting farms for

preservation based on specific criteria. According to the SADC, the Strategic Targeting Project has the following goals:

- The coordination of farmland preservation and retention of agricultural practices with proactive planning initiatives, including state-level plans, county and municipal master plans and development regulations, infrastructure investments, etc.;
- To update and create maps which assist in targeting farmland preservation efforts, including the development and mapping of ADAs and project areas and the establishment of acreage targets; and
- To coordinate farmland preservation efforts with open space, recreation, and historic preservation investments.



“Blue Heron in the Millstone River,” by Ron and Pat Morris

The Somerset CADB, through the completion of its 2008 Comprehensive Farmland Preservation Plan and this 2018 plan update, meets each of these goals.

G. Coordination with Open Space Preservation Initiatives

The preservation of farmland and open space reinforce one another. Section 5.9 of the Open Space Preservation Plan that accompanies this plan as part of the Somerset County Preservation Plan describes the many benefits of preserving open space and makes a point of describing “ecosystem services.” In fact, preservation of natural resources that provide the context for farming should be considered an

important element of a systematic approach to farmland preservation – and farmland itself also contributes to ecosystem benefits. The benefits of open space preservation as it affects farmers include:

- **Water quality:** Open space lands filter contaminants from stormwater runoff, protecting the quality of water flowing into rivers, streams, and ground-water – water sources that farmers often use for irrigation.
- **Flood mitigation:** Open space, especially vegetated buffers along rivers and streams and forested steep slopes, helps mitigate the impact of flooding by absorbing stormwater runoff and slowing the flow of stormwater into rivers and streams. Many farms in Somerset County include lands that suffer from flooding.
- **Natural diversity and resiliency:** Open space protects a diversity of natural areas offering habitat for a wider variety of plants and animals as well as protecting habitats of rare and at-risk species. Indigenous species in naturally functioning eco-systems are more resilient and are more likely to out-compete invasive species. Open space offers buffers and sanctuaries that harbor and protect humans and plant and animal species, helping all to cope with weather events stemming from climate change. For farmers, pollinators that rely on such diverse habitat are essential for producing a wide variety of crops.
- **Carbon storage:** Intact natural land cover and soils are capable of sequestering

carbon, thereby offsetting greenhouse gas emissions. Increasingly, policymakers are also recognizing the potential for farmland to be farmed in ways that maximize carbon storage.¹⁹

This plan recognizes this interplay between open space and farmland generally, but there are two ways that the preservation of farmland can specifically support Somerset County's open space goals (and vice versa). First, Somerset County and a number of jurisdictions have identified many greenway corridors. (See the Open Space Preservation Plan, Section 4.5.) Greenways per se do not necessarily include trails – other benefits of greenways include water quality protection, flood mitigation, habitat protection, and wildlife migration. Incorporation of farmland into greenway corridors is an excellent way to gain the benefits of greenways without the management responsibilities that jurisdictions must take in making open space purchases.

Second, the intention in Somerset County is that wherever it is feasible and appropriate, jurisdictions will indeed work to create recreational access in association with a greenway. Thus, Somerset County views any potential farmland preservation transaction as an opening to discuss the possibility of establishing trail access. If the landowner is willing, the administrators of the open space and farmland preservation programs will cooperate with the owner in subdividing the transaction into a parcel or parcels to protect farmland (where trail access is ordinarily discouraged by existing farmland protection rules) and another parcel or parcels to be purchased for trail

access. Although every transaction depends on conditions on the ground, generally speaking a benefit for the farmer in such a transaction is that the sales price of a farmland easement plus fee title for public trail access would probably be greater than the price given for the easement alone.

Moreover, although across the nation farmers are known to fear that trail development would bring unwanted visitors and behaviors, associating trail access with farms in a suburban area such as Somerset County can help farmers to connect with other residents, including buyers eager to get to know who grows their food. Most trail users are frequent and local, and would benefit from getting to know their neighboring farmers and observing seasonal production activities. As noted in Section 5.9, Economic Development, farmers need every opportunity to build relationships with local buyers who can help boost farm sales and farm income from agritourism.

Finally, the preservation of farmland magnifies the impact of open space as “breathing room.” The vistas of fields and meadows are considered especially attractive to humans – perhaps, it is theorized, because human brains evolved to prize long views with few trees (“savannahs”) as a way of seeking safety from predators in a hostile world, and finding food. Unmanaged, open space in New Jersey's climate reverts to forest – not a bad thing, but farmed open lands in an otherwise forested or suburban landscape provide visual relief and variety in scene. Not only do residents find this appealing,

¹⁹ There are many references on this topic, some of which reach back ten years or more. A useful general explanation is available from the National Sustainable

Agriculture Coalition: *Carbon Sequestration Potential on Agricultural Lands: A Review of Current Science and Available Practices*, by Daniel Kane (November 2015), <https://sustainableagriculture.net/>.



Ponies on a preserved farm in Belle Mead, Hillsborough Township.

but so do visitors and potential residents and investors.

In answer to the opportunities for obtaining trail access and magnifying the benefits of farmland preservation in relation to the preservation of open space, Section 5.12, Goals & Strategies, includes Strategy 5.3.G, “Carefully evaluate farm properties for impacts of farmland preservation on opportunities for historic preservation, trail access, alignment with greenway corridors, and open space conservation.”

H. Coordination with Historic Preservation and Cultural Resources

As laid out in detail in Chapter 2 of the Somerset County Preservation Plan – a simultaneous approach to planning for the preservation of open space and historic resources along with this Farmland

Preservation & Agricultural Development Plan – Somerset’s farming heritage is important:

From early settlement through the mid-nineteenth century, a mature agricultural landscape was established in Somerset County... Though this two-century era included many historical changes and events, this long period of development was consistent in (1) the dominance of agriculture as the primary economic force within the region, (2) its dependence upon wagon and water for transportation, and (3) its dependence upon water power as a source of energy for industrial activities. Many of the distinctive landscape patterns that were established in the county during this period are still clearly evident in the landscape today.

Initial settlement of the area of central New Jersey that became Somerset County occurred in the 1680s, though political machinations for the establishment of provinces here had been underway since England wrested control of the territory from the Dutch in 1664. Large parcels of land became available for sale in Somerset County after 1681. Many of the early settlers in the southern portion of the county, in the vicinity of the Raritan River, were second and third generation Dutch families who had moved from Long Island, attracted by the prospect of larger land holdings. A wave of English settlement occurred predominantly in the northern portion of the county between 1685 and 1700. Like the Dutch, these early English families relocated from other portions of the colonies, primarily New England...The character of Somerset County's agricultural landscape was significantly influenced by native landscape conditions that were present as well as by the dependence upon wagon transportation and water power. The low rolling hills of the Triassic Lowlands south of the Raritan River, the area of early Dutch concentration, provided the best soils and least rocky, most gentle topography, and most easily cultivated lands. The earliest landowners established their farms on the fertile lands adjacent to streams and rivers,

but as settlement increased in the early eighteenth century, farms were laid out across the landscape.

Without the farmland preservation program that Somerset County began in 1983, it is unlikely that this historic farm landscape would have continued into its fourth century. While the actual acreage preserved is only a small percentage of the land that is still being farmed, just 25 percent, the program has

Without the farmland preservation program that Somerset County began in 1983, it is unlikely that this historic farm landscape would have continued into its fourth century.

A fully preserved farm with both buildings and land is a more valued historic resource, because it is far more difficult to understand the full significance of a farmstead without its related fields.

sent a strong signal to the farming community that local leaders and the community as a whole value their presence and economic contributions.

The preservation of farms can also aid in the preservation of both archeological resources and historic buildings. Prehistoric archeological resources are safer for future scientific exploration if the sites in

which they are to be found remains relatively undisturbed (below the "plow line"). For historic resources, preserving a farm does not guarantee that its historic buildings will remain, but it is certain that without continuing farm use, most historic farm buildings – barns and outbuildings – are unlikely to survive. The residence associated with the farm may be preserved by a developer, but that is not a given, and it most certainly loses its landscape context. Preserving a farm gives the farmer more ready cash at the time of preservation that can be invested in the farm – including its existing buildings. Moreover, a fully preserved historic farm with both buildings and land is a more valued resource, because it is far more

difficult to understand the full significance of a farmstead without its related fields.

Many agricultural easements, however, are actually designed such that the removal of a historic building may be seen as an advantage – providing more ground for cultivation. Owners who want to construct a new residence are literally forced to take down the unwanted, often historic residence under the limits of the state program. Where such a change involves a known, significant historic property, it should be possible to negotiate a settlement that allows the historic building to remain, but this is difficult with existing easements. Above is described the idea of joint consulting in advance of an easement transaction with a farmer whose land may offer an opportunity for trail access (between farmland and open space preservation program administrators). Similarly, with easements still to come, where farms involve older structures, the County’s historic preservation and farmland program administrators can consult on the ins and outs of preserving the farm’s historic structures and adjust the easement’s terms and area coverage accordingly. Luckily, many farm owners are proud of their heritage and take steps on their own to support the preservation of their structures; offering them added counseling during the easement process should be welcome. For farm owners who may be unaware of the significance of buildings under their care, the historic resources survey recommended in the Historic Preservation Plan is anticipated to provide new insights to all owners of older buildings.

In answer to the opportunities for aligning the benefits of farmland preservation with the preservation of historic resources, Section 5.12, Goals & Strategies, includes

Strategy 5.3.G, “Carefully evaluate farm properties for impacts of farmland preservation on opportunities for historic preservation, trail access, alignment with greenway corridors, and open space conservation.

A final note – for commercially used farm buildings, such as barns, it may be possible for farm owners to obtain a 20 percent federal income tax credit for qualified rehab expenses. (This idea does not depend on the farmland easement program, but during easement monitoring, it would be possible to offer those particular farmers information about this.) Any such structure must be listed in the National Register of Historic Places, either individually or as a contributing structure in a historic district that is listed in the National Register. Unlike a locally designated historic district under local zoning, National Register listing has no local regulatory effect – it confers the tax incentive and requires that federal (and state, through simultaneous listing on the New Jersey Register) projects take the listed historic resources into account in project planning. For the tax incentive, the property owner must gain approval of rehabilitation plans in advance. For more information, farm owners should consult with the Somerset County Cultural & Heritage Commission or the New Jersey Historic Preservation Office.²⁰

I. Farmland Preservation Program Funding Expended to Date by Source

Section 5.6, Future Farmland Preservation, discusses sources of funding for farmland preservation in greater detail, but Figure 5.5.A displays a high-level summary of governmental funding sources for farmland preservation to date. Since the

²⁰ <https://www.nj.gov/dep/hpo/3preserve/itc.htm>



The historic Farm Barn at Duke Farms, now the Orientation Center for an extensive program of visitor services and education. Duke Farms operates an Agro-Ecology Program “to demonstrate that the operations of Duke Farms, including our farming operations, can be conducted in a way that is both sustainable and wildlife friendly.”(Photo by Ekem - Own work, CC BY-SA 3.0, <https://commons.wikimedia.org/w/index.php?curid=19532160>)

establishment of the Farmland Preservation Program in 1983 through 2018, \$139.7 million has been spent by governmental partners to preserve 8,393 acres.

J. Monitoring of Preserved Farmland

The SCADB maintains an inspection program to ensure that landowners who participate in farmland preservation programs in Somerset County comply with program requirements. Through monitoring, staff are looking for any violation of easement deed restrictions, including but not limited to:

- Trash accumulation;

- Unauthorized construction of structures; Movement of soil without NRCS/SADC approval; and
- Use of the land for a non-agricultural purpose.

Annual Monitoring

The primary inspections by SCADB occur on an annual basis. Staff notify landowners of the date in advance. Prior to the inspection, landowners must fill out a questionnaire regarding any changes to the farm since last year, including alterations to the land, structures, operation, etc. Staff generally inspects from the last week of September through the first week of November. SCADB is required to submit a



report to the SADC annually on July 15th with the results of the monitoring inspections.

Interim Monitoring

In addition to annually monitoring all preserved properties, SCADB staff also randomly selects approximately 20 farms for interim monitoring. Interim monitoring enables staff to become aware of violations that may become larger if not found for a year, and creates additional visibility of the monitoring program for farmers. In all other ways, interim monitoring is identical in procedure to annual monitoring.

Violation Enforcement

If a violation of the deed of easement is found through monitoring, staff notify the SCADB of the matter. If the board agrees that it is a violation, the landowner, township, and SADC are notified of the problem in writing. The official notice outlines remediation requirements and a timeline for those

requirements. SCADB staff and board members continually monitor the remediation activities and certify completion of remediation. Note that litigation may be required should a landowner refuse to implement required remediation. Violations have relatively rare among preserved farms in Somerset County since establishment of the program in the 1980s.

K. Conclusion

This section of Somerset County's Farmland Preservation & Agricultural Development Plan has focused on the administration of the County's farmland preservation program, including not only the geographic areas of focus (ADA project areas) but also coordination with the state and other county preservation programs. The next section looks at the future of the program, particularly its ability to continue preserving farmland.

5.6. Somerset County's Future Farmland Preservation Program

The Somerset County Agricultural Development Board (SCADB) has set an ambitious goal for farmland preservation in Somerset County. In the 2008 Comprehensive Farmland Preservation Plan, the SCADB set a goal to preserve a total of 16,000 acres by 2017. As of early 2021, the County has preserved 8,393 acres with more than 400 additional acres pending. With this plan, the County restates its strong commitment to farmland preservation, retaining the goal of protecting 16,000 acres. To accomplish this goal, given the expected rate of growth in northern New Jersey and Somerset County, as much action as possible must be taken within the next 10 years, to 2030. This would require more than double the present rate of preservation. This chapter details this goal, estimates the funding and resources required to reach the goal, and discusses limiting factors.

A. Introduction

Critical to Somerset County's ability to preserve its open space, farmland, and historic resources has been the County's Preservation Trust Fund. Commonly called the "Open Space Preservation Trust Fund" because of its origins for the purpose of saving open space lands, and formally known as the Somerset County Open Space, Recreation, Farmland and Historic Preservation Trust Fund, this plan uses the simpler "Preservation Trust Fund" because the fund today applies to all three of the resources addressed by the Somerset County Preservation Plan, the combined plan for all three resources.

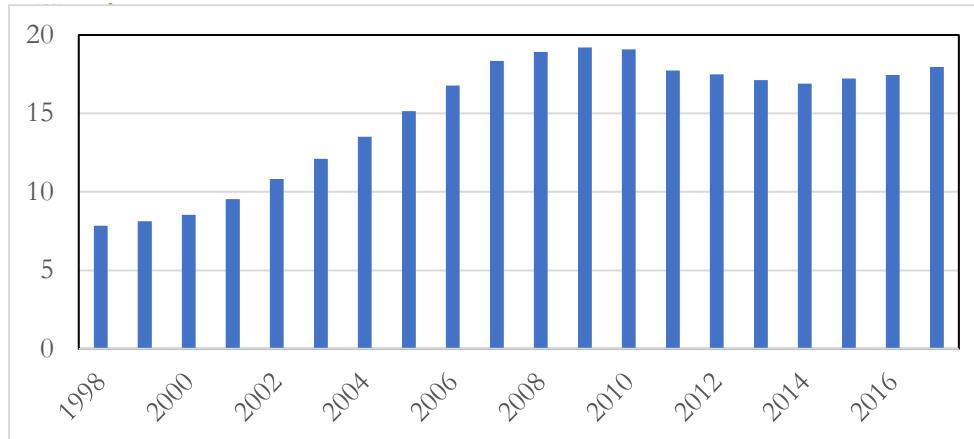
B. Somerset County's Preservation Trust Fund

Chapter 3 in the Preservation Plan lays out the trust fund's history, purpose, revenues, and accomplishments. It has been a highly effective tool

that has formed the basis for much of the County's farmland preservation efforts. One of the benefits of having the Preservation Trust Fund available is the ability to use its funding to leverage other funds. Federal, state, municipal, and nonprofit funding streams have also supported open space, agricultural preservation, and historic preservation.

Before the establishment of the Somerset County Agricultural Development Board (SCADB) and a dedicated trust fund in the 1980s, Somerset County funded farmland preservation through general county capital funds. The initial Somerset County Open Space Tax to pay into the trust fund was \$0.015 per \$100 of assessed property valuation, established in 1989. In 1997, the residents of the county overwhelmingly approved the doubling of the tax to \$0.03 per \$100, where it remains today.

Figure 5.6.A. Somerset County Open Space Tax Revenues, 1998-2017



Source: New Jersey Department of Community Affairs, Property Tax Information, Abstract of Ratables Tables

Figure 5.6.A shows how open space tax revenues have trended over the past two decades since the last tax increase; these revenues have been entirely devoted to capital expenditures and debt service (that is, none of the funds are used to cover such operational expenses as staffing).

Allocation of Trust Funding

The total tax collected from Somerset County’s taxpaying property owners since 1990 is more than \$310 million. As Figure 5.6.A demonstrates, actual collections have varied from year to year and have grown significantly in the 30 years since the program’s establishment. In 2017, the fund collected \$17,952,720²¹ with a balance of unspent funds totaling nearly \$6.5 million.²² The Somerset County Board of Commissioners determines the allocation of funding among the various purposes of the fund, including reserves within fiscal years that allow for flexibility in addressing unexpected opportunities, as

happened with the purchase of Natirar for the park system. The balance fluctuates from year to year as it is difficult to predict demands on the fund within a 12-month cycle, particularly for acquisitions, which can take months and sometimes years to close.

Roughly speaking, from 1990 through 2017, Somerset County expended just over half the \$310 million (53.4 percent) directly for open space, which generally involves acquisition of properties (not easements) and also includes capital costs for developing and maintaining parks. Just over 30 percent (31.6 percent) of the trust fund has gone for debt service. Debt service could also be considered a charge against the fund’s open space mission, since the County’s determinations to incur debt have only occurred in association with acquisitions for open space. Thus, approximately 85 percent of the Preservation Trust Fund’s expenditures have gone to support open space,

²¹ Source is 2017 Property Tax Information, collected by NJ Department of Community Affairs, as of 1/31/18.

²² Actual amount is \$6,484,290 (Annual Report of the Somerset County Open Space Advisory Committee, January 2018).

Table 5.6.1. Trends in Farmland Decline in Somerset County, 2000-2015 and Projected to 2030

	2000	2005	2010	2015	2019	2025 est	2030 est
Acreage	48,842	44,337	42,130	38,715	38,444	36,365	34,441
Loss		(4,505)	(2,207)	(3,415)	(271)	(2,079)	(1,924)
Percent Decline		-9.2%	-5.0%	-8.1%	-0.7%	-5.8%	-5.8%

Source: Actuals from New Jersey Farmland Assessment; estimates calculated by Land Stewardship Solutions, Heritage Strategies Team.

parks, greenways, and recreation. Another 6.4 percent has gone for historic preservation grants to publicly owned historic sites and nonprofit sites open to the public. (Spending on open space and historic preservation is discussed further in their respective plans, described in the Somerset County Preservation Plan in Chapters 4 and 6.)

The final 8.5 percent has benefited farmland preservation. As this involves purchase of easements rather than the outright acquisition of farmland, this makes sense in comparison to the acquisition costs associated with open space. Dollar figures are provided immediately below.

C. Farmland Preservation

There are 116 permanently preserved farms in Somerset County, protecting 8,393 acres; in most cases, funds from the Somerset County Preservation Trust Fund contributed to this protection. This is 1,683 acres over the number reported in the 2008 agricultural preservation plan, an increase of 25 percent over the former number, 6,710 protected acres. In total, governmental partners have spent

\$139.7 million to preserve agricultural land in the county, with Somerset County providing \$33.6 million or 24 percent of the cost. County easement purchases have preserved 4,446 acres in Somerset County, representing 55 percent of the preserved farmland in the county. It is also the program where most of the funding has been spent on preservation, totaling \$48.9 million or 36 percent of total costs. The state covered 59 percent of these costs, the County 33 percent, and the federal government nine percent.

D. Preservation Goals: Acreage Targets for 1, 5, and 10 Years

As of 2019, 38,444 acres were under farmland assessment in Somerset County, including cropland, woodland, farm structures, and wetlands/waterways on agricultural property.²³ Somerset County has preserved 8,393 acres of farmland since the formation of its preservation program in 1983, which is 25 percent of the entire farmland base. This leaves 28,740 farmland acres remaining unprotected in Somerset County, 75 percent. Preserving a total of

²³ For an overview of farmland assessment, see New Jersey Department of Agriculture, *Farmland Assessment Overview*, 2015, available at <https://www.nj.gov/agriculture/home/farmers/farmlandassessment.html>. Additional information can be accessed at <https://www.nj.gov/agriculture/divisions/anr/pdf/far>

[mlandassessmentoverview.pdf](#). The farmland assessment figures for 2019 can be accessed at <https://www.state.nj.us/treasury/taxation/pdf/lpt/2019farmland.pdf>. Note that the 2017 Ag Census reports that Somerset County has 35,862 acres of farmland; this plan chooses to use the higher figure reported by New Jersey in 2019 of 38,444 acres to define the county's farmland base.



16,000 acres would reduce the amount of unprotected farmland to 22,444 acres, achieving protection of 42 percent of the county’s farmland acreage. That figure assumes that the 2019 base figure holds over the next 10 years (that is, assuming that all farmland remains in farming and is not converted to other land uses). If losses occur (see Table 5.6.1), the percentage of protected farmland could rise to as much as 45 percent depending on actual losses in the farmland base.

Stabilizing the amount of farmland in the county over the next 10 years itself would be an achievement for Somerset County, but one less determined by the success of the County’s farmland preservation program than the success of farming in general. For without continued profitability, farmers will not continue in farming long enough for the preservation program to conclude protection measures, and replacement farmers will not be available to keep farming the preserved farmland.

Current trends for farmland decline in Somerset County are worrisome, although the stabilization seen in the 2017 Agricultural Census and the 2019 New Jersey Farmland Assessment Report is encouraging. If the longer-term pattern continues, however, the county could see a drop of roughly

another 4,000 acres of farmland by 2030. This projection, which must be emphasized is an estimate, is based on historic data from tax assessment records showing that, in recent decades, the county has seen an average decline of 5.8 percent of its farmland every five years (Table 5.6.1). Actual losses will be determined by farm profitability and the demand for farmland for other land uses – both involving economic trends that are difficult to tackle, although this plan works to identify ways to address farm profitability in Section 5.9, Economic Development –

plus land-owners’ decisions for other reasons to withstand those trends (family tradition, outside income, personal choice, etc.).

Unpreserved lands identified as candidate farms eligible for farmland preservation in Somerset County total 16,879 acres. These farms conform to New Jersey’s criteria for preservation combined with county criteria. The potential for enlarging this pool was recently increased through a change in policy in Somerset County’s farmland preservation

program, allowing the purchase of easements on parcels under 25 acres in size, conforming with SADC standards for smaller parcels as described in the preceding section (5.5.C, County Ranking Criteria) – an early action taken by the SCADB in support of this plan.

This plan sets the ambitious goal of preserving 6,300 acres of eligible farmland by 2030, which is

Stabilizing the amount of farmland in the county over the next 10 years itself would be an achievement for Somerset County, but one less determined by the success of the County’s farmland preservation program than the success of farming in general. For without continued profitability, farmers will not continue in farming long enough for the county’s preservation program to be able to conclude protection measures, and replacement farmers will not be available to keep farming the preserved farmland.

Table 5.6.2. Preservation Trust Fund Revenue Assumptions (in \$ millions)

2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
17.2	17.4	18	18.2	18.5	18.8	19.1	19.1	19.1	19.1	19.1	19.1	19.1	19.1	19.1

Source: Actuals from New Jersey Department of Community Affairs, Property Tax Information, Abstract of Ratables Tables. Projections from Land Stewardship Solutions.

about 35 percent of the current candidate acreage:

- **One-year target:** 10,150 acres (446 acres net by 2022)
- **Five-year target:** 3,000 acres (2,850 acres net cumulative by 2026, an accelerated rate of 713 acres per year averaged over four years)
- **Ten-year target:** 16,000 acres (6,300 acres net cumulative, rounded, by 2031, or a rate of 600 acres per year averaged over five years)

It would be possible to buy a greater proportion of the candidate acreage only if there were an increase in either the allocation of the Preservation Trust Fund for farmland easement purchases (requiring a decision of the Board of County Commissioners) or the funds collected for the trust fund (which would require an increase in the allocation of property taxes to the fund, requiring a vote of the taxpayers) – or both. As we shall see in the following discussion, however, in order to achieve the goal as stated here, just finding the funds for this plan’s goal as stated will be a challenge.

E. Revenue Projections

County Funding

Figure 5.6.A clearly shows a dip reflecting the negative impact the 2008 recession and related declines in property values had on receipts going into Somerset County’s dedicated trust fund after 2010. Nonetheless, property values have begun to rebound since 2014. A conservative projection of revenues

based on recent trends would result in 1.5 percent in annual revenue growth for the trust. This would mean an annual increase in receipts of more than \$260,000, with total revenues exceeding \$19 million each year by 2021. However, even with this projected growth, revenues are not projected to reach the previous peak of \$19.2 million seen in 2009 for several years. As this plan was in its finishing stages the Covid-19 pandemic struck, threatening a worldwide recession. Until that point, the United States was in its second longest period between recessions since the 1920s, one of the longest economic expansions in the country in more than a century, if not the longest. Table 5.6.2 displays tax revenue assumptions, employing caution when assuming revenue growth; the assumption of level revenues beginning in 2021 may not be conservative enough if the downturn following the pandemic resembles the 2008 recession.

State Funding

Before Fiscal Year (FY) 2016, the state of New Jersey funded farmland preservation through a series of general obligation bonds subject to annual budget authorization and thus significant fluctuation. On November 4, 2014, voters in New Jersey approved Public Question #2 amending the New Jersey Constitution to a permanent, two-phase dedication of a firm percentage of the Corporation Business Tax (CBT) to environmental, conservation, and preservation programs. While the resulting funding for preservation may be somewhat reduced from heights seen in past decades, it is much more stable and less subject to budget pressures.

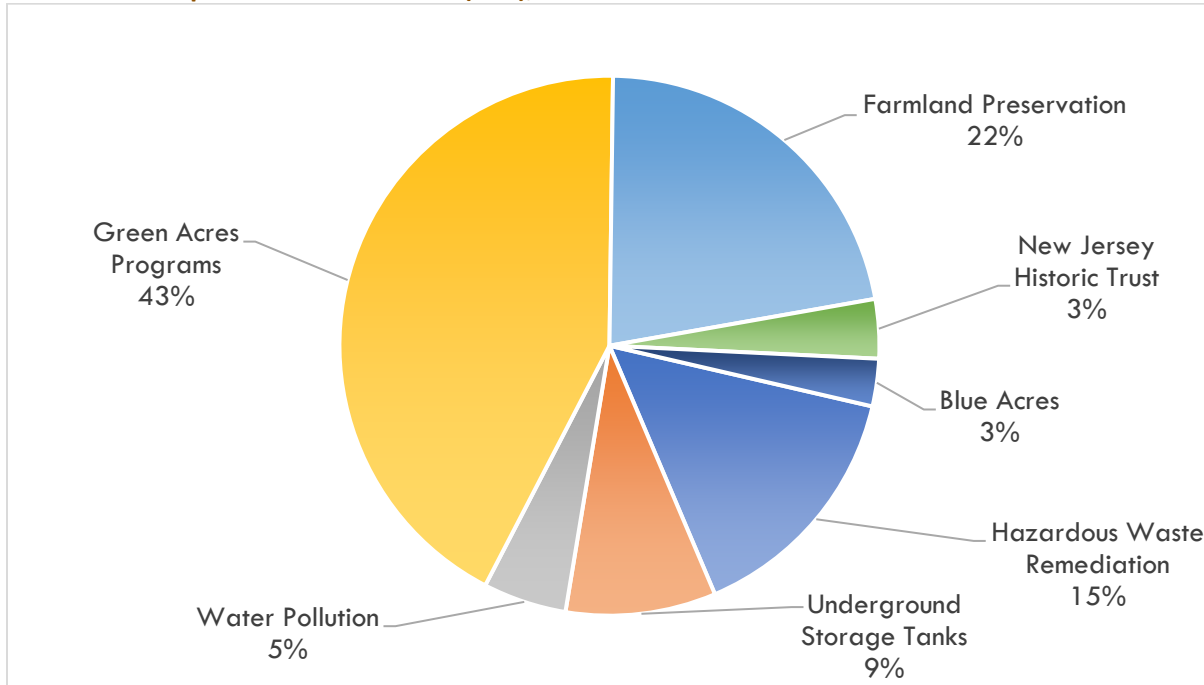


A classic early twentieth century dairy barn now provides retail space for a specialty lavender farm in Skillman, Montgomery Township, on preserved acreage.

For FY2016 through FY2019, the first phase, 4 percent of all CBT revenues is dedicated to environmental programs. On June 30, 2016, the Governor signed the Preserve New Jersey Act defining how the Garden State Preservation Trust Program allocation would be spent. Figure 5.6.B displays this funding breakdown in graphical form. When combined, the allocation of the 4 percent in phase one is as follows:

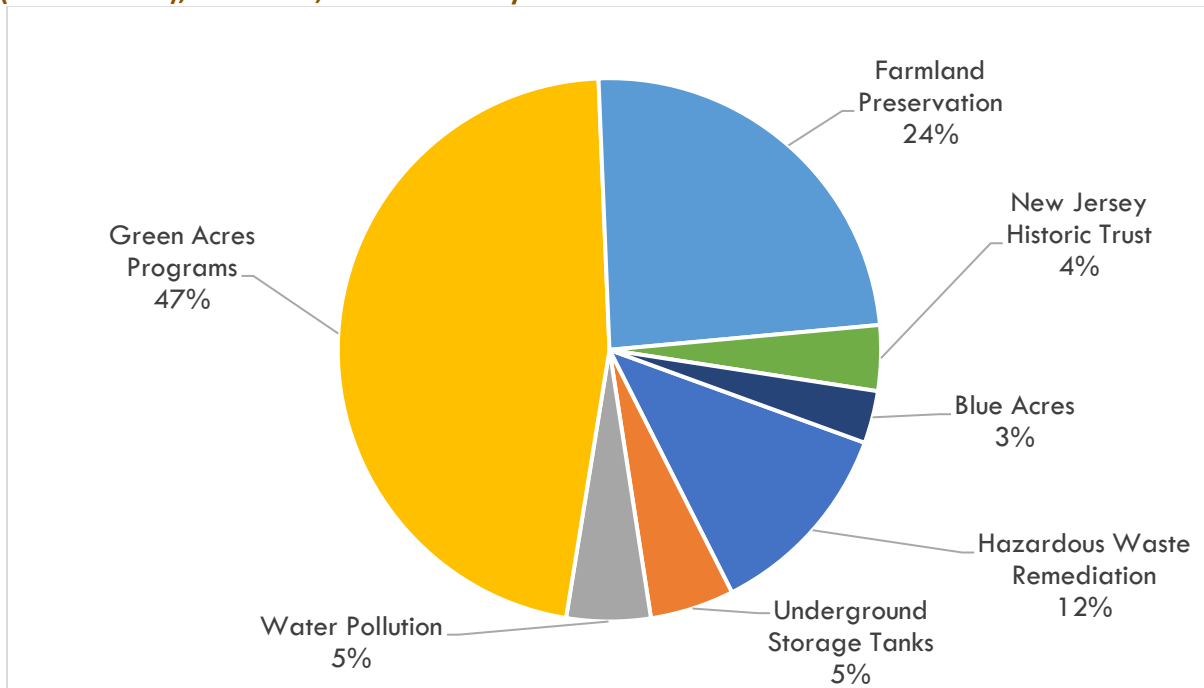
- 15 percent goes to hazardous waste discharge remediation
- 9 percent goes to removal of underground storage tanks
- 5 percent goes to water pollution monitoring & prevention
- 71 percent goes to Garden State Preservation Trust Programs:
 - 60 percent goes to Green Acres programs:
 - 55 percent to Green Acres state park and refuge acquisition or recreational development
 - 38 percent to Green Acres local (county and municipal) acquisition or recreational development grants
 - 7 percent to Green Acres nonprofit acquisition or recreational development grants
 - 31 percent goes to farmland preservation:

Figure 5.6.B. Dedicated Environmental, Conservation, and Preservation Allocations (As Part of 4%) from the NJ Corporation Business Tax (CBT), FY2016-2019



Source: New Jersey Statute. Note: Funding allocations assume that Garden State Preservation Trust program allocations on a percentage basis remain constant from FY2016-19.

Figure 5.6.C. New Jersey CBT Dedicated Environmental, Conservation, and Preservation Allocations (As Part of 6%), Estimated, FY2020 and Beyond



Source: New Jersey Statute



Table 5.6.3. New Jersey Corporate Business Tax Revenues and Resulting Estimated Farmland Preservation Funding, FY2013-2017

State Fiscal Year	CBT Revenue (\$ Millions)	% Growth	Farmland Preservation Under 4% (Estimate) (\$)	Farmland Preservation Under 6% (Estimate) (\$)
FY2013	2,364	16%	20,816,984	22,869,363
FY2014	2,101	-11%	18,496,837	20,320,469
FY2015	2,655	26%	23,374,770	25,679,325
FY2016	2,378	-10%	20,933,931	22,997,840
FY2017	2,142	-10%	18,853,842	20,712,672

Source: State of New Jersey Annual Comprehensive Annual Financial Reports, FY2013 through FY2017

- 5 percent goes to New Jersey Historic Trust resource preservation grants
- 4 percent goes to Blue Acres repetitive-loss flood property acquisition

Starting in FY2020 and continuing in perpetuity, the dedication of CBT revenues increases to 6 percent:

- 12 percent goes to hazardous waste discharge remediation
- 5 percent goes to removal of underground storage tanks
- 5 percent goes to water pollution monitoring & prevention
- 78 percent goes to Garden State Preservation Trust Programs

Note that the 2016 Preserve New Jersey Act only stipulated Garden State Preservation Trust Programs allocations through Fiscal Year 2019, but it is expected that new legislation will be passed to maintain or adjust the percentage allocations for the 78 percent. Figure 5.6.C displays the phase two funding allocations, assuming that Garden State Preservation Trust Programs percentage allocations remain constant. The farmland preservation allocation would grow from 22 percent to 24 percent of revenues.

Table 5.6.3 displays the last five years of actual CBT revenues for the state and the statewide farmland preservation funding that would result under 4 percent and 6 percent funding scenarios (FY2013 through FY2015 are for trend analysis only, as the dedicated funding source did not begin until FY2016).

The table clearly shows that CBT might be a more stable source of funding, but it is still a volatile one subject to economic pressures and business decisions. In the last five years, annual growth has fluctuated between positive 26 percent and negative 11 percent. However, it is a relatively safe assumption based on these numbers that statewide farmland preservation funding will remain in excess of \$18.5 million annually through FY2019 and could exceed \$20 million annually starting in FY2020. The distribution of this funding to the 18 counties with farmland preservation programs will depend on multiple factors including the allocation to base grants versus competitive grants and the amount reserved for municipal grants.

Of note, per SADC records, as of May 15, 2018, Somerset County had \$1,002,377 in base county PIG (Project Improvement Grant) Program funding

Table 5.6.4. Open Space Tax Rates and Receipts by Municipality, 2008 and 2017

Municipality	2008 Municipal Tax Open Space Tax Rate (per \$100)	2017 Municipal Tax Open Space Tax Rate (per \$100)	2008 Amount Generated (Annual \$)	2017 Amount Generated (Annual \$)
Bedminster	0.020	0.015	533,038	369,544
Bernards	0.040	0.040	2,858,103	2,716,521
Bernardsville	0.020	0.020	539,328	454,911
Bound Brook	N/A	N/A	0	0
Branchburg	0.050	0.050	1,553,406	1,514,486
Bridgewater	0.040	N/A	3,635,506	0
Far Hills	N/A	N/A	0	0
Franklin	0.050	0.050	4,430,168	4,755,802
Green Brook	0.015	0.005	220,049	67,920
Hillsborough	0.041	0.028	1,533,745	1,606,061
Manville	N/A	N/A	0	0
Millstone	N/A	N/A	0	0
Montgomery	0.040	0.040	1,504,908	1,531,819
North Plainfield	N/A	N/A	0	0
Peapack-Gladstone	0.030	0.030	247,959	218,732
Raritan	N/A	N/A	0	0
Rocky Hill	0.020	0.010	12,427	12,500
Somerville	N/A	N/A	0	0
South Bound Brook	N/A	N/A	0	0
Warren	0.020	0.020	897,028	917,946
Watchung	0.020	0.020	363,620	351,349
Total			\$18,329,284	\$14,517,589

Source: State of New Jersey Department of Treasury Division of Taxation

remaining from FY2017 and prior years. In addition, New Jersey counties have about \$19.4 million in remaining competitive county PIG funding available from sources FY2013 through FY2018.

Municipal Funding

Twelve municipalities in Somerset County currently have property tax receipts dedicated to open space preservation. Table 5.6.4 displays how the open space tax rates and amounts generated have trended over the past 10 years. Over that time, five jurisdictions have reduced their rates, including Bridgewater, which eliminated its open space tax. Largely due to this rate

reduction, municipal open space tax receipts in the county declined by \$3.8 million between 2008 and 2017. Similar to county funding, this open space funding is shared among open space, historic, and farmland preservation projects.

Financial Policies Related to Cost-Share Requirements

The amount of funding required of each partner in an easement purchase – whether county, municipality, state, federal government, or nonprofit – varies depending on the program:

- **County Preservation Programs (Easement or PIG):** In general, the state provides 60 percent for PIGs and between 60 percent and 80 percent for County easements. The County provides the remaining funds.
- **Municipal PIGs:** The standard arrangement has the state providing 60 percent, the municipality providing 20 percent, and the County providing 20 percent.
- **SADC Direct Easement Purchase:** The state will provide up to 100 percent of the costs of these easements.
- **SADC Fee Simple:** The state will provide up to 100 percent of the costs of these acquisitions.
- **Agricultural Conservation Easement Program (ACEP):** The federal NRCS will generally provide up to 50 percent of the cost of the easement. The remaining costs are covered by other partners such as the state, county, municipality, or nonprofit.
- **Nonprofit Program:** The state will provide up to 50 percent of the cost of the easement, and the remaining costs are covered by other partners such as the state, county, or municipality.

Cost Projections and Funding Plan

In order to analyze the costs of preserving farmland in Somerset County over the next 10 years as well as what resources will be available for these easements, the following assumptions were made:

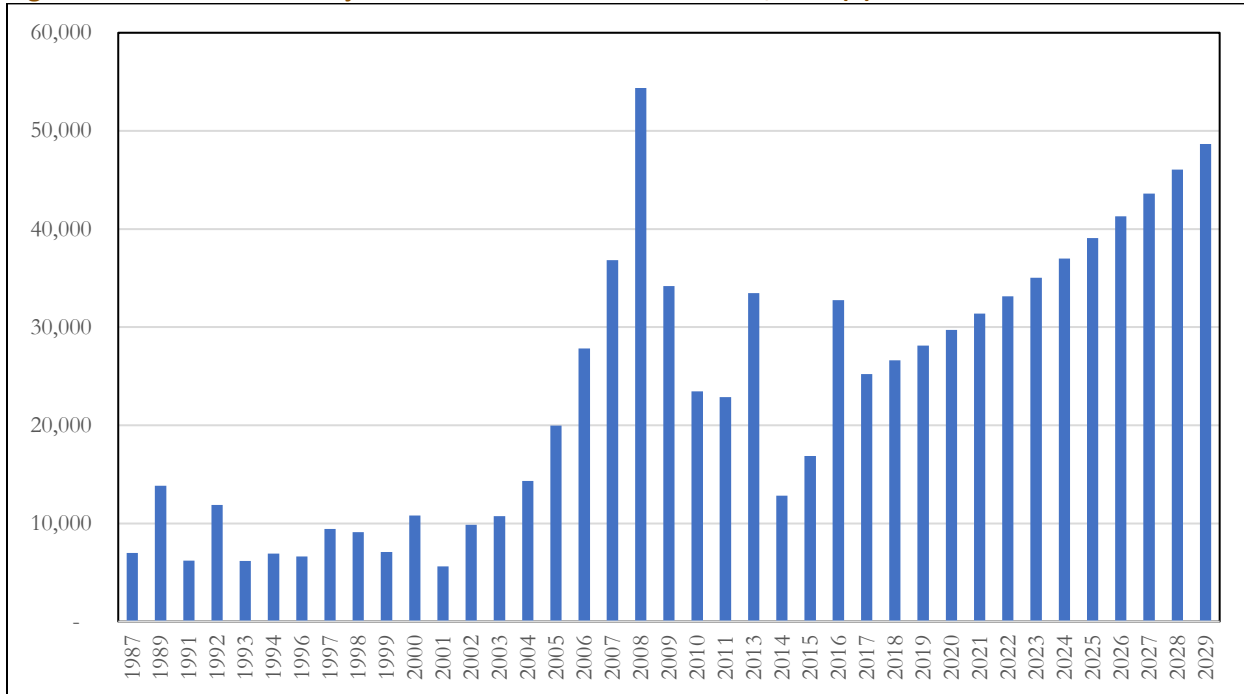
- Somerset County open space tax revenues will trend as depicted in Table 5.6.2 and the percentage that the commissioners allocate toward farmland preservation will

be 9.2 percent. Therefore, \$1.7 million in county funding will be available for farmland preservation in 2020, \$1.73 million in 2021, and funding will hold constant at \$1.76 million between 2022 and 2029.

- The cost per acre of preserved farmland in Somerset has fluctuated considerably over the past 10 years, from a low of \$12,821 in 2014 to a high of \$34,201 in 2009. However, the overall trend shows an average annual growth in cost per acre of 5.6 percent. Applying this growth rate to the ten-year average experienced cost per acre of \$25,211 results in the projected trend line beyond 2017 shown in Figure 5.6.D which is used for this funding plan.
- It is assumed that 3 percent of farmland preservation funding from open space tax revenues will go towards administrative costs and due diligence (“transaction costs”). This is conservative; the County’s policy currently is to pay administrative costs from other sources.
- It is assumed that all county revenue for farmland preservation going forward is unencumbered by prior debt or other obligations and is available for future use.

While the County’s share of preservation costs has averaged at 24.5 percent since 1987, the share has grown in the past 10 years to an average of 29 percent. This analysis assumes a county share of 30 percent. That is, the assumption is that

Figure 5.6.D. Actual and Projected Farmland Preservation Cost/Acre (\$)



Source: Somerset County Planning Department and Land Stewardship Solutions, Heritage Strategies Team

Table 5.6.5. Projections of Preservation Plan Funding and Acreage Preserved, 2020-2029

Plan Year	County Open Space Tax Revenues Allocated to Farmland Preservation (9.2%)	Less 3% Transaction Costs	Total Estimated Available Funding, County Funds Leveraged as 30%	Estimated Easement Cost Per Acre	Estimated Acres Preserved
1	\$1,702,000	\$1,650,940	\$5,503,133	\$29,704	196
2	\$1,729,600	\$1,677,712	\$5,592,373	\$29,716	188
3	\$1,757,200	\$1,704,484	\$5,681,613	\$31,390	181
4	\$1,757,200	\$1,704,484	\$5,681,613	\$33,158	171
5	\$1,757,200	\$1,704,484	\$5,681,613	\$35,025	162
6	\$1,757,200	\$1,704,484	\$5,681,613	\$36,998	154
7	\$1,757,200	\$1,704,484	\$5,681,613	\$39,082	145
8	\$1,757,200	\$1,704,484	\$5,681,613	\$41,284	138
9	\$1,757,200	\$1,704,484	\$5,681,613	\$43,609	130
10	\$1,757,200	\$1,704,484	\$5,681,613	\$46,066	123
Total	\$17,489,200	\$16,964,524	\$56,548,413		1,589

Source: Land Stewardship Solutions, Heritage Strategies Team

Meats such as organically raised pork have high sales and profitability potential, particularly for farmers in a suburban region. Farmers need education about the benefits of diversifying beyond field crops into such alternative crops as animals, vegetables, fruits, and horticultural products.



70 percent of the cost of preserving farmland, on average, will come from other sources (federal, state, municipal, nonprofit). This is by no means a requirement for any single transaction.

Table 5.6.5 shows the estimated farmland acreage that would be preserved under these assumptions, totaling 1,589 acres, which would bring total preserved farmland to 9,982 acres. This is well short of the plan goal of 16,000 acres. In order to reach the plan goal, and assuming that admittedly limited non-county funding is no higher than derived in Table 5.6.5, it is estimated that the County would need to fund farmland preservation by at least \$24 million annually over the next 10 years, that is, more than funding projected for the entire Preservation Trust Fund currently (see Chapter 3 of the overall Somerset County Preservation Plan).

Somerset County recognizes the challenge presented by these estimates. Even if the funding were available, the rate of preservation over 10 years under such a projection – an average of 630 acres

per year – may not be feasible even if funding is available, as the program depends on willing easement sellers, plus a continued supply of farmers to own/lease and thus manage the preserved land and contribute to the health of the farm economy – thereby keeping enough land in farming for the County to arrive at its preservation over time. (Not to mention the need for more staff time.) The goal of 16,000 acres of preserved farmland, therefore, should not be regarded as achievable in one short decade. An equal emphasis on maintaining and enhancing the health of the agricultural industry, as described in Section 5.9, Agricultural Economic Development, is needed in order to keep farming healthy enough to justify protecting it over a much longer period. A more reasonable goal would be to aim to spend as much as \$7,800,000 each year for 30 years, aiming for 200 to 300 acres protected each year on average.

Even this would require the County to support about 66 percent of the cost of each easement, instead of 20 to 30 percent, and increase the farmland



Heritage breeds such as the Tamworth (this page) and Gloucestershire Old Spots (opposite page) are back in favor for raising pastured pork, since they were bred to live outdoors. Breeds like these fell out of use as indoor industrial hog-raising arose in the twentieth century but programs of The Livestock Conservancy have helped to preserve their availability. Found in the Skillman and Blawenburg areas, respectively, of Montgomery Township.

preservation program's demand on the Preservation Trust Fund from 9.2 percent per year to 40 percent.

F. Factors Limiting Implementation of Farmland Preservation

Funding and Projected Costs

With a diminished state funding source, declining municipal funding, and the expectation of a recession that will impact finances at all levels, funding is the most critical limiting factor for Somerset County's farmland preservation program. In addition, Section 5.4, Land Use Context, noted that land values, and thus easement costs, have risen considerably in Somerset County over time.

The county has limited control over the availability of funding, but this plan does make recommendations as to how the County can both efficiently use available resources and seek additional funding (see Sections 5.9, Economic Development, and 5.12, Goals & Strategies).

Land Supply

With approximately half of the county in urban and suburban land use as of 2017, the agricultural industry faces increasing competition for the remaining land base. Also, of the remaining unpreserved assessed farmland, a little more than 18,000 acres out of the 38,715 acres is eligible for New Jersey's preservation funding, making it critical to preserve the shrinking pool of potential applicants. Section 5.9 of this plan highlights strategies to support the industry so that it can remain economically viable as a land use.

Farmer Supply

Farmland preservation programs in New Jersey seek not only to protect the land but also to continue its active use in production. As such, preserving agricultural land in the Somerset County requires sufficient farmers to operate that land. Table 5.6.6 displays Census of Agriculture data, highlighting several concerning trends regarding farmers in the county, even though 2017 data give cause for hope. A worrisome trend is the aging of the farming



workforce in Somerset County. Between 1997 and 2017, the average age of the principal farm operators in the county grew from 58 to 60.2. This does reflect national trends, but Somerset’s average age exceeds even the national average of 57.5 as of 2017. Overall, however, the number of principal operators of farms Finally, as of 2017 a quite hopeful sign is that 55 percent of the principal operators of farms in the county farmed full-time. Strategies to encourage more individuals to take up a career in farming are found in Section 5.9, Economic Development (and longer term perhaps, Section 5.11, Public Outreach and Education).

Landowner Interest

Somerset County’s easement program relies entirely on landowners volunteering to sell or donate the development rights to their property. Therefore, continued landowner interest will be vital as the County seeks to reach its farmland preservation goals. Issues that may negatively affect landowner participation include:

- High land values, which make selling for development an attractive option;
- Farmer supply, as noted above, since if there is no one planning to farm the land in the future a landowner is less likely to preserve that land; and
- Negative experiences in the easement program by participating landowners, thus dissuading them from preserving additional properties and leading them to convey their negative experience to others. One particular concern, noted by representatives from surveyed municipalities, was the long length of time required for a farm to be approved for preservation. This lengthy process causes some landowners to drop out while under consideration and prevents some from participating entirely.

Table 5.6.6. Somerset County Farm Operator Trends, 1997-2017

Trends	1997	2002	2007	2012	2017
Principal Operator Age, Number of Operations					
Less than 35	19	10	5	7	19
Age 35 to 44	76	82	49	21	66
Age 45 to 54	118	135	159	94	118
Age 55 to 64	107	98	101	150	195
65 and Older	166	117	131	128	359
Average Age of Principal Farm Operators	58	56	58	61	60.2
Number of Principal Farm Operators	486	442	445	400	757
Percentage of Farmers Whose Primary Occupation is Farming	36%	43%	38%	33%	55%

Source: USDA Census of Agriculture, 1997-2017



Millstone Valley Agricultural District is a prosperous farming region south of Millstone Village and west of the Millstone River and the Delaware and Raritan Canal in Hillsborough Township. It developed along River Road, in existence as early as 1737. Pictured, top, one of the rare Dutch barns found across southern Somerset County, indicative of the earliest settlers. At left, a mid-nineteenth century Italianate farmhouse, spelling the prosperity of farming after the canal improved access to markets. (Photo upper right by Katelyn Katzer, Somerset County Office of Planning, Policy and Economic Development. Other photos courtesy Somerset County Cultural & Heritage Commission)

Rutgers Cooperative Extension has coordinated with other Mid-Atlantic state extension programs to complete surveys measuring landowners' satisfaction with state easement programs.²⁴ Notable findings regarding landowner satisfaction included:

- Nine percent of participating Mid-Atlantic farmers were critical of easement restrictions regarding agricultural practices (e.g., use of nutrients), agriculture-related businesses (greenhouses, wineries), nonagricultural uses (wind turbines, cell phone towers), and/or residential dwelling opportunities;
- Four percent felt that the amount paid for the easement was inadequate;
- Four percent said that the process of negotiating the easement was too long, too complicated, or lacked transparency; and
- Second-generation owners (those who purchased or inherited the land from the property owner who accepted the easement) were 25 percent less likely to be satisfied with the program. In fact, 19 percent of New Jersey landowners who inherited a preserved farm, when asked whether preserving the land was the right decision, said "probably no" and another

²⁴ Schilling, B., Gottlieb, P., and Sullivan, K. (2015). *Evaluating Farmland Preservation in New Jersey*;

Overview of Recent NJAES Research. Rutgers Cooperative Extension.

11 percent said “definitely no.” This compares to 7 percent of landowners who sold their land themselves saying “probably no” or “definitely no,” and 6 percent of landowners who purchased preserved farms saying “probably no” or “definitely no” to the same question. Of note, owners were 10 percent more likely to be satisfied if they were an owner who inherited the farm and were interested in farming.

Extension findings point to areas for improving landowner experience with the easement process. Sections 5.7, Stewardship and Post-Preservation, and 5.12, Goals & Strategies, contain recommendations on how to improve landowner experience and increase landowner interest.

Administrative Resources

The administrative costs of implementing the farmland preservation program are substantial. Although transactional costs can be recouped from the Preservation Trust Fund (e.g., surveying), the most significant costs of personnel are not currently paid for by trust funds. If the coordination efforts described throughout this plan as necessary to promote preservation and support the agricultural industry, particularly those in Section 5.9, Economic Development, are to be implemented, such work will require staffing enhancements, whether or not paid for through the Preservation Trust Fund.

G. Conclusion

The Somerset County Open Space, Recreation, Farmland and Historic Preservation Trust Fund – the Preservation Trust Fund – has been key to the growing level of preservation achieved by Somerset County, working with partners and property owners, over thirty years. Furthermore, it will remain critical in

the years ahead, in providing not only the financial resources, but also the leverage and flexibility to stimulate creativity on the part of administrators and partners in expanding the number of open space acres acquired on behalf of the public, farmland acreage permanently protected as a part of the agricultural economic base, and buildings in the public trust (owned by government agencies and nonprofits) conserved through historic preservation methods.

This section has set forth an ambitious goal of continuing to aim for the 16,000 acres set in 2008. The county’s major obstacle in achieving this goal is too little funding (not just for Somerset, but municipalities and state and federal sources); this may or may not be exacerbated by a recession stemming from the coronavirus pandemic since the apparent effect on real estate of the pandemic has been an increase in demand for housing in such attractive rural/suburban places as Somerset County. This may enable Somerset County to collect more tax income, but it comes at the price of more development pressure on agricultural land. Moreover, the necessity of attending to the farm economy in order to assist its adaptation is also an obstacle, with or without a preservation program to assist in providing stability.

The good news is that the Somerset County farmland preservation program is now thirty years old. If Somerset had not acted when it did, county farmers and leaders would not be in the position they occupy now, with the option of continuing to enlarge permanently preserved farm acreage. Indeed, had the County not undertaken its long-term program 30 years ago, there likely would be little remaining of the farmland and agricultural economy to continue working to preserve.

5.7 Stewardship and Post-Preservation Issues

This section of the Farmland Preservation & Agricultural Development Plan highlights some of the common issues that landowners face after they have preserved their property. Policies and procedures are detailed regarding each of these topics in order to identify potential changes that would ease burdens on landowners while still serving the underlying goal of preserving agricultural land for future generations.

A. Soil Protection Standards

Several of the notable right-to-farm cases in New Jersey (right-to-farm is covered more extensively in the following section, 5.8) have centered around landowners who seek to move soil within or onto their farm as they transition to new agricultural practices on their land. The ability of a farmer to transform their land can be central to evolving to meet a changing economy. As such, preservation policies should permit some flexibility for soil movement. However, it is also crucial that regulations adequately protect the quality of the agricultural land itself. This plan is supportive of the adoption of a statewide comprehensive soil movement policy, as it would enhance clarity and increase regulation consistency across the state.

B. Housing Issues

Housing is among the most common complications that landowners face when their farmland is preserved. While both the landowners who sell their development rights and future generations of landowners accept and understand that this prevents them from selling the land for future development, the limitations that preservation programs place on family houses are somewhat more contentious. The ability for their descendants to build a house on the farm is important to many farmers. In fact, in surveys of preservation program

participants, Rutgers Cooperative Extension found that landowners were 24 percent more likely to be satisfied with that participation if a new house had been built on the farm since preservation. On preserved farmland in New Jersey there are three types of housing construction that can occur: residential dwelling site opportunities, agricultural labor housing, and house replacement.

Residential Dwelling Site Opportunities (RDSO)

As was stated in Section 2.5, RDSOs are areas designated by a landowner as sites on a farm where the owner may construct housing at some point in the future. According to SADC rules, related parcels must be at least 100 acres, and the density of the proposed residential development must not exceed one residential unit per 100 acres when including both existing and proposed buildings. Each RDSO in Somerset County must be approved by both the SCADB and the SADC at the time the land is preserved. If an RDSO is approved, the housing is limited to single-family buildings, the lot for the RDSO is limited to two acres, and at least one person living in the proposed residence must be actively engaged in the day-to-day production activities of the farm.

When landowners decide to exercise their RSDO and actually build a residence on the land, they must apply for further approval by the SCADB and SADC. The SADC has provided the following guidelines for such applications:

1. An approved constructed residential unit is not in violation of the statute, rules, or policy if it is vacant.
2. There are no restrictions regarding the relationship of the occupant(s) of the unit and the owner of the premises.
3. An applicant may submit a request to exercise an RSDO concurrent with an application requesting division of the premises.
4. The SADC's approval to exercise an RSDO will be valid for a period of three years from the date of approval. Extensions may be granted by the SADC for additional periods for at least one year but not to exceed a total extension of two years.
5. Once the SADC has granted approval to exercise an RSDO, the approval is not transferable to another individual or for a different agricultural purpose without the approval of the SCADB and SADC.
6. Upon approval of the location of the residual dwelling site by the municipal planning review body, the landowner must prepare a legal metes and bounds description of the location of the residual dwelling site.

Regarding the availability of housing for family members, the RSDO may be used to build housing for a descendant of the landowner, but only if the descendant or a person living with the descendant will be actively engaged in the day-to-day production activities of the farm. In addition, agricultural labor housing (discussed below) cannot be used for the

owner or any lineal descendant of the owner. It is because of these restrictions that landowners often choose to carve out an exception on their land when preserving it rather than requesting RSDOs. If landowners build housing within an exception, their descendants can live there without stipulation.

Farmers often wish to provide building lots for their children. Therefore, due to the restrictive requirements of land once preserved, the SCADB encourages at least one exception area on a property prior to preservation. Exceptions should also be considered if landowners might use future premises for nonagricultural production (e.g., bed-and-breakfast lodging).

Agricultural Labor Housing

Addressing the housing needs of the agricultural labor industry is critical to sustaining the viability of farming operations. On-site housing enables farmers to accommodate for a long workday and helps to meet seasonal housing needs when nearby affordable rental housing might not be available.

Note that Somerset County's agricultural sector primarily comprises less labor-intensive farming. In 2015, 87 percent of the farmland in active production was devoted to field crops such as corn, soybeans, and hay. These crops have a more mechanical rather than labor-intensive harvesting process. As such, farm labor housing is not as pressing an issue in Somerset County as it might be in other counties. Even so, it is important to permit sufficient housing for those farms that do require additional labor. The SADC recognizes the need for agricultural labor housing, and may approve its construction provided the following pertains:

1. There is proof of its need for farm production.

2. Proposed occupants would be full-time employees (seasonal labor is permitted).
3. The structure is sized appropriately based on labor needs.
4. The housing will not be used as a residence by the owner, any descendant of the owner, or any relative.

Even if SADC does approve labor housing, farmers seeking to construct the structures can come into conflict with local zoning ordinances. For example, a number of municipalities bar mobile homes within their jurisdiction. In the 2006 case of *Wilkin and Urbano* (WL3018047 N.J. Super. AD), the New Jersey Supreme Court found that the state's Right to Farm Act does not shield agricultural labor housing from local zoning regulation.

One strategy to prevent conflict with municipal ordinances yet permit some flexibility for labor housing is the passage of a farm labor housing ordinance at the municipal level. These ordinances establish farm labor housing as a permitted accessory use while still ensuring public health and safety. The American Farmland Trust has developed a model farm labor housing ordinance for Burlington County, NJ, which can serve as a model for other municipalities in the state.

House Replacement

Once a farm has been preserved, the SADC does permit the replacement of residences that were originally on-site. Both the easement holder (the County, etc.) and the SADC must approve replacement. The new house does not have to be built where the old house being replaced was located, but when evaluating such requests, the SADC takes into consideration what, if any, impact the new house will have on the ability of the landowner to farm the property. In the case of house replacement, the new

constructed residence can be for any person regardless of relationship to farm.

C. Renewable Energy Generation on Preserved Farms

Farms utilize industrial-scale agricultural equipment and need to operate a number of ancillary buildings, resulting in a high demand for electricity. Generating renewable energy onsite, whether solar, wind, biomass, or geothermal, represents an opportunity for a farmer to defray expensive electricity costs.

P.L. 2009, c. 213, was signed into law in January of 2010, formalizing rules regarding the ability of landowners to install solar, wind, or biomass energy generation systems on farms. The law specified allowable limits and criteria for such renewable energy installations and required the SADC to establish regulations regarding right-to-farm (covered in Section 2.7) and farmland assessments on both preserved and non-preserved farms. Per statute and regulations, energy generation systems are allowed on preserved farms providing that they meet the following criteria:

- Energy generation systems cannot interfere significantly with use of land for agricultural or horticultural production.
- The systems cannot occupy more than one percent of the area of the entire farm.
- Annual energy generation capacity is limited to 110 percent of the previous calendar year's energy demand.
- The systems must be owned by the landowner or be owned by the landowner on conclusion of a purchase agreement.

- The energy generated must be used to provide power/heat to the farm in order to reduce farming energy costs.
- Applications to install energy generation systems must also meet farmland assessment criteria (10 acres maximum, 1:5 ratio, 2 MW limit).

D. Deer and Predatory Animal Fencing and Enclosures

Deer, geese, and other wildlife cause millions of dollars in damage to New Jersey farms each year. In interviews with local farmers, deer in particular were repeatedly mentioned as animals that have caused excessive damage to crops in recent years. Suburban, fragmented landscapes are places where deer thrive and their primary predator populations (wolves, bears, etc.) have been decimated in the region. This combination has resulted in an overabundant population of deer that, unless managed, can decimate crops

When protecting agricultural products from wildlife, it is important not only to manage the damage but also to prevent collateral natural resource damage (i.e., limit use of chemicals when feasible, etc.). Section 5.9, Economic Development, details additional recommendations regarding wildlife control, but one issue that is faced by preserved farms is the implementation of fencing and other enclosures to protect crops from wildlife.

Many localities have enacted ordinances that limit the height of fences in order to promote the consistent aesthetic qualities of their streetscapes, usually capping height at four to six feet. However, a

six-foot fence is insufficient to protect crops from deer, which can leap fences of that height. In response, the SADC has established an agricultural management practice for fencing on commercial farms (N.J.A.C. 2:76-2A.9, entitled “Fencing installation agricultural management practice for wildlife”). In a number of instances, the SADC has upheld the right of farmers to protect their farms with tall fences despite local zoning codes that limit fence height. Beyond SADC determination, this plan recommends that municipalities adopt flexible fencing ordinances that allow for types of fencing on farms that might not otherwise be desirable in residential areas. Such ordinances both acknowledge farmers’ needs to prevent wildlife damage and avoid the need for SADC intervention.

In addition, Rutgers Cooperative Extension maintains a webpage in its learning center, evaluating fencing and offering guidelines, various ideas, and videos to enable farmers to avoid deer damage.²⁵

E. Conclusion

This section has covered important ongoing issues that farm owners often face following preservation of their property. Both the state and county agricultural development agencies pay close attention to these issues and over the years have evolved thoughtful and detailed policies that support the basic goal of preserving farmland while enabling owners to get on with the all-important management of their farms, subject to local regulations. The next section covers the “right to farm,” and how challenges are resolved if this generally harmonious level of communication and cooperation should break down.

²⁵ <https://snyderfarm.rutgers.edu/learning-center/deer-fencing/>

5.8. The Right to Farm

In many instances, communities view the location of agricultural operations near residential development in a positive light, as this proximity enriches local culture and opens farms up to new markets and direct-sales possibilities. At times, however, the concerns of residential and non-farm commercial developments conflict with the needs of adjacent farm businesses. New Jersey’s approach to such conflicts is well-founded and longstanding.

A. Introduction

The Right to Farm Act was enacted by the New Jersey State Legislature in 1983 to address conflicts with existing farms. The purpose of the act is “ to establish as the policy of this State the protection of commercial farm operations from nuisance action, where recognized methods and techniques of agricultural production are applied, while, at the same time, acknowledging the need to provide a proper balance among the varied and sometimes conflicting interests of all lawful activities in New Jersey.” (N.J.S.A. 4:1C-2e)

This section outlines the act’s provisions, recent updates, and significant right-to-farm decisions at the state and county levels since Somerset County’s 2008 Comprehensive Farmland Preservation Plan.

B. Procedures

Right-to-Farm Eligible Activities

In order to be eligible for protection under the Right to Farm Act, an agricultural operation must be a “commercial farm.” The act defines a commercial farm as:

- A farm management unit of five or more acres producing agricultural or horticultural products worth \$2,500 or more annually,

and satisfying the eligibility criteria for the Farmland Assessment Act;

- A farm management unit less than five acres, producing agricultural or horticultural products worth \$50,000 or more annually and otherwise satisfying the eligibility criteria for the Farmland Assessment Act; or
- A beekeeping operation farm management unit that produces honey or apiary-related products, or provides crop pollination services, worth \$10,000 or more annually. (This final beekeeping provision was adopted more recently, as noted below in Subsection C, Changes to the New Jersey Right to Farm Act.)

As long as they are operated as a single business, commercial farms may be made up of multiple separate (contiguous or non-contiguous) parcels. Additional criteria for protection of a farming operation includes:

- The commercial farm must be located in a zone that permits agriculture as of December 31, 1997 or

Table 5.8.1. Protected Agricultural Activities under the New Jersey Right to Farm Act

Category	Activity
Producing	<ul style="list-style-type: none"> ▪ Produce agricultural or horticultural crops, trees, forest products, livestock, poultry, and other products. ▪ Replenish soil nutrients and improve soil tilth (physical condition, particularly its suitability for growing crops). ▪ Control pests, predators, and diseases of plants and animals. ▪ Clear woodlands using open burning and other techniques, install and maintain vegetative and terrain alterations and other physical facilities for water and soil conservation and surface water control in wetland areas. ▪ Conduct onsite disposal of organic agricultural wastes.
Processing	<ul style="list-style-type: none"> ▪ Process and package the agricultural output of the commercial farm.
Marketing	<ul style="list-style-type: none"> ▪ Provide for the operation of a farm market, including the construction of building and parking areas in conformance with municipal standards. ▪ Conduct agriculture-related educational and farm-based recreational activities provided that the activities are related to marketing the agricultural or horticultural output of the commercial farm.
Other	<ul style="list-style-type: none"> ▪ Engage in solar, wind, and biomass energy generation, in compliance with agricultural management practices.

Source: N.J. State Agriculture Development Committee (2016). The Right to Farm Act in New Jersey; A Guide for Farmers, Neighbors, and Municipalities. Retrieved from: <https://www.nj.gov/agriculture/sadc/documents/rftprogram/resources/guidebook.pdf>

thereafter. Those farms in operation as of July 2, 1998 were grandfathered and excluded from this zoning requirement.

- The commercial farm operation (including practices, activities, or structures) must:
 - Conform to generally accepted agricultural management practices;
 - Comply with all relevant federal or state statutes and regulations; and
 - Not pose a direct threat to public health and safety.

Table 5.8.1 details those activities of commercial farms protected under the Right to Farm Act.

As noted above, commercial farms must conform with agricultural management practices (AMPs) in order to be eligible for protections under the Right to Farm Act. The act states that the SADC will delineate the AMPs. Over time the committee has defined practices in the following 12 areas:

- Apiaries
- Poultry manure
- Food processing by-product land application
- Commercial vegetable production
- Commercial tree fruit production
- Natural resource conservation
- On-farm composting operations
- Fencing installation for wildlife control
- Aquaculture
- Equine activities
- On-farm direct marketing
- Solar energy generation facilities

Municipal right-to-farm ordinances can be less restrictive of agricultural activities, but not more restrictive, than the Right to Farm Act and the AMPs designated by the SADC. If a right-to-farm matter

arises that is outside of an adopted AMP, the SADC or the Somerset County Agricultural Development Board (SCADB) will make a determination as to whether the agricultural activities are in line with generally accepted practices.

Filing Process (Site-Specific Agriculture Management Practice vs. Right-to-Farm Complaint)

The Right to Farm Act establishes two formal processes through which County Agricultural Development Boards (CADBs) can determine whether a farm is eligible for Right to Farm Act protection in a specific situation:

- a. **Complaint Process:** If a neighbor or municipality feels aggrieved by a commercial farm, they must file a complaint with the local CADB instead of in court. This gives CADBs primary jurisdiction over agriculture-related disputes. Upon receiving the written complaint, the CADB reviews the complaint to determine whether (i) the operation involved meets the requirements to be a “commercial farm,” (ii) whether activity is protectable under the act, and (iii) if the farm conforms with AMPs. If the CADB determines that the farm does fall under protection through the act, the CADB holds a public hearing and then issues a resolution with its findings. In its findings, the CADB can protect the activities that are part of the complaint, protect them in part, or deny protection under the Right to Farm Act. If either party chooses to do so, the decision of a CADB can be appealed to the SADC, whose decisions can then be appealed to the New Jersey Superior Court, Appellate Division.

- b. **Site-Specific Agricultural Management Practice (AMP) Process:** In order to proactively address future issues, or to address a current situation with a neighbor or municipality, a commercial farm may request determination by the CADB as to whether its operation and/or practices meet AMP requirements and are protected under the act. The CADB reviews the case, holds a public hearing, and issues a formal resolution with its findings. The farm involved must notify the municipality and all property owners within 200 feet of the farm of the upcoming public hearing to ensure all sides are considered. The appeal process is the same as under the “complaint process” described above.

Right to Farm Act Protections

If a CADB determines that an agricultural operation is a “commercial farm” and that the practices related to a complaint are entitled to protection under the Right to Farm Act, then the CADB’s final decision sets an “irrebuttable presumption” that the farm’s activities do not constitute a public or private nuisance. This protects the activities from any nuisance lawsuits related to those activities. On the other hand, if the requirements for right-to-farm protection are not met, then the farm is not protected from lawsuits.

There are cases when municipal ordinances are the subject of a complaint. For example, a municipality may request an official hearing because an agricultural operation is violating local zoning standards. In these instances, the CADB must (a) seek input from the related municipality during the public hearing process, and (b) consider in their decision the competing interests of the municipality, impact on other property owners, and any impact on



public health and safety. The CADB decision can preempt local ordinances (i.e., exempt a commercial farm from a zoning requirement), but this is done on a case-by-case basis and the farm must provide a “legitimate agriculturally-based reason” that it cannot comply with local standards.

Responsibilities and Procedures of SCADB

With regard to the Right to Farm Act, the Somerset County Agricultural Development Board (SCADB) is the County’s CADB. Therefore, the SCADB is the entity responsible for reviewing requests and complaints, determining Right to Farm Act eligibility, and processing the matters to their completion as described above. The SCADB’s website has forms available for (a) agricultural operations to apply to be certified as a “commercial farm” or (b) municipalities, farms, or other constituents to apply for a formal hearing due to a complaint.

Mediation Program

The formal complaint and hearing process can take an extended period of time, particularly if appeals are filed. To provide a potentially quicker alternative, SADC offers a free mediation program. Through the mediation program, a trained, impartial, and certified mediator works with the two parties to examine the matter at hand, discuss their different points of view, consider options, and determine if those involved can agree on a solution without a formal complaint.

In order to participate, all involved parties must agree to the mediation. A form to request voluntary mediation is available on SCADB’s website and, once an application has been submitted by both parties, SADC assigns a mediator to the case from a roster the SADC maintains. The mediator is provided by SADC at no expense to the involved parties. If an agreement is reached through mediation, the mediator prepares an agreement that both parties

must sign. If no agreement is reached, the mediator prepares a Notice of Termination of Mediation which is signed by the parties, and the matter can return to the formal right-to-farm complaint process.

Benefits of mediation for participants include reduced time compared to the appeals process, no legal costs, and the fact that the parties involved in the dispute retain control over the outcome rather than a third party (SCADB or SADC) determining the result. Further detail on the administration of the mediation program can be found at New Jersey Administrative Code 2:76-18.

C. Changes to the New Jersey Right to Farm Act

The Right to Farm Act authorizes the SADC to designate AMPs and thus add over time to the list of protected agricultural practices/activities under the act. This section highlights some of the more recent additions to right-to-farm protections in New Jersey, including on-farm direct marketing, solar generation, beekeeping, and additions to existing equine industry protections.

Inclusion of On-Farm Direct Marketing

On January 31, 2014, the SADC approved rules establishing an AMP for on-farm direct marketing facilities, activities, and events. The intent of the rules is to create a broad umbrella of protection for farm markets and agritourism under the Right to Farm Act. The rules list farm stands, farm stores, community-supported agriculture, and pick-your-own operations as specific examples of on-farm direct marketing activities that are protected, providing they meet other requirements. Key definitions under the rules include the following:

- **On-Farm Direct Marketing:** “The on-farm facilities, activities, and events that are used

to facilitate and provide for direct, farmer-to-consumer sales of the agricultural output of the commercial farm and products that contribute to farm income.”

- **On-Farm Direct Marketing Facility:** “A type of farm market including the permanent, temporary, and/or moveable structures, improvements, equipment, vehicles, and apparatuses necessary to facilitate and provide for direct, farmer-to-consumer sales of the agricultural output of the commercial farm and products that contribute to farm income.”
- **On-Farm Direct Marketing Activity:** “An agriculture-related happening made available by a commercial farm that is accessory to, and serves to increase, the direct-market sales of the agricultural output of the commercial farm. Such activities are designed to attract customers to a commercial farm by enhancing the experience of purchasing agricultural products and include, but are not limited to: agriculture-related educational activities; farm-based recreational activities; and ancillary entertainment-based activities.” Educational activities are those that assist in increasing the direct-market sales of the farm, such as school trips, farm tours, etc. Recreational activities that serve to assist the farm in marketing include corn mazes, horse/pony rides, bird watching, hunting, etc. Ancillary activities are those that are accessory to other marketing activities but less specifically related to agriculture, such as live music, playgrounds, etc.
- **On-Farm Direct Marketing Event:** “An agriculture-related function offered by a

commercial farm that is accessory to, and serves to increase, the direct-market sales of the agricultural output of the commercial farm. Such events are designed to attract customers to a commercial farm by enhancing the experience of purchasing agricultural products; may include on-farm direct marketing activities as components; are either product-based or farm-based; and occur seasonally or periodically.” Examples are listed in the rules including such product-based events as pumpkin or wine festivals, seasonal harvest festivals, open house events, and CSA membership meetings.

The AMP rules provide specific standards regarding hours of operation, lighting, safety procedures, sanitary facilities, signage, parking areas, buffers (for new or expanded operations only), event planning and notification, and structures. The rules also specify that, in order to be protected, activities and events must have a negligible impact on the continued use of the land for agricultural production.

Inclusion of Solar Generation

New SADC rules went into effect June 3, 2013, enabling farms preserved under the Agriculture Retention and Development Act to install solar energy systems, and adding those solar generation facilities to the AMPs protected under the Right to Farm Act. The goals of the new rules are to enable farmers on preserved land to generate solar energy, thus reducing the farm’s energy costs and/or providing a limited income opportunity to the farm owner. Owners must request approval by the SADC before constructing a solar system, and the systems are required to meet the following criteria:

- Either (a) the output of the solar system must be limited to 110 percent of the



A preserved horse farm in the Neshanic Station area, Branchburg Township. State Agricultural Development Committee rules adopted in 2008 added to the list of protected equine activities the boarding, keeping, training, and rehabilitation of horses, as well as complementary activities including clinics, open houses, demonstrations, educational camps, farm events, competitions, and rodeos. To be eligible for right-to-farm protection, these complementary activities must specifically be related to the marketing of horses on the farm and in compliance with municipal requirements.

farm's previous calendar year energy demand or (b) the system must occupy one percent or less of the farm's acreage.

- The system must be owned by the farm owner or be under a purchase agreement that ends in farmer ownership.
- The solar generation system has to either provide power or heat to the farm or reduce farm energy costs through net metering, etc.
- The system cannot hinder the uses of farmland for agricultural or horticultural production in a significant fashion.

The rules further stipulate application requirements, evaluation criteria, and the SADC review process.

Inclusion of Beekeeping

In 2015, the Governor signed into law A401294/S1328, which expanded the Right to Farm Act to cover commercial beekeeping operations. In order to be protected, operations must earn at least \$10,000 annually from bee-related agricultural products or through providing crop-pollination services. These protections cover the related operation even if the land does not qualify for farmland assessment. However, non-beekeeping related operations on the farm are not covered under the Right to Farm Act unless they qualify separately for non-beekeeping purposes. The SADC has yet to establish AMPs related to this change to the law.

Changes to Equine Industry Standards for Right-to-Farm

On June 26, 2008, the SADC adopted rules expanding the list of equine-related activities protected under the Right to Farm Act. The act already included equine production activities such as breeding, pasturing, and hay production. The 2008 rules added to the list of protected activities the boarding, keeping, training, and rehabilitation of horses, as well as complementary activities including clinics, open houses, demonstrations, educational camps, farm events, competitions, and rodeos. However, in order to be eligible for protection, these complementary activities must specifically be related to the marketing of horses on the farm. The complementary activities must also be in compliance with municipal requirements.

In order to be eligible, an agricultural operation with equine activities must still meet the definition of a “commercial farm” and conform with AMPs, and the rules specify which equine-related income may be used to satisfy “commercial farm” requirements. The rules cover AMP specifics, ranging from stocking rates and manure management to the maximum allowable extent of equine-related buildings, parking areas, and other equine-related improvements. CADBs are enabled by the rules to set limits on the number of improvements (buildings) farms can have for equine-related activities, thus ensuring the farm itself retains a reasonable agricultural production capacity. This limit can range between 15 and

25 percent of the first 150 acres of total usable area plus 10 percent of all additional acres of total usable area above the first 150 acres. Usable area is defined as land available for farming, essentially excluding wetlands and the farm’s other buildings.

In 2013, the SADC “reviewed activities on a Somerset County equine farm for consistency with the farmland preservation deed restrictions and determined that equine shows are permitted on the farm under certain conditions because they are a necessary tool in marketing hunter/jumper horses bred, raised and trained on the farm.”²⁶

Winery Special Occasion Events on Preserved Farmland

In 2014, New Jersey S837 was signed into law, requiring the SADC to establish a 44-month pilot program that permits wineries on preserved land to conduct special occasion events. Examples of such events include fairs, festivals, and weddings. The intent was to enhance the revenue of a rapidly growing winery industry, which saw a 222 percent increase in the number of businesses in New Jersey between 2000 and 2013, of which 42 percent are located on preserved farms.²⁷

On October 26, 2017, the SADC adopted rules establishing procedures to implement this program. The pilot program was set to expire March 1, 2018, but the New Jersey legislature extended it for another two years; SADC reported on the pilot program in 2020.²⁸

²⁶<https://www.nj.gov/agriculture/sadc/documents/publications/2013annualreportFINAL.pdf>

²⁷ New Jersey Agriculture Development Committee. *Winery Special Occasion Events*. Retrieved from: <https://www.nj.gov/agriculture/sadc/ruleprop/recentlyadoptedrules.html>.

²⁸<https://www.nj.gov/agriculture/sadc/documents/news/populartopics/SOE%20FINAL%20REPORT%20TO%20THE%20GOVERNOR%20AND%20LEGISLATURE%202020.03.05.pdf>

D. Highlighted Right-to-Farm Cases

The following is a brief summary of several significant decisions under the Right to Farm Act at the state and county levels since the 2008 Somerset County Comprehensive Farmland Preservation Plan.

SADC vs. Quaker Valley Farms (Hunterdon County)

Located in Franklin Township in Hunterdon County, Quaker Valley Farms is owned by David den Hollander. While prior to his purchase the 120-acre preserved farm had been used for cropland, Mr. den Hollander switched to growing flowers in order to increase the farm's economic viability. Following a major crop loss one year due to hail damage, in 2007-08 the farmer made the decision to build 72 large hoop houses on the farm (temporary greenhouses). In order to level the ground for their construction, he moved approximately 50,000 cubic yards of soil and, in response, the SADC sued based on the perceived destruction of agricultural value.

A trial court in Hunterdon County sided with the SADC, and the Appellate Division of New Jersey Superior Court affirmed the trial court's decision in July of 2015. However, Mr. den Hollander sought reconsideration from the Appellate Court and, on October 13, 2016, that court reversed its decision, finding, "Although protecting the productive soil

resources is key, so is shielding the land from non-agricultural development, maintaining agriculture's economic role, and enabling New Jersey's agricultural sector to compete economically." The court observed that the Agriculture Retention and Development Act (ARDA) promotes "dual, if sometimes competing goals...: soil conservation and agricultural economic development, which may include expansion of greenhouse farming and other agricultural activities that do not rely on soil resources." The court found that Mr. den Hollander is entitled to grade the farm in order to install hoop houses for agricultural purposes, as long as the soil he removes is conserved "to the extent practicable." The court further stated that determining whether Mr. den Hollander did in fact conserve the soil to this extent would require expert testimony.

In March of 2017, following a request by the SADC, the New Jersey Supreme Court agreed to review the Appellate Court's decision. In August of 2018, the Supreme Court ruled that²⁹

We now conclude that the Appellate Division erred in overturning the grant of summary judgment in favor of the SADC. The incontrovertible evidence of record is that Quaker Valley permanently damaged premier soil on twenty acres of farmland protected by the deed of easement and the

recommends the overriding goal of the SOE law be to enable ALL preserved farms, not just wineries, to hold an appropriate number and scale of special occasion events, over and above the events and activities already permitted on preserved farms in New Jersey, in order both to attract more members of the public to their farms, thereby increasing the opportunity to market their agricultural output, and provide an opportunity for supplemental, farm-based income." (p. 32) The state legislature continues to consider

adjustments to the law under NJ A2773 ("Allows certain preserved farms in certain counties to hold 14 special occasion events per year during three -year pilot program; imposes further event restrictions on residentially-exposed preserved farms"), which as of this writing (7/15/21) is still under consideration. See <https://www.billtrack50.com/billdetail/1193000>.

²⁹<https://www.state.nj.us/gsppt/pdf/CourtCases/quakervalleyfarms.pdf>, pp. 2-3.

ARDA. The preservation of high-quality soil and open space for future generations is one of the chief aims of the Farmland Preservation Program. Although Quaker Valley had the right to erect hoop houses, it did not have the authority to permanently damage a wide swath of premier quality soil in doing so.

Quaker Valley crossed a threshold that clearly violated the deed and the ARDA. Nevertheless, those who own deed-restricted farmland must have well delineated guidelines or rules that will permit them to make informed decisions about the permissible limits of their activities. The State has yet to promulgate such guidelines or rules. The imperatives of due process require that the State give farmers reasonable notice of the permissible agricultural uses of the land, particularly when there are seemingly conflicting provisions in a deed of easement. Farmers must know where the goalposts are set before the State burdens them with costly enforcement actions.

In this case, however, we hold that even under the existing law and the present deed, any reasonable person should have known that despoiling so much prime quality soil was an unauthorized activity. We remand to the trial court to continue with the remediation plan earlier ordered.

Ciufo Farm vs. SCADB (Branchburg Township)

On October 19, 2010, the zoning officer from the Township of Branchburg in Somerset County submitted a request to the SCADB for a determination of an AMP on Ciufo Farm. The

request was in response to complaints from neighboring properties regarding the storage of multiple commercial vehicles for the owner's landscaping business onsite. Prior to the zoning officer's request, he had notified Mr. Ciufo that the storage of the vehicles was a violation of the township's zoning code, had issued a summons and, upon that summons being contested by Mr. Ciufo, sought determination from the local judge who designated it as an issue under the Right to Farm Act, therefore bringing it under the jurisdiction of the SCADB.

SCADB deliberations extended until March 2011, as the board's Right-to-Farm Committee examined whether the commercial vehicles that were stored onsite were essential to the running of the farm's agricultural operations. The board's final determination on March 17, 2011, was that their primary use for the owner's landscaping business meant that they were not protected under the Right to Farm Act, and thus they fell under jurisdiction of the local zoning code.

Mr. Ciufo appealed the SCADB decision to the SADC, which ultimately determined the following:

- a. Given the numerous hours of farm work that the vehicles were used for, one (not four) would fall under right-to-farm protection.
- b. Such protection is not a blanket ability to override municipal zoning ordinances beyond matters of public health or safety, rather that such preemption must require a legitimate, farm-based reason for not complying with the local law.



On-farm direct marketing activities on preserved farmland, such as this harvest festival event at a farm in Franklin Township, are regulated by the SADC. The intent is to create a broad umbrella of protection for farm markets and agritourism under the Right to Farm Act. Farm stands, farm stores, community-supported agriculture, and pick-your-own operations are protected, providing they meet other requirements.

Simply Grazin’ Mobile Slaughtering Operation (Montgomery Township)

Mr. and Mrs. Faille, owners of the Simply Grazin’ Organic Farm in Montgomery Township, Somerset County, requested SCADB’s development of a site-specific AMP in 2011 for the implementation of a mobile poultry processing unit onsite as the township’s code specifically states that “slaughtering is prohibited.” The township was actually supportive of this application and, upon review, SCADB determined that a mobile poultry processing unit is an AMP under the following requirements:

- Slaughter waste must be handled in accordance with the NJDA’s Animal Waste Management Plan and NJDEP and NRCS standards and regulations.
- Implementation of the unit on the farm conforms to all relevant federal and state regulations, rules, and statutes.

E. Conclusion

The business of farming can be complicated, as are the rules governing farmers’ right to farm, an important policy area affecting all kinds of farms, both preserved and otherwise. As agriculture has changed, such rules have similarly been adapted in the effort to sustain agricultural uses that are compatible with the goal of preserving farmland in the interest of the entire community. Agriculture continues to diversify and change, a topic addressed thoroughly in the next section. This next section covers the “agriculture development” part of this plan, asking what Somerset County and partners can do to enhance farm profitability. For, as stated in several ways previously in this plan, without continued profitability, farmers will not continue in farming long enough for the County’s preservation program to be able to conclude protection measures, and replacement farmers will not be available to keep farming the preserved farmland.

5.9. Agricultural Economic Development

Economic viability is critical to farmland preservation, for without that viability there would be no industry to sustain farming on the land. Therefore, one objective of this Farmland Preservation & Agricultural Development Plan is to outline strategies for agricultural industry retention, expansion, and recruitment.

Providing a positive climate for the business of farming has been a primary goal of the Somerset County Agriculture Development Board (SCADB) from its formation in 1983. The SCADB's position reflects the full intention of New Jersey's Agriculture Retention and Development Act, which gives farm viability the same level of importance as easement purchase. The Somerset County Board of Commissioners, Planning Board, and the SCADB all recognize the need to provide an atmosphere in which agriculture can continue to be sustainable as an industry. This goal is also addressed in Somerset County's Comprehensive Economic Development Strategy (CEDS) sponsored by the Somerset County Business Partnership, as described further below. Somerset County's farming industry contributes not only aesthetically and environmentally but also economically to a healthy and inviting county.

A. Introduction

While the ideas cited in this section, and the Somerset County Preservation Plan itself, are sponsored by Somerset County, it must be noted that Somerset County itself cannot accomplish or lead many of these ideas.

Farmers, farm-related business owners, farm advisors, and local consumers are also stakeholders in the work to assure a robust agricultural economy in the county. All must work together, and encourage county and state support wherever needed.

Therefore, this section departs slightly from the overall strategy for presenting ideas for action in this

plan. Generally, all sections refrain from stating what Somerset County intends to do in reaction to issues and ideas described; Somerset County's intentions are presented in the final section of this plan, Section 5.12, Goals & Strategies.

However, here, this section does lay out highly specific recommendations from NJDA and additional ideas from the planning team. These ideas are largely addressed to stakeholders at large; for the sake of completeness within a topic, some recommendations are directed to Somerset County and the SCADB.

- **Recommendations by Agricultural Sector**
- Section 6.9.G in the following pages organizes ideas for the agricultural industry in Somerset County by sector:
- Produce
- Nursery, Greenhouses, Floriculture, and Sod
- Dairy
- Field and Forage Crops
- Livestock and Poultry
- Organic Farming
- Equine Industry
- Wine
- Agritourism
- A tenth section presents “General Strategies for Agriculture.”

If County recommendations are to be pursued directly by the County and SCADB for the timeframe of this plan, and within the constraints of existing resources, they are repeated in Section 5.12.

B. Overview of Agricultural Economic Conditions

According to the U.S. Department of Agriculture’s Census of Agriculture, 2017 was a good year for farms in Somerset County. Sales overall increased 6 percent from 2007 to 2017. Vegetable crops and equine performed particularly well, with sales of vegetables jumping more than five-fold from \$0.43 million in 2007 to \$2.4 million in 2017 and equine sales rising from 75 animals to 132 animals over the same decade. The number of acres in farms actually increased between 2007 and 2017, reversing a downward trend. Overall, the number of principal operators of farms nearly doubled, with

increases in each age class. Finally, as of 2017 a quite hopeful sign is that 55 percent of the principal operators of farms in the county farmed full-time.

On the other hand, agriculture in Somerset County has been undergoing significant changes in the last few decades, with major losses in the dairy industry, livestock farms, and grain producers, all due to lost profitability and competition for land. Another worrisome trend is the aging of the farming workforce. Between 2002 and 2012, the average age of the principal farm operator grew from 56 to 61. As of the 2017 Agricultural Census, the average age of the principal farm operators in the county is 60.2. This does reflect national trends, but Somerset County’s average age exceeds even the national average of 57.5 as of 2017. In addition, despite the positive acreage shift cited between 2007 and 2017 above, the longer-term trend is one of declining acreage in county farmland. See Figure 5.2.A, Somerset County Land in Farms, 1987-2017, Section 5.2, Agricultural Land Base.

All told, the future of farming in Somerset County is clouded by competition for development of the land, the price of land, lack of availability of farmland for young farmers, and a deficiency of young farmers.

C. Improving the Viability of the Farm Industry: Enhancing Farmer Access to Consumers

In Somerset County and along the East Coast, there is hope for all sectors of agriculture in the strengthening local food movement. The earlier stage of the local food movement began with farmers’ markets, which have grown in New Jersey

from 12 markets in 1980 to 133 in 2018.³⁰ Nonetheless, farmers' markets have their limitations, including being highly dependent on the weather. They also tend to be skewed towards sale of fruits and vegetables. Improved marketing options for all farm products are greatly needed.

Somerset County is a relatively densely developed county. As such, the key economic issue is how local farmers can successfully reach the strong local retail market. A regional food system where local food sources supply many of the needs of food consumers would not only help farmers, but it would also reduce the dollar drain from the regional economy (what economists call "leakage" – every dollar that remains in the regional economy circulates several times, reinforcing local prosperity).

Consumers spend roughly 10 percent of their income on food. There are about 116,500 households in Somerset County with a median income of more than \$100,000. That equates to more than \$11 billion dollars of income. Ten percent of the county's total income is \$1 billion dollars spent on food each year. With about \$400,000 spent on direct sales in Somerset County in 2012, nearly all of that \$11 billion is currently leaving the region.

Some states and municipalities are setting a goal of locally sourcing 10 percent of all food. Ten percent of food purchases in Somerset County would be approximately \$100 million. Just one percent equates to \$10 million in direct sales for food.

The overarching economic approach needed to improve the viability of farming as an industry in

Somerset County relies on enhancing farmer access to consumers.

This section of the plan outlines detailed strategies specific to the agricultural sector to support this goal. In general, the SCADB's objectives are as follows:

- Expansion of the sale of commodities and products that benefit from proximity to high densities of people, such as horticulture, equine, farm-to-table, and direct sales. These will need support in the form of greater training for farmers in marketing skills, enhanced agritourism coordination, and improved connections to heritage and ecotourism planning.
- Expansion of local food source partnerships, such as the creation of regional food hubs (central facilities that enable the aggregation, storage, processing, distribution, and marketing of local food) to supply restaurants, schools, and service industries.
- Incorporate local food retail and local food in restaurants into towns' economic development and residential and commercial development.
- Allow all farm products the same access to the consumer as products that arrive in the county from global sources.
- During the Covid-19 pandemic, Somerset County held roundtables bringing representatives from the County, the State, Office of Emergency Management, Municipalities, Agricultural community, as

³⁰<https://ediblejersey.ediblecommunities.com/shop/2021-edible-jersey-farmers-market-guide>. Jersey Fresh

now counts more than 2,000 on-farm sellers - <https://findjerseyfresh.com/find/>.

well as farmers together to discuss the issues facing the agriculture community as well as the general public. In response to these roundtable discussions, the County developed a three document series covering ways to safely run or attend farmers markets, drive-thru markets, and pick-your-own events. These documents held the latest CDC guidelines, information, pre-made signs – functionally working as an all encompassing guide for farmers, municipalities, and the general public. Additionally, the County designed a storymap that houses the locations of every known farmer's market in the County. Users can input their location and discover nearby markets, their times of operation and any social media associated with the site, and types of foods offered at that specific location.



highest percentage of agriculture for any county in the state.

However, farms and agricultural production gradually moved west during the twentieth century, reducing profitability in the East. Newer farms in the Midwest and West were much larger than those in the older, established farm communities of the East. With irrigation systems, economies of scale, and growing seasons lasting year-round, California became the fruit and vegetable basket for the country. The Midwest became the United States grain belt. Livestock operations expanded in the West and South. Dairy and livestock producers also flourished in California. An improved highway system and better refrigeration systems allowed perishable goods to be transported long distances.

D. Historical Perspective

In 1919, New Jersey was the fourth largest state producer of vegetables, behind only California, New York, and Florida.³¹ Farm size in New Jersey averaged 69.5 acres at the time. The number of acres of vegetables in the state actually increased from 95,000 in 1920 to 144,000 in 1950.

In 1950, approximately 97,500 acres in Somerset County were in agriculture, or 49.6 percent of the total county acreage. This was the fifth

Later in the century, trade agreements provided even greater competition for East Coast farmers. Wholesale vegetable and fruit production from low-wage countries flooded chain supermarkets, driving down prices and East Coast agricultural profitability even further. By the last quarter of the twentieth century, the states along the East Coast were struggling to maintain their agricultural economies.

Largely because of these pressures, 80 percent of New England farmland acreage disappeared during the twentieth century. In the Mid-Atlantic region, states lost 65 percent of their farmland. New Jersey dropped from 2,284,251 acres in 1920 (its peak) to

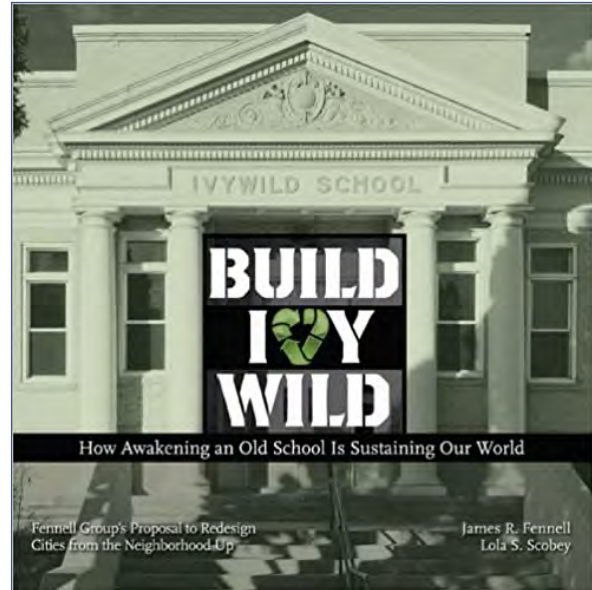
³¹ United States Department of Agriculture. (1920). *1920 U.S. Census of Agriculture*, p. 819.

832,600 in 1997, a 64 percent decrease in farmland acres.

As farms began to disappear in the second half of the twentieth century, counties within commuting distance of major urban centers began to experience residential sprawl. Most counties in New Jersey were part of this trend, with residential sprawl emanating from New York City, Philadelphia, and many smaller cities in between. Somerset County was no exception. By the end of the twentieth century, Somerset County was a suburban county with only about 46,258 acres of farmland in 1997, a 53 percent drop in acreage in 50 years.

E. New Market Trends

Since the turn of the century, certain sectors have been rebounding thanks to direct sales to consumers, the internet, and new market realities. As reported in the Urban Land Institute’s publication *Cultivating Development: Trends and Opportunities at the Intersection of Food and Real Estate*, “Across the United States, people have a growing interest in and awareness of the value of fresh, local products. The number of farmers’ markets throughout the country has grown rapidly, with five times the number in 2016 as in 1994. New and revamped food halls and marketplaces, such as Grand Central Market in Los Angeles, the Ivywild School Marketplace in Colorado Springs, and the Midtown Global Market in Minneapolis, are becoming top tourism destinations and are providing economic opportunity for local entrepreneurs.”³² Brick-and-mortar marketers are now realizing that shoppers are seeking experiences



The renovated Ivywild School (1916) in Colorado Springs now houses a vibrant indoor marketplace. Preservation Colorado tells the story: “Ivywild School was closed in 2009. It was shortly thereafter that the wheels started turning and the idea to move the 18-year-old Bristol Brewery over to the space, along with a bakery, espresso/cocktail bar, delicatessen and office space, started to take shape. It was a unique and bold proposition that would take years of planning and a lot of great minds to achieve but it was just what the neighborhood needed.” (Pictured, cover of a book about the project by James R. Fennell and Lola S. Scobey. Caption text from Preservation Colorado found at <http://coloradopreservation.org/uniquely-colorado-creative-reuse-projects/>)

and products that Amazon and other internet sellers cannot deliver.

In addition, national leaders are recognizing the importance of regional food systems. In a 2017 report, the Federal Reserve Bank of St. Louis and the Board of Governors of the Federal Reserve System

³² Urban Land Institute. (2016). *Cultivating Development: Trends and Opportunities at the Intersection of Food and Real Estate*. p. 2. Retrieved

from: <https://uli.org/wp-content/uploads/ULI-Documents/Cultivating-Development-Trends-and-Opportunities-at-the-Intersection-of-Food-and-Real-Estate.pdf>.

noted both the economic and strategic importance of regional food systems: “Given the tremendous upheavals in the nation and the world today, farm advocates, state and federal agencies, and Congress are also viewing United States agriculture as a national security priority given a rising world population and what could be America’s vulnerability in food production.”³³

Creating a regional food system, however, is not simple. Such work requires support and coordination among state and local governments, nonprofit advocates, and producers. For the most part, local producers and processors do not have access to the prevailing national and international corporate food system. This system supplies most food to consumers in the nation and is based primarily on maximizing volume and minimizing cost at each step in the supply chain. It relies almost entirely on large farms and processing plants in other parts of the United States and even in other countries, the national/ international aggregation, distribution, and transportation systems necessary to sustain it, and the consolidated wholesale and retail chains that deliver products to consumers.

Throughout the United States, there is little or no corresponding local/regional food system infrastructure. In New Jersey, the food aggregation and distribution systems that supplied the region 80 years ago have long since disappeared. It is difficult to set up new systems that can move locally grown foods efficiently and profitably through a local or regional supply chain, from producer through processor, aggregator, and distributor to wholesale,

institutional, and retail customers. Most aspiring local businesses must create their own microsystems – no small challenge for a farmer working to match products to markets or a processor trying to balance producers of ingredients with consumers of market-ready products.

On the other hand, demand for local food is strong, so opportunities do exist. Direct and indirect sales (through intermediaries such as food hubs and other food aggregators) are on the rise such that farmers are beginning to imagine the potential of a regional food system. In order for the Somerset County farming industry to continue, and even to expand, local farmers will need support in tapping into the local food market and eventually moving towards such a regional food system.

Existing Supporting Actions (State and County)

It is important that the County’s focus remain on ways to help farmers increase their profitability. Coordination with federal and state agencies, as well as other organizations both in the public and private sectors, is key to finding solutions.

New Jersey Department of Agriculture (NJDA)

The move toward more direct sales has been evident since the turn of the century. New Jersey has been a trendsetter in this movement, as reflected in the 2011 report by the New Jersey Department of Agriculture (NJDA), *Economic Development Strategy*. The state of New Jersey offers farmers a number of support services and programs ranging

³³ Phillips, R. & Wallace, D. (2017). *Harvesting Opportunity: The Power of Regional Food System Investments to Transform Communities*, p. 128.

Retrieved from:
https://www.stlouisfed.org/~media/Files/PDFs/Community-Development/Harvesting-Opportunity/Harvesting_Opportunity.pdf?la=en.

from technical advice to farm loans. One of these supports is the NJDA's Smart Growth Toolkit³⁴, which provides information to aid governments, businesses, nonprofit groups, and local citizens in their efforts to achieve the goals and objectives outlined in the NJDA 2006 *Agricultural Smart Growth Plan for New Jersey*.³⁵ The toolkit embraces the five components identified by the NJDA as critical for the future of farming: Farmland Preservation, Innovative Conservation Planning for Agricultural Land Use, Economic Development, Agriculture Industry Sustainability, and Natural Resource Conservation.

The 2011 *Economic Development Strategy* report identifies and proposes methods to expand and enhance various subsets of the agriculture industry in New Jersey, including produce, horticulture, aquaculture and seafood, dairy, field and forage crops, livestock, and poultry, organic, wine, and agritourism. The NJDA notes that "local access to large affluent markets has long been an advantage for the marketing of [those] products. While our markets are still there, competition has become tougher. New Jersey...must continually work to rediscover its competitive advantages, improving access to nearby markets and strengthening consumer loyalty."³⁶

Jersey Fresh

Major efforts by the NJDA are directed at increasing the demand for New Jersey grown produce through branding, agritourism, farm direct-sales programs,

and farmers' markets. NJDA is committed to promoting agritourism through the *Jersey Fresh* website, the distribution of printed materials, and other forms of advertisement. Other promotion by NJDA includes collaborating with Rutgers University through the New Jersey Agricultural Experiment Station and promoting the work of such other organizations as the New Jersey Farmers' Direct Marketing Association.

In 2018, the NJDA launched the ad campaign "*Jersey Fresh - as Fresh as Fresh Gets*." Along with new brands *Jersey Grown* and *Jersey Seafood*, it conveys the message that each brand is truly grown and harvested in New Jersey. The campaign also educates the public about the benefits of New Jersey products and strengthens the link between farmers and consumers.

This effort aligns well in Somerset County with the growth in local food sales in the twenty-first century and the increased focus on agritourism. Direct-to-consumer meat sales have been proven to make livestock and poultry operations more profitable. Grain farmers could also benefit. Grist mills once dotted the landscape before the huge mills in the West took control of national markets. Today, small electric mills can be used to process the local grain market to supply local bakeries. Wheat berries, milled and unmilled, are in demand for consumers seeking local grains so that they can bake at home.



³⁴<https://www.nj.gov/agriculture/divisions/anr/agriasist/smartgrowth.html>

³⁵<https://www.nj.gov/agriculture/pub/farmer.html>

³⁶ NJDA. (2011). *Economic Development Strategy*. p. 1. Retrieved from: <https://www.nj.gov/agriculture/pub/>.

Farm Link and Other Transfer Assistance

The New Jersey Farm Link Program³⁷ was developed through collaboration between the State Agriculture Development Committee (SADC) and the Northeast Organic Farming Association of New Jersey (NOFA-NJ). The website serves as a resource and referral center for farmers and landowners, helping to connect beginning and established farmers who are seeking access to land and farming opportunities with landowners who have available farmland. Farmers and landowners can also use the program's resource pages to find more information on getting started in farming, leasing farmland, finding farmers/landowners, and developing farm transfer and succession plans. As of November of 2019, seven farms in Somerset County were listed on the Land Link website, with two properties totaling 217 acres for sale (including one preserved property); another five properties totaling 121 acres were available for lease.

In addition to Farm Link, the SADC maintains a website with extensive information for farmers seeking to transfer their farm to the next generation or to a new owner via sale. Documents and articles are provided on topics ranging from components of farm succession and mistakes to avoid, to risk-management checklists. Beyond information, the SADC also provides a free mediation program where certified mediators can assist families with weathering the difficult issues that can arise in succession planning.



Direct Marketing Agricultural Management Practice

As was stated in Section 5.8, Right to Farm, the SADC updated the Agricultural Management Practice (AMP) for On-Farm Direct Marketing in 2014 in order to:

- Develop a consistent AMP that farmers, the public, municipalities, and CADBs can rely on;
- Establish standards that are performance-based rather than prescriptive to give reliable, statewide guidance to farmers, towns, and others without being overly rigid; and
- Add clarity to the Right to Farm Act to better define the act's numerous terms and what is protected.

Having such standards in place, which are then compliant with the Right to Farm Act, gives farmers the confidence to invest in these types of farming practices, provided that compliance is not cost-prohibitive.

Rutgers University – Agricultural Education and Market Research

Rutgers Cooperative Extension (RCE) Service

Rutgers, the State University of New Jersey, has Cooperative Extension offices in all 21 New Jersey counties. These offices are staffed with 4-H agents, extension specialists, educators in family and community health sciences, and agriculture and natural resources agents. Specific to the agriculture industry, the RCE offices provide education and

³⁷ www.njlandlink.org

technical assistance regarding best-management practices (BMPs) that both protect natural resources and enhance farm economic viability.

New Jersey Agricultural Experiment Station

The New Jersey Agricultural Experiment Station (NJAES) is part of Rutgers University and its extension services. The NJAES provides research, extension, and education programs specifically in the areas of agriculture. Activities include research developing disease-resistant, drought-tolerant, and high-yield products for use by state producers, professional education for farmers, youth development programs teaching the next generation about science and agriculture, and many more.



School of Environmental and Biological Sciences at Rutgers University

Located on the George H. Cook Campus of Rutgers University, the School of Environmental and Biological Sciences offers 21 undergraduate majors, including plant and animal sciences, microbiology, biotechnology, agriculture and food systems, landscape architecture, food and nutritional sciences, ecology and evolution, marine science and oceanography, environmental sciences and meteorology, human ecology, entomology, and environmental economics. The school coordinates closely with NJAES, with students participating in related applied research programs on farms. The school is a crucial component in educating the next generation of agricultural researchers and producers in the state.

Somerset County Board of Commissioners

In November of 2021, the Somerset County Board of County Commissioners adopted Resolution R21-

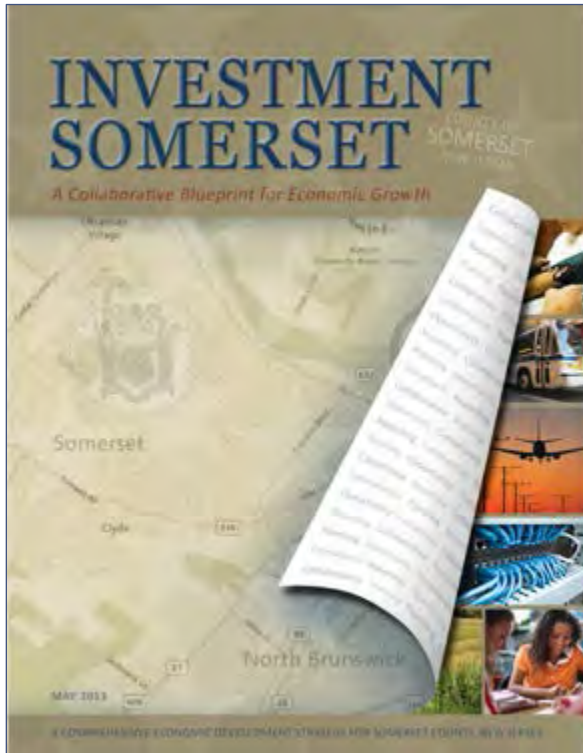
1288 which outlines the County commitment to four major goals in response to Climate Change. These goals include:

- End Emissions
- Cool Back Down
- Minimize the Pain
- Create a Fairer Environment

The goals broadly outline actions such as achieving net-zero greenhouse gas emission targets, implementing carbon sequestration strategies, addressing the job losses from decarbonization of the economy and mitigating environmental and climate change impacts in low-income communities. The goals outlined in this resolution are highly consistent with many of the goals, policies and strategies contained in the overall Preservation Plan as well as this master plan element.

Somerset County Comprehensive Economic Development Strategy (CEDS)

In 2013, Somerset County adopted a new Comprehensive Economic Development Strategy (CEDS) entitled *INVESTMENT SOMERSET: A Collaborative Blueprint for Economic Growth*. Preparation of the document was led by the Somerset County Business Partnership (SCBP). It identified tourism as a source of job creation, and agritourism was recognized as an emerging industry. In fact, tourism and agricultural development are two of nine priority areas in the document. While they rank low on the list of nine priority areas, the County provides mechanisms for support as explained in the following:



A case-in-point that exemplifies the availability of external resources is tourism efforts. The Somerset County Business Partnership (SCBP) has been designated as the Destination Marketing Organization for Somerset County. This designation has resulted in some \$100,000 made available annually for tourism marketing activities. Although these activities are ranked as a low priority in this CEDS, the availability of external funding may impact the overall allocation of organizational resources or result in new strategic approaches to tourism promotion.

Additionally... there has been significant public investment in the preservation of

farmland, implying that some support of farming operations is in order. The SCBP acknowledges that the Somerset County Agriculture Development Board has a significant understanding of the needs of the farm community. The SCBP is pledged to work collaboratively with the County Agricultural Development Board, as appropriate.³⁸

The strategy describes tourism and agriculture development in the following manner and provides the following goals and objectives:

- **Tourism:** “Although tourism is a billion-dollar industry in Somerset County, tourism assets have traditionally been under-valued. Recently, the County implemented efforts to leverage tourism-related assets that include hotels and motels, a convention center, significant catering facilities, historic sites, extensive parks and recreation facilities (including the County Parks system and Duke Farms), and major annual events, such as the Tour of Somerville Bicycle Race and the Far Hills Race Meeting. The County is fortunate to be home to the US Golf Association and the US Equestrian Team. These assets, as well as historical features dating back to colonial times, [provide] recent opportunities to increase tourism-related economic activity in the region.” Goals and Objectives:
 - o Deploy resources necessary to manage attendance and visitation to high

³⁸ INVESTMENT SOMERSET; A Collaborative Blueprint for Economic Growth, Somerset County (2013), p. 46. Retrieved from:

<https://www.co.somerset.nj.us/home/showpublisheddocument/7987/635918280274130000>.



Cabbage and broccoli thriving on a vegetable farm near Blawenburg, Montgomery Township. Annual sales of vegetables in Somerset County were reported to total \$2.4 million in the 2017 Ag Census, increasing more than five-fold from \$0.43 million in 2007.

- attendance events, thus reducing community road and highway impacts.
- o Implement targeted tourism promotional activities to leverage local hospitality industry assets and to increase regional economic activity.³⁹
- **Agricultural Development:** “Fluctuating weather and commodity market challenges, aging farm operators, relatively low operating revenues, and smaller-scale farm operations present challenges across Somerset County.” Goals and Objectives:
 - o Enhance agritourism business opportunities for preserved farms to help insure long-term use of these properties consistent with public investment.
 - o Deploy technologies and create greater connections with educational

- institutions to enhance business operations on preserved farms to help ensure long-term use of these properties consistent with public investment.
- o Adopt a broader, flexible regulatory view of farms as unique business enterprises that contribute to increased commercial activity.⁴⁰

In short, Somerset County’s CEDS reinforces SCADB efforts to support a strong agricultural economy.

F. Recommendations by Agricultural Sector

The following is a brief discussion of each of the sectors of Somerset County’s agriculture industry, including recommendations on how to boost their economic viability and how each sector relates to the 2011 NJDA *Economic Development Strategy* report

³⁹ Ibid., p. 62.

⁴⁰ Ibid., p. 63.

and Somerset County's 2013 *Investment Somerset (CEDS)* report. It is important to set forth NJDA's recommendations as context for further recommendations offered for consideration by this Farmland Preservation & Agricultural Development Plan. Recommendations are intended for the broad audience of stakeholders in the regional farm economy, from consumers to farmers to ag business and advisors to community leaders.

Produce

At the time of NJDA's 2011 *Economic Development Strategy* report, its authors noted that vegetables and fruits represented 15 percent of all agricultural sales in the state, one of the highest percentages in the country. The report went on to say that "through industry visits and involvement with the Eastern Produce Council and other trade groups, the Department continues to closely coordinate advertising with our region's major buyers and retailers. In partnership with the New Jersey Restaurant Association, approximately 350 restaurants participated in the 'Proud to Offer *Jersey Fresh*' signage program. Working closely with the *Produce News*, *Produce Business* and the *Packer* national industry publications, the Department continues to keep the *Jersey Fresh* program in the national spotlight. Through active membership and participation in the United Fresh Produce Association and the Produce Marketing Association trade shows, the *Jersey Fresh* program's high profile was supported and maintained at the national level."⁴¹ This level of state involvement is a powerful tool for getting local products before the consumer.

Somerset County vegetable growers' sales increased from \$370,000 in 2007 to \$2.4 million in 2017, a

549 percent increase. Fruit, tree nut, and berry sales added another \$211,000 to the local economy in 2017. However, there are many obstacles for farmers seeking to grow produce, particularly new farmers, including:

- **Renting Land:** Many farmers do not own the land they farm, especially beginning farmers. Produce farmers need longer leases to cover up-front costs, such as irrigation systems, fencing, storage facilities, and wash stations with potable water. Many farmland owners are reluctant to lease farmland under these conditions, especially when they can lease it for hay and still be eligible for the agricultural use assessment.
- **Lack of Experience:** New farmers lack the knowledge of how to install irrigation or drip tape systems and other tools of the trade that enhance production, particularly with beginning farmers who did not grow up on a farm.
- **Marketing:** All farmers need to learn about produce marketing strategies, marketing expenses, and post-harvest handling practices and regulations.
- **Expense:** New farmers in particular find it difficult to finance the expense of maintaining the crop over several years until the plants, vines, bushes, or trees are ready to bear. This includes paying the upfront expenses for fertilizers and pest control.

NJDA's *Economic Development Strategy* section on produce focuses on the *Jersey Fresh* program and

⁴¹ NJDA. (2011). p. 1.

food safety. An emphasis of the *Jersey Fresh* program is to work with processors to develop and market products labeled with a new “Made with *Jersey Fresh*” brand. NJDA’s *Jersey Fresh* label program is to be updated and promoted throughout the state, especially to continue to grow the *Jersey Fresh* Hospitality Industry Program. This program works closely with the industry to market *Jersey Fresh* produce to the hotel, restaurant, educational, and institutional food service industries. In addition, NJDA planned to strengthen the appeal of the *Jersey Fresh* brand to supermarket chains and other retailers. NJDA also plans to continue to promote New Jersey grown organic products as distinct from, and of higher value than, competing products by establishing the *Jersey Organic* brand.



NJDA Recommendations for Produce

The 2011 plan recommends the following strategies for produce growers⁴²:

Jersey Fresh

- **“Expand *Jersey Fresh* Program.** Continue to strength-en the appeal of the Jersey Fresh brand and communicate the benefits of our state’s produce food-safety program to super-market chains and all other retailers. Discourage the use of the “Locally Grown” product claim and increase the use of the Jersey Fresh brand name. Through the use of Specialty Crop Block Grant funds,

expand the budget for the Jersey Fresh campaign.

- **“Improve Retailer and Processor Coordination.** Continue weekly dialogue, including weekly updates, involving Department representatives, growers, producers, wholesalers and retailers of New Jersey agricultural products. Conduct farmer and buyer meetings to bring retailers, processors and growers together. Improve coordination and communication with the USDA Market News that collects information on the current supply, demand and prices on fruits, vegetables, and ornamental and specialty crops. Continue working with growers and food processors to develop products and support the marketing of products labeled with the new “Made with Jersey Fresh” brand.

- **“Promote Vertical Integration.** With funding from the USDA Federal-State Marketing Improvement Program, provide funding to Rutgers University to conduct product research and development for a New Jersey-produced agricultural commodity to meet the specific nutritional and serving requirements of the federally funded school lunch program. This will include inte-grating the USDA’s new

⁴² NJDA. (2011). pp. 2-3. Reproduced verbatim through the following two sections (subheads *Jersey Fresh* and Promote Produce Food Safety).

healthier school lunch requirements into the development of these commodities.

- **“Expand Markets.** Encourage industry attendance at national produce industry trade shows, continue to work with representatives of nationally marketed produce brands and seek new methods to better integrate New Jersey’s produce industry into the year-round supply model. Continue supporting fresh exports of New Jersey agricultural products to the New England states and Canada. Through industry visits and participation in such shows as the New England Produce Council and the Canadian Produce Marketing Association trade shows, keep key industry contacts current on New Jersey agriculture and the latest promotions of the Jersey Fresh brand.”



Promote Produce Food Safety

“The Department will continue assisting New Jersey’s fruit and vegetable growers to offer the highest quality locally grown products while adapting their operations to new food-safety standards. As food safety increases in importance, and consolidation continues in the retail produce industry, the importance of the Department’s affordable third-party farm certifications will continue to grow, as retailers require the improved trace-back ability

that third-party certifications offer. The Department will work to:

- a. “Influence the regulatory process to ensure that it is relevant to small-, medium-, and large-scale producers.
- b. “Ensure that all types of agriculture, including traditional in-ground, above-ground and tree fruit growers are considered in the development and implementation of food safety standards and regulations.
- c. “Use the *Jersey Fresh* brand to promote the food safety of New Jersey agricultural products to supermarket chains and all other retailers.

“Despite budget cuts in recent years that have reduced funding for *Jersey Fresh*, NJDA has continued to find innovative ways to market local foods to residents. Several initiatives were discussed earlier in this section, such as new sub-brands for seafood and new ad campaigns. In addition, the department has increasingly turned to social media as an outlet for marketing. In summer 2015, NJDA launched its first social media campaign, “*Jersey Fresh Love*,” and residents responded by posting thousands of photos highlighting *Jersey Fresh* products from around the state. Over the past decade, NJDA has extended its social media presence to include Facebook, Twitter, Instagram, Tumblr, and Pinterest. In 2016, NJDA launched an online store selling *Jersey Fresh* merchandise.⁴³

⁴³ www.cafepress.com/jerseyfreshshop

“NJDA’s marketing efforts, combined with a national movement of people increasingly looking for local foods, appear to be having a positive impact on public awareness. In its 2017 annual report, NJDA reported survey results showing that 72 percent of those polled are more likely to purchase *Jersey Fresh* projects, a large jump from 62 percent in 2016. In addition, 64 percent of respondents said they are likely to ask for *Jersey Fresh* products if they cannot find them in a store. Finally, “the brand is being seen at a higher rate as well, with 69 percent seeing *Jersey Fresh* tomatoes this year (up from 59 percent), 54 percent seeing *Jersey Fresh* sweet corn (up from 43 percent) and 50 percent seeing *Jersey Fresh* blueberries (up 13 percent).”⁴⁴



Additional Recommended Strategies for Produce

This Farmland Preservation & Agricultural Development Plan recommends all stakeholders consider the following strategies to support sales of produce:

- Support Direct Sales of Produce:
 - Encourage municipalities to plan for agricultural marketing sites in future developments with major residential/commercial projects, setting aside prime marketing sites for indoor and/or outdoor marketing venues for New Jersey grown products.
 - Work with municipalities to establish additional farmers’ markets. There are currently 10 out of 21

municipalities in the county with farmers’ markets. An incentive for municipalities is that communities receive Sustainable Jersey credit (discussed further in Section 5.10) for operating farmers’ markets and for actively promoting businesses that sell locally grown food.

- Encourage farmers to consider community-supported agriculture (CSA) as such contract-growing reduces farmer risks and provides a stable source of income. Reach out to existing CSAs in the county to see if they require training or technical assistance, and to discover any lessons learned they could offer to new CSAs in the area.
 - Expand participation in the WIC & Seniors Farmers’ Market Nutrition Program, where four \$5 vouchers are available for each eligible WIC/Senior participant to use to purchase local produce at county farmers’ markets. Residents can apply for the program through the Somerset County Office on Aging and Disability Services.
 - Support the state’s efforts in the *Jersey Fresh* Hospitality Program, building connections between county food service providers (restaurants, hotels, specialty, and grocery markets) and county farmers.

⁴⁴ NJDA. (2018). *2017 Annual Report and Agricultural Statistics*. p. 6. Retrieved from:

<https://www.nj.gov/agriculture/sadc/publications/2017AR%20Final.pdf>.

- **Encourage farmers to market their own farm stands, CSAs, and other direct sale opportunities** through their websites and social media. In coordination with Rutgers Cooperative Extension, provide training to farmers on innovative methods of marketing their products.
- **Encourage Extension training** that helps farmers to provide value-added products to the marketplace, such as jams and jellies.
- Explore the feasibility of establishing a county-managed, **licensed food preparation facility** to facilitate farmers looking to develop value-added products.
- **Support Diversification of Farm Crops:**
 - Encourage farmers to diversify into **vegetable and/or fruit production** due to the direct sale potential of such crops, an important means of enhancing profitability in a suburban region.
 - Continue to support county farmers looking to expand into **ethnic foods** and other specialty foods not generally found in supermarkets.
- **Other:**
 - **Marketing:** Coordinate among state, county, and municipal websites and written advertising materials to achieve consistent messaging and up-to-date accurate information regarding local food opportunities in the county.
 - **Community gardening:** Encourage municipalities to plan for prominent sites in residential developments where residents can produce their own food, a growing trend along the East Coast.
 - **Agricultural lease terms:** For open space land owned by Somerset County not foreseeably needed for recreational development and leased for agriculture, advocate for state policy to allow the extension of agricultural lease terms – currently at a maximum of five years for agricultural operations – to 10 years or longer. This would encourage the up-front infrastructure investments farmers must make to install irrigation systems, construct fencing and storage, and purchase equipment. See Section 5.12, Goals & Strategies, Strategy 5.3.C, “Increase the availability of publicly owned open space for long-term farm use.”
 - **Water allocation for produce irrigation:** As produce crops rely on irrigation to a greater degree than field crops, encourage municipalities to support water allocation for new and existing produce operations in the county. See Section 5.12, Goals & Strategies, Strategy 5.4.G, “Ensure Somerset County farmers’ access to adequate water for farm operations.”

Nursery, Greenhouses, Floriculture, and Sod

Horticulture has emerged as the leading agriculture sector in Somerset County since the turn of the century. Horticulture sales in the county totaled more than \$7.1 million in 2017, or 50 percent of all crop sales. This sector is especially well-suited to Somerset County, with its residents who value beautiful residential communities and private living spaces and



Fall chrysanthemums awaiting transport to a local farm market in Franklin Township. Horticulture and direct farm marketing have both increased in Somerset County as farmers have diversified their operations.

are also willing to make investments to maintain those spaces.

Local producers have the potential to provide plant materials that will grow best in their region, as well as being able to give the best advice concerning the care of the materials planted. The 2011 *Economic Development Strategy* noted that NJDA upgraded the retail nursery and garden center listing on the *Jersey Grown* website with an interactive search feature to assist consumers.

NJDA Recommendations for Horticulture

The strategies put forth in the state’s *Economic Development Strategy* for the ornamental horticultural sector are set forth below.⁴⁵

Ensure Plant Health

“Work to have a comprehensive approach to ensuring plant health. The following methods to be employed include:

- “Continue inspections for harmful pests and disease.
- “Seek ways to increase use of new methods of pest control and beneficial insects.
- “Inspect and certify nurseries, enabling growers to sell certified disease-free material in and out of state.
- “Conduct seed certification and seed control testing programs to ensure high quality turf grass seed for New Jersey sod growers.
- “Encourage the New Jersey Agricultural Experiment Station to continue its research in identifying new varieties of agricultural

⁴⁵ “Ensure Plant Health,” “Increase Consumer Awareness,” and “Improve State and Public Contract

Requirements” are taken verbatim from the report.

products resistant to pests, diseases and new plant introductions.”

Increase Consumer Awareness

“Strengthen the *Jersey Grown* brand name to enable the industry to benefit from a common trademark identifying locally produced horticultural products:

- “Work with growers and independent garden centers and nurseries to strengthen their efforts to promote *Jersey Grown* products with advertising tools such as point of sale materials.
- “Continue distributing the new *Jersey Grown* banner for use at the point of sale and also to identify growers participating in the program.
- “Continue to include horticultural crops in the Department’s marketing program and communicate the benefits of buying *Jersey Grown* products.
- “Maintain the retail nurseries and garden center listings on the *Jersey Grown* website.
- “Continue efforts with major area retailers to coordinate the promotion of locally produced *Jersey Grown* products
- “Publish the list of certified *Jersey Grown* growers on the Department’s *Jersey Grown* website.”

Improve State and Public Contract Requirements

“Continue to work with government agencies including the National Resource Conservation Service, the Department of Transportation through its highway planting program, and the Department of

Environmental Protection through its forestry program, to use New Jersey produced products whenever possible and ensure that all products meet the pest-free standards of the New Jersey Nursery Law and satisfy the quality standards set by the Jersey Grown Rule as established by the Department.”⁴⁶

Additional Recommended Strategies for Horticulture

This Farmland Preservation & Agricultural Development Plan recommends all stakeholders consider the following strategies to support sales of horticultural products:

- **Support Direct Sale of Horticultural Products:**
 - **Support the marketing of the *Jersey Grown* brand** alongside *Jersey Fresh*, educating consumers that produce is not the only agricultural product they can purchase locally.
 - **Market landscaping utilizing native plant selections** that can be grown more easily than other plant products.
 - **Assist farmers in establishing contracts with large box store operations** such as Home Depot and Lowes to supply locally grown horticultural products.
 - **Assist farmers and locally sourced nurseries with establishing contracts with landscaping firms** that service residences in the county.
 - **Encourage local horticulture operations to establish direct sale**

⁴⁶ NJDA. (2011), pp. 3-4.

- opportunities such as farm stands or participation in farmers' markets.
- Other:
 - **Support plant health in horticulture as well as produce:** Support the efforts by NJDA listed above as the department works to ensure plant health.
 - **Maximize local investment in horticulture:** Encourage farmers to diversify into this sector due to the high direct-sale potential of such crops, enhancing profitability in a suburban region.
 - **Agricultural lease terms: For open space land owned by Somerset County** not foreseeably needed for recreational development and leased for agriculture, **advocate for state policy to allow the extension of agricultural lease terms** – currently at a maximum of five years for agricultural operations – to 10 years or longer. This would encourage the up-front infrastructure investments farmers must make to install irrigation systems, construct fencing and storage, and purchase equipment. See Section 5.12, Goals & Strategies, Strategy 5.3.C, “Increase the availability of publicly owned open space for long-term farm use.”
 - **Water allocation for horticulture irrigation:** As nurseries rely heavily on irrigation, encourage municipalities to support water allocation for new and

existing produce operations in the county. See Section 5.12, Goals & Strategies, Strategy 5.4.G, “Ensure Somerset County farmers’ access to adequate water for farm operations.”

Dairy

Dairy in Somerset County has been the victim of national and international trends. Due to a reduction in national consumption, there was a glut in dairy production and prices dropped. The dairy industry moved to the international market and then fell victim to political instability and politics. In 2002, dairy ranked as the second-highest sales-producing sector in Somerset County at \$1.3 million. Five farms in Somerset County were listed as dairy producers on the 2002 Census of Agriculture. In 2017, there were only two dairy operations with sales left. The situation has been much the same throughout the Mid-Atlantic states, which have all been losing dairy operations at a rapid pace.

Even climate change has played a role. USDA has reported that dairy operations in warmer climates lose production when the temperature heats up.⁴⁷ In addition, the cost of keeping the dairy cattle cool increases.

However, a USDA study points to a possible rejuvenation of dairies in New Jersey. *Competitiveness of Management-Intensive Grazing Dairies in the Mid-Atlantic Region from 1995 to 2009* points out that grass-fed dairy operations are more profitable and found “improved animal health, as reflected in lower veterinary, breeding, and medicine

⁴⁷ Key, Nigel, Stacy Sneeringer, and David Marquardt. (2014). *Climate Change, Heat Stress, and U.S. Dairy*

Production, ERR-175, U.S. Department of Agriculture, Economic Research Service.

A Holstein cow greets a photographer at a dairy farm in Franklin Township. Holsteins are known for their outstanding milk production. According to the United States Holstein Association, of more than 9 million dairy cows coast to coast, approximately 90 percent are of Holstein descent with their distinctive black and white markings.



costs per cow and greater income from the sale of animals.”⁴⁸ There were also lower labor costs.

Locally sourced milk and dairy product sales is another trend that can increase farm income and provide a more stable, reliable market source, where customers stay with producers out of loyalty to the farmers that they have come to know.

Recommended Strategies for Dairy

This Farmland Preservation & Agricultural Development Plan recommends all stakeholders consider the following strategies to support sales of dairy products:

- **Support Direct Sales of Dairy Products:**
 - Encourage farmers to license under the *Jersey Fresh* Quality Grading Program, which enables processors to

use raw milk in value-added goods bearing the logo *Made with Jersey Fresh Milk*

- Encourage farmers to consider the production of value-added products, such as cheeses, yogurt, and ice cream, and intermediary markets for dairy, including sale to local restaurants and grocery markets, especially those that can carry the *Made with Jersey Fresh Milk* logo.
- Encourage dairies with value-added products and milk to sell direct to consumers.

- **Support Dairy-Related Agritourism:**

- As the industry recovers, set up ice cream tours with participating dairies.

⁴⁸ J. C. Hanson, D. M. Johnson, E. Lichtenberg, and K. Minegishi. (2013). Competitiveness of Management-Intensive Grazing Dairies in the Mid-Atlantic Region

From 1995 to 2009. Department of Agricultural and Resource Economics, University of Maryland, College Park.

(More on agritourism is discussed later in this section.)

- **Other:**
 - **Dairy health and food safety:** Work to ensure the health of the livestock, the quality of raw and processed milk, and additional certifications for raw milk.⁴⁹ For example, encourage farmers to use the services offered by the Garden State Dairy Alliance (a coalition of state and federal partners), including disease control, milk quality, marketing and promotion, and technical assistance.
 - **Further promote raw milk sales to food processors as already allowed:** Consider and encourage the NJDA's campaign to establish a process to allow sales of raw milk direct from the farmer to producers.



Field and Forage Crops

Forage crops always have been common in Somerset County since there has been a reasonably strong equine and livestock industry. In recent decades, as more land has been rented, landowners are usually happy to lease farmland for forage crops due to the

minimal requirement for infrastructure. The profitability, however, is usually lower than with grain and other farm products.

Grain is another agricultural field crop that has become an international commodity, subject to fluctuations in price beyond local, state, and national influence. The latest iteration of the federally supported crop insurance program protects farmers against either the loss of their crops due to natural disasters, such as hail, drought, and floods, or the loss of revenue due to declines in the prices of agricultural commodities. However, it does not ensure profitability or a living wage, which is especially problematic for East Coast grain farms that are generally much smaller than the national average. In addition, wildlife (deer, geese, etc.) can damage crops and further reduce profitability.

The NJDA's *Economic Development Strategy* acknowledges that, due to the state's high land values, property taxes, and labor rates, production costs in New Jersey are higher than in most other production areas. Therefore, it can be less profitable to produce commodity items in New Jersey than elsewhere. As a result, the document emphasizes a move to strategies to increase farm profitability: organic crop production, farm income diversification,

⁴⁹ On sales of raw milk to consumers, New Jersey is one of only eight states that fully bans the sale of raw milk to consumers. NJDA's 2011 Economic Development Strategy advocated for establishing "a balanced health and safety standard for the sale of raw milk directly to consumers... including: a strict Animal Health testing program implemented at the cost of the producer, which would cover all the communicable and

transmittable diseases to humans; strict daily sanitation testing and recordkeeping required to provide a level of food safety; and requirements for a label informing the general public that 'Raw Milk may be hazardous to the health of the consumer,' or similar language pointing out that safety of the product cannot be guaranteed." (p. 7)

the establishment of biofuels businesses, and grower education about agritourism opportunities.

For field and forage crops, the 2011 document encourages plant health and development strategies to improve production, yield per acre, and management practices. It also supports organic crop production plans for a green energy initiative involving biofuel production that could provide a new local market for New Jersey agricultural products (discussed further in Section 5.10 of this plan).

The local food movement can also be a benefit to field crop and forage operations. Consumers looking to avoid consumptions of meats produced with antibiotics, GMO grain, or use of chemical fertilizers are seeking out local farms where they can find out how the meat is produced. Those farmers, in turn, are looking for local feed. The organic poultry industry is growing on the East Coast and those producers are actively seeking local grain.



Finally, as mentioned earlier, small electric mills can be used to process the local grain market to supply local bakeries. Wheat berries, milled and unmilled, are in demand for consumers seeking local grains so that they can bake at home. Direct sale to consumers can greatly increase the price per pound and can establish a market that is more immune to global fluctuations in grain.

NJDA Recommendations for Field and Forage Crops

The NJDA *Economic Development Strategy* recommends the following⁵⁰:

Ensure Plant Health

“Through the implementation of the Mexican Bean Beetle parasite program, soybean rust monitoring surveys, and the release of beneficial insects to control tarnished plant bug and mile-a-minute weed, the Department will continue working to protect the health of the field and forage crops from the immediate threat of devastating and economically damaging plant pests and diseases.

“Aid in the development of strategies to improve New Jersey production and yield per acre for corn, soybeans, small grains, grass hay, alfalfa hay, pasture and other alternative forage and feed crops. Work to support improved management practices, increased economic and environmental sustainability of forage-livestock systems, and improved production and quality of conserved feeds, including alfalfa and other hays and silages.

“Work with Rutgers Cooperative Extension and NRCS to:

- **“Provide regional producer workshops** that will emphasize the benefits of good pasture and cropland management and preservation of water quality.

⁵⁰ NJDA. (2011). “Ensure Plant Health” (p. 3) “Support Organic Field Crop Production” (p. 8), and “Support Plans for a Green Energy Initiative” (p. 8) are

taken verbatim from the report.

- “Explore the use of demonstration plots that will emphasize renovation and intensive management systems to improve yield per acre.
- “Further develop opportunities to **produce crops that can be pelletized** for use in energy systems.”

Support Organic Field Crop Production

“Continue to encourage the production of certified organic soybeans, corn, and wheat to increase the value of these crops. Continue to assist in linking growers with organic food processors, retailers, animal feed suppliers and all other handlers to help identify new market opportunities and take advantage of the growing demand for processed food products made from organic ingredients.”

Support Plans for a Green Energy Initiative

“Continue to facilitate and support efforts to construct biofuel plants in New Jersey, and to foster related biofuels businesses whose end goals focus on feedstock crops most suited for growth in New Jersey. These businesses could create a major new local market for the state’s agricultural production and have the potential to elevate the price paid for regionally produced grain or other agricultural products.”

Additional Recommended Strategies for Field and Forage Crops

This Farmland Preservation & Agricultural Development Plan recommends all stakeholders consider the following strategies to support production and sales of field and forage crops:

- **Support the Direct Sale of Field Crops:**
 - Consider **cooperative purchase of a grain mill and related equipment** for local farm use, allowing small producers

to use these items to enable the direct sale of grain and flour to consumers and restaurants.

- Work with livestock and poultry producers seeking grain for animal feed to source such needs locally.
- **Other:**
 - **Plant health:** Actively support NJDA efforts to ensure plant health.
 - **Encourage increased yields:** Coordinate with the Extension office to educate farmers on ways to improve yield per acre with enhanced management practices.
 - **Encourage diversification:** Encourage farmers growing solely field crops to diversify into alternative crops (such as fruits/vegetables, hops, small-scale animal products) to enhance their profits.
 - **Promote insurance:** Educate farmers about federal crop insurance programs and their role in mitigating market risk.

Livestock and Poultry

Per acre, livestock and poultry require less labor than produce. They also generate more income per acre than grain or forage, particularly when direct sales to consumers are a possibility. They can be a viable option either for individuals seeking part-time farming opportunities or for existing farms working to diversify product offerings.

Historically, livestock and poultry have been a key part of the local farming industry in Somerset County. Proximity to a large customer base in Somerset County is an asset for the industry going forward. While the number of beef cattle has been in decline, New Jersey Tax Assessment data indicates that the

“Free range” chickens on a preserved farm near Skillman, Montgomery Township. Egg production was once a major feature of Somerset County farming. Today, poultry (and livestock) require less labor than produce, generate more income per acre than grain or forage, and are an option for existing farms to diversify.



trend is leveling off. Meat chicken, egg chicken, and turkey counts have grown significantly since the turn of the century, another sign of the growth in the local food movement. (In Section 5.3, Agricultural Industry, see Tables 5.3.8 and 5.3.9.)

NJDA Recommendations for Livestock and Poultry

The 2011 NJDA *Economic Development Strategy* agrees, stating: “The competitive pricing of the U.S. commodity market structure combined with New Jersey’s higher-than-average feed and production costs can be disadvantages for our state’s livestock industry. New Jersey’s livestock industry is currently approaching a new marketing era with fewer commercial-size operations and a trend toward alternative livestock and production methods. Direct or value-added marketing will be a driving factor for the livestock industry in New Jersey.”⁵¹ The report

recommended the following strategies to support the livestock and poultry industry in New Jersey⁵²:

Ensure Animal Health

“Through the continued implementation of best management practices for bio-security, the Department will continue working to protect the health of the livestock and poultry industry from the immediate threat of devastating and economically damaging diseases.”

Work with Markets

“Support the sale and marketing of locally produced poultry meat and eggs. Monitor the health code and market regulations that affect this industry to ensure that they address current industry models of production and distribution. Distribute, and communicate the principles contained in, the guidance document “Chapter 24 and You: A Practical Guide to Selling Safely at Farmers’ Markets” to

⁵¹ NJDA. (2011). p. 8.

⁵² “Ensure Animal Health,” “Work with Markets,” and “Support Youth Programs” are taken verbatim from the report, p. 9.

ensure the safe and legal sale of poultry and eggs at community farmers' markets."

Support Youth Programs

"Continue to support the New Jersey Junior Breeders' Fund loan program, which is helping future generations of agricultural education/FFA students and 4-H members to continue to advance the breeding of purebred livestock and the production quality of grade livestock."

Additional Recommended Strategies for Livestock and Poultry

This Farmland Preservation & Agricultural Development Plan recommends all stakeholders consider the following strategies to support production and sales of field and forage crops:



- **Support the Direct Sale of Livestock/ Poultry Products:**

- Farmers should consider combining efforts to pursue the purchase and rental of a freezer trailer for farmers to transport locally raised (USDA slaughtered, vacuum packed and frozen) meat cuts directly from the slaughter facility for sale to consumers, restaurants, and stores.
- As part of the national trend towards vertical integration in farming, where large corporations manage all aspects of the food system and put smaller processors (slaughter facilities) out of business, the number of available processing facilities has dropped precipitously in recent decades. Farmers should explore the feasibility of combining efforts to establish a

centralized, licensed meat-processing facility to facilitate farmers seeking to develop value-added products.

- Encourage the formation of farmers' groups, countywide or regional, to help standardize and market meat products directly to consumers, restaurants, and institutions.
- Encourage farmers to directly market their livestock products, particularly such value-added products as wool and cheeses.
 - Work with the local business community to promote sales of local livestock products to area retailers, such as restaurants and grocery markets.

- **Support Livestock-Related Agritourism:**

- Encourage farms with livestock to consider taking advantage of the agritourism potential of livestock, with "looking" or "petting" zoos and educational school tours. (More on agritourism is discussed below.)

- **Other**

- **Promote goats:** Educate farmers about the benefits of goat farming and related value-added products. Consumer demand for goat dairy

products such as milk and cheese has grown rapidly in the last decade.⁵³

- o **Animal health:** Actively support NJDA efforts to ensure animal health.

Organic Farming

According to the USDA, nationwide, organic food sales continue to show double-digit growth. “Organic products are now available in nearly 20,000 natural food stores and nearly 3 out of 4 conventional grocery stores. Organic sales account for over four percent of total U.S. food sales, according to recent industry statistics.”⁵⁴ Even better news, the price premium for organic products remains high. A *Consumer Reports* study in 2015 found that organic food received, on average, a 47 percent price premium.⁵⁵ In 2017, 10 farms in Somerset County sold more than \$1.3 million in organic products, compared to only four operations in 2012.

Certification of organic farms is regulated by USDA via the Organic Food Production Act of 1990, and the paperwork and time involved to become certified can be somewhat costly compared to non-organic farming. This may dissuade some farmers from moving their operations to organic ones. However, as shown in the case of Vermont, farmers can be encouraged to grow organically if given sufficient

support. While Vermont is only the 43rd largest state, it has the eighth most organic farms (556), an achievement that required a concerted effort to get so many farmers certified.⁵⁶ One of the primary organizations in Vermont promoting organic farming is the Northeast Organic Farming Association of Vermont (NOFA-VT), the oldest organic farming association in the United States, founded in 1971. NOFA-VT offers the following programming to promote organic farming to farmers in the state:

- Workshops, mentors’ programs, and technical assistance site visits to help dairy farmers transition to organic.
- Coordination of apprenticeships at organic farms around the state for new farmers.
- A revolving loan fund for farmers transitioning to organic, with loans ranging from \$2,000 to \$15,000. The loans can be used for capital expenses, equipment, or for business management improvements such as software and training.⁵⁷

In 2007, New Jersey became the 17th state in the nation to gain accreditation by USDA to offer in-state certification services to farmers and processors who want to enter the organic market in the Garden State. Three months later, the state announced that

⁵³ *USA Today*. (2017). *America’s 25 thriving industries include goat farming, breweries*. Retrieved from: <https://www.usatoday.com/story/money/business/2017/12/26/americas-25-thriving-industries-include-goat-farming-breweries/964225001/>.

⁵⁴ USDA. (2018). *Organic Market Overview*. Retrieved from: <https://www.ers.usda.gov/topics/natural-resources-environment/organic-agriculture/organic-market-overview.aspx>.

⁵⁵ Consumer Reports. (2015). “The cost of organic food; A new Consumer Reports study reveals how much more you’ll pay. Hint: Don’t assume that organic

is always pricier.” Retrieved from <https://www.consumerreports.org/cro/news/2015/03/cost-of-organic-food/index.htm>.

⁵⁶ Statista. (2018). *Number of certified organic farms in the United States in 2016, by state*. Retrieved from: <https://www.statista.com/statistics/677447/certified-organic-farms-in-us-by-state/>.

⁵⁷ Vermont New Farmer Network. *Resource Guide for Vermont’s New and Aspiring Farmers*. Retrieved from <http://www.uvm.edu/newfarmer/resourceguide71107.pdf>.

through the USDA National Organic Certification Cost Share Program, each qualified producer or handler of organic products was eligible for a reimbursement of up to 75 percent of its costs of certification not to exceed \$750. Certification costs included fees and charges levied by the certifying agent for certification activities.

NJDA Recommendations for Organic Farming

The NJDA 2011 *Economic Development Strategy* document recommended the following strategies to support the organic farming industry⁵⁸:

Promote Cost-Sharing

“Continue outreach efforts to educate growers about federal funds available to help offset organic grower certification costs. Through a cost-sharing agreement with the Department and USDA, each operation is eligible for a reimbursement of up to 75 percent of its certification costs, not to exceed \$500 (since updated to \$750 by the federal government).”

Promote the Marketing of Organic Agricultural Products

“Develop and distribute Jersey Organic point-of-sale advertising materials using USDA Specialty Crop Block Grant funds. Encourage integration of the marketing of the Jersey Organic brand alongside the Jersey Fresh promotional program. Represent the Jersey Organic brand at national produce industry trade shows and promote the availability of organic products and the use of the *Jersey Organic* promotional brand to wholesalers and retailers.”

Encourage Technical Assistance

“Continue working with NOFA-NJ to encourage research and technical assistance for organic growers, including certification requirements, production practices, and the harvesting and handling of organic products.”

Additional Recommended Strategies for Organic Farming

This Farmland Preservation & Agricultural Development Plan recommends all stakeholders consider the following strategies to support organic farming:

- **Support the Direct Sale of Local Organic Products:**
 - Locate markets already interested in selling organic products, including local restaurants and grocery markets and cooperative farm stands at county events, and match them with farmers already growing organically or seeking to grow organically.
- **Other:**
 - **Promote farm profitability through organic production:** Educate farmers regarding about the price premiums of organic products.
 - **Ensure a farm community knowledgeable about organic production requirements:** Educate farmers regarding requirements to be certified as organic, and inform them of the federal funding that is available to assist them in certifying.

⁵⁸ “Promote Cost-Sharing,” “Promote the Marketing of Organic Agricultural Products,” and “Encourage

Technical Assistance” are taken verbatim from the report, p. 10.

- **Coordinate with NJDA and Rutgers Extension** to explore ways to support organic food growing and processing, in particular to identify high-demand products that can benefit from being produced organically.

Equine Industry

Many people may know that New Jersey has the most people per square mile, but they may be surprised to know that it also has the most horses per square mile. The state animal in New Jersey is the horse, and the equine industry has had a highly positive long-term impact on the economy of the state, on traditional agriculture, and on the preservation and maintenance of open space. A study conducted by Rutgers in 2007 determined that the industry generated \$1.1 billion in economic impact annually, which is comparable to other major industries in the state.⁵⁹ In terms of impact on working agriculture, equine accounts for one in five

Many people may know that New Jersey has the most people per square mile, but they may be surprised to know that it also has the most horses per square mile. In terms of impact on working agriculture, equine accounts for one in five agricultural acres in the state, more than any other segment of agriculture.

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In the United States, equine is a multi-billion-dollar industry. However, it is also strongly connected to discretionary spending. After the Great Recession hit in 2008, discretionary spending plummeted and many owners and investors who needed to sell their animals lost a great deal of money. This resulted in major shrinkage in the United States equine industry. Compounding these fiscal woes was the rising cost of animal feed following the recession. New Jersey's horse industry was not immune to these problems, as detailed in the Rutgers white paper entitled

2014 State of the New Jersey Horse Racing Industry: Post-Report of the Governor's Advisory Commission on New Jersey Gaming, Sports and Entertainment.⁶⁰ In the paper, the authors portray an industry that is continuing to lose market share to other states in the region. Part of what led to this decline was the state's elimination of its \$17 million purse subsidy in 2011.⁶¹

⁵⁹ Rutgers Agricultural Experiment Station. (2007). *The New Jersey Equine Industry 2007 Economic Impact*. This is, unfortunately, the latest data available. Retrieved from <http://foodpolicy.rutgers.edu/docs/pubs/2007%20Equine%20Economic%20Impact%20Study%20Report%20-%20Final.pdf>

⁶⁰ Rutgers Agricultural Experiment Station. (2014). *2014 State of the New Jersey Horse Racing Industry:*

Post-Report of the Governor's Advisory Commission on New Jersey Gaming, Sports and Entertainment. Retrieved from <https://esc.rutgers.edu/wp-content/uploads/2014/11/2014-Health-Of-Horse-Racing.pdf>.

⁶¹ Edelson, S. (2018). *Monmouth Park: Bill would give \$20 million to racing to enhance purses*. Retrieved

Despite these larger trends, Somerset County did not lose its equine industry during these years. In fact, its numbers of animals actually increased between 2005 and 2010 and then leveled off slightly by 2015. (In Section 5.3, Agricultural Industry, see Tables 5.3.8 and 5.3.9.) Also, sales of equine have increased in the past decade, representing 43 percent (\$2.5 million) of livestock sales in 2017.

Furthermore, the Rutgers paper noted that the reduction in the New Jersey racehorse population had not yet negatively impacted hay, straw, and grain producers who depend heavily on horse owners for business. It observes that farmers adapted to the reduction in sales to racing-related customers by moving to a non-racing customer base.

The Hamilton Farm, located in Bedminster, is home to the U.S. Equestrian Team and was recently listed in the National Register of Historic Places.⁶² This is the perfect type of asset for agritourism/heritage tourism that can strengthen Somerset County's long-term economic viability.

Equine rules adopted August 4, 2008, established agricultural management practices (AMPs) for equine activities on commercial farms and expanded the list of equine activities eligible for right-to-farm protections. Previously, breeding, raising, pasture, and hay production had always been deemed compliant. With these changes, the following were added: boarding, keeping, training, rehabilitation of horses, and complementary activities including but not

limited to clinics, open houses, demonstrations, educational camps, farm events, competitions, and rodeos. These are now all eligible for right-to-farm protections as long as the activities are related to the marketing of horses that are raised, bred, kept, boarded, trained, or rehabilitated on the farm, and are also in compliance with municipal requirements. This state level of clarification of options is important to the sustainability and viability of the equine sector.

NJDA Recommendations for the Equine Industry

Pertinent to Somerset County, the 2011 NJDA *Economic Development Strategy* recommends⁶³:

- “Working with horse owners to assure awareness of disease threats and animal safety.
- “Working with Rutgers University to continue development of a state-of-the-art research facility for its Equine Science Center.
- “Continuing to host Olympic-caliber events, training clinics, horse shows, festivals, industry meetings, and auction sales, and to promote the state's many high-quality venues and prestige events.
- “Continuing to improve the New Jersey equine website, highlighting the sectors of New Jersey's equine industry activities.
- “Bolstering promotion and education of the pleasure horse and racing industries to

from:

<https://www.app.com/story/sports/horses/2018/08/28/monmouth-park-bill-would-give-20-million-racing-enhance-purses/1124681002/>.

⁶² Tapinto Horses Staff. (2018). *Hamilton Farm, Home to the U.S. Equestrian Team Listed on Historic*

Registry. Retrieved from

<https://www.tapinto.net/towns/nutley/articles/hamilton-farm-home-to-the-u-dot-s-equestrian-team-l-8>

⁶³ NJDA. (2011). pp. 11-12.



Vintage photo of the Hamilton Farm Stable Complex, home of the US Equestrian Team Foundation in Bedminster Township. The complex was completed in 1917 by Wall Street financier James Cox Brady and listed in the National Register of Historic Places in 2018. In addition to the 54-stall stable (with 40 other rooms), the complex's historic structures include an outdoor riding ring, a garage, and a blacksmith shop and residence. Somerset County's equine heritage runs deep, and the industry can take advantage not only of the usual opportunities for sales and activities, but also heritage tourism. (Photo courtesy The United States Equestrian Team Foundation)

increase interest, and working to stimulate new owners and create career opportunities.

- "Continue working with youth programs to establish new 4-H clubs to expand the interest in standardbred racing, and work with computer-based programs for the Boy Scouts Horsemanship and Animal Science Badges and for the Girl Scouts including Horse Fan, Horse Sense, and Horse Rider.
- "Promote the *Jersey Bred* logo."

Additional Recommended Strategies for the Equine Industry

This Farmland Preservation & Agricultural Development Plan recommends all stakeholders consider the following strategies to support the equine industry:

- **Equine health:** Support the NJDA's efforts in ensure the health of equine animals.

- **Equine-friendly municipal regulation:** Encourage municipalities to support the equine industry through ordinances that permit temporary signage to promote specific equestrian events and activities.
- **Right-to-farm education:** Educate municipalities regarding the rights of equine farmers contained in the SADC's AMPs.
- **Promote the equine industry as a whole to county residents** to help it gain a wider audience, not only as a lifestyle for the wealthy, but as an accessible recreation activity for families.
- **Promote the agritourism aspect of the equine industry** through farm tours, horse and pony rides, and boarding and riding lessons.
- **Publicize the equine industry in Somerset County** in county publications and

websites, and at local shows and festivals, such as the annual 4-H Fair.

Wine

Local food is not the only local dining commodity that has grown in market share. In fact, local beverages have captured a larger share of the beverage market than local food has of food markets. As of 2011, New Jersey ranked fifth in the nation in wine production, but the *Economic Development Strategy* report noted that grape production is not keeping pace with wine production.⁶⁴

Grape production is complicated and expensive. It requires knowledge of the cultivars that will produce successfully in Somerset County soils. It requires the purchase of expensive plant material and an irrigation and trellis system, and it takes seven years to reach full production.



During 2018, the NJDA and the New Jersey Wine Industry Advisory Council (NJWIAC) have been in the process of providing grants for wine industry projects to address research, development, and promotion of the New Jersey wine industry. According to its website, "NJWIAC will accept grant applications for projects benefiting the wine industry through research and development concerning the viticultural and wine-making processes in the State and for the promotion of the New Jersey Wine Industry. Proposed projects must benefit the wine industry as a whole and funded project activities may not exclude any plenary and/or farm wine licensee whose sales of New Jersey wine contribute to the

Wine Promotion Account and who wishes to participate. Expenditure and performance reports will be required on a quarterly basis, and a final report must be submitted at the end of the grant period. The available funds, to be used during calendar year 2018, are equal to \$280,773.77." This is a unique opportunity to provide a product that addresses a market need.

NJDA Recommended Strategies for Supporting Wine Retail

The 2011 report recommends supporting the industry's efforts to highlight the "Made with *Jersey Fresh*" origins of the wines. It recommends expanding the number of eligible retail outlets as well as the creation of New Jersey wine trails.

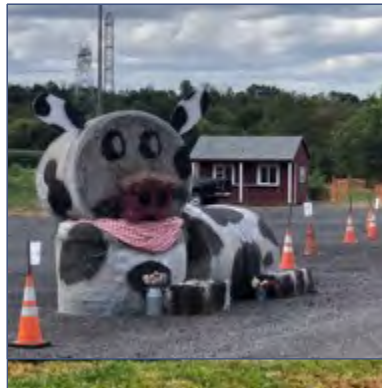
Additional Recommended Strategies for the Wine Industry

This Farmland Preservation & Agricultural Development Plan recommends all stakeholders consider the following strategies to support the wine industry:

- **Support the Direct Sale of Local Wine:**
 - **Coordinate with growers in Somerset County and the surrounding areas, linking wineries looking for grapes with Somerset County farmers** either growing or interested in growing grapes.
 - **Encourage the sale of local wines** at retail outlets and restaurants.
- **Other:**

⁶⁴ NJDA. (2011). p. 12.

- **Promote cooperatives:** Support the creation of cooperatives, where multiple farms involved in wine production and sale can share equipment and expertise.
- **Work with Rutgers experts** to determine the best cultivars for New Jersey soils, and research into the disease and pest prevention techniques.
- **Assist new wineries with marketing strategies.**
- **Wine tourism:** As the local wine industry develops, consider developing a Somerset County wine trail or wine tour.



Agritourism

Agritourism is a viable supplement to farm income in times when other farm products have become less successful economically. The National Agricultural Law Center defines agritourism as “a form of commercial enterprise that links agricultural production and/or processing with tourism in order to attract visitors onto a farm, ranch, or other agricultural business for the purposes of entertaining and/or educating the visitors and generating income for the farm, ranch, or business owner.”⁶⁵

Twelve farms in Somerset County currently advertise as agritourism farms (see Table 5.3.14, Agritourism Businesses in Somerset County, NJ). In 2012, 11 farmers reported participation in agritourism activities. One of the challenges with agritourism is the weather, which may have been a reason for a drop in income from agritourism detected by the Census of Agriculture, from \$250,000 in 2007 to \$74,000 in 2012 (2017 data not yet available). A series of rainy weekends during prime spring and fall periods can produce a large drop in profits. Another challenge for farmers seeking income from agritourism is lack of event marketing skills and of infrastructure (i.e., parking areas, market venues, and activities) to support customer visitation.

Vermont is one state that has specialized in agritourism. In the report *Agritourism and Culinary Tourism* written by the Vermont

Agency of Agriculture, Food, and Markets (VAAFAM), authors noted that “many Vermont farms are small and find it challenging to invest in the infrastructure needed to ensure the safety of food, visitors, or livestock as they open their operations to the public.”⁶⁶ In response to the problem, Vermont applied for and received a federal grant to help farmers with agritourism. With its partners, VAAFAM provided workshop training and technical assistance to farmers, then tracked results in follow-up surveys which found the following:

⁶⁵ National Agricultural Law Center. *Agritourism – An Overview*. Retrieved from <http://nationalaglawcenter.org/overview/agritourism/>

⁶⁶ Lewis, C. and Godin, R. (2015). *Agricultural and Culinary Tourism; Translating Opportunity into Farm*

Profitability. Retrieved from https://www.ams.usda.gov/sites/default/files/media/VT%20Agritourism%20FSMIP%20Final%20Report_123115.pdf.



Reindeer offer a diverting sight at a preserved farm near Neshanic Station.

- More than three-quarters (78 percent) of Vermont farmers reported a positive impact on profitability as a result of the information, resources, and contacts from the workshops. A similar percent (76 percent) reported an increase in the number of visitors/customers.
- More than one-third of respondents (41 percent) indicated that they had created additional jobs for their farm.
- Regarding quality of life, more than three-quarters (76 percent) reported increased personal satisfaction from their farm.
- Almost all (90 percent) reported a positive impact on profitability as a result of the technical assistance; the same percentage (90 percent) reported increased personal satisfaction from work on their farm.

Additional opportunities for agritourism exist if Somerset County were to feature not only traditional tourism and agritourism in its advertisements, but also ecotourism and heritage tourism. When looking

for vacation or outing opportunities, family groups often have disparate interests, and they may be more likely to visit Somerset County if they can check off multiple family pursuits on the same weekend. An example would be a trip to a historic site that happens to be near a corn maze and a kayak launch site.

NJDA Recommendations for Agritourism

The NJDA strongly supports agritourism as a way for farmers to add value to their crops and/or capture more of the market price of their products by directly accessing consumers. The department created the website www.visitnjfarms.org where farmers can post their operations and what goods and activities are available at the farms. In its 2011 report, the NJDA recommended continuing to work with the New Jersey Department of Transportation to expand the participation of agritourism roadside operations in the Tourist Oriented Destination Signage (TODS) program. It further recommended coordinating efforts to gain approval for a discounted signage rate for agritourism operations and an expansion of the current maximum of three miles distance that an

operation can be from a state road to be considered eligible for the program.

Additional Recommended Strategies for Agritourism

This Farmland Preservation & Agricultural Development Plan recommends all stakeholders consider the following strategies to support agritourism (note that the Somerset County Preservation Plan as a whole also includes Chapter 8, Tourism, combining agritourism with ecotourism and heritage tourism):

- **Training and Technical Assistance:**

- Hold training workshops that help farmers understand more about the business of agritourism and the steps to get there.
- Provide technical assistance on any needed infrastructure improvements on farms that are setting up agritourism activities.



- **Tourism:**

- Consider organizing an **Open Farm Week** in Somerset County, where local farms provide special agritourism activities and give visitors a behind-the-scenes look into their operations. Vermont holds such an event annually in August.⁶⁷

- Work with Somerset County Tourism to **provide marketing support**, including assisting farms with agritourism activities to get their marketing on tourism websites and into such publications as *Skylands* (www.njskylands.com/).

- **Cross-market agritourism with heritage tourism and ecotourism.**

For example, farm tours could be organized in coordination with such groups as the Somerset County Heritage Trail Association.

- Establish **permanent signage** throughout the county for **agritourism destinations** and allow farms to set up **temporary signage for special seasonal or annual events**. Directing drive-by tourists to the farms will help enhance their business.

- **Other:**

- **Encourage school groups to visit:** Coordinate with county schools to set up field trips to farms with agritourism opportunities, particularly those of an educational nature.
- **Address liability:** One of the major challenges for farmers interested in agritourism on their land is health and safety liability. Concerns over visitor injuries and other liability exposure, and

⁶⁷ <https://www.diginvt.com/blog/open-farm-week-events-in-central-vermont/>

the expense of liability insurance, may cause farmers to determine that agritourism is simply not worth it. Models for state-level agritourism limited-liability legislation already exist in Virginia and North Carolina. The SCADB can also explore ways to reduce the cost of liability insurance for local farmers engaged in agritourism, which might in turn encourage farmers to expand into such less-visible agritourism areas as hunting, fishing, and trapping. See Section 5.12, Goals & Strategies, Strategy 5.4.J, "Support state policy improvements for liability exposure in agritourism."



General Strategies for Agriculture

In terms of large-scale agricultural production, the only agricultural sector that has been steadily increasing in production and profit in Somerset County is Nursery, Greenhouses, Floriculture, and Sod. All other sectors have the potential for growth, and some, such as produce, livestock, organic, and wine, are already showing promise, but they will require a boost from direct or indirect local/regional sales in order to reach that potential. Programs that help connect residents to farmers will be important in building the customer base, and agritourism plays a role in making that happen.

At all levels of government, it will be important to be mindful of the need to amend regulations and policies to complement changes in agriculture. With continued efforts to update and provide new AMPs, the SADC can keep up with market trends and allow farmers to change with the times. By continuing to provide mediation and education related to the farmers and the general public, the SCADB can promote effective communication. The county can also work with the Somerset County Business

Partnership to encourage agricultural connections with the broader business community. By providing flexible zoning regulations that still protect health, safety, and welfare, municipalities can allow farmers the freedom to make a living while also being good neighbors and stewards of the environment.

As stated in the NJDA's 2011 *Economic Development Strategy* report, "many different agencies, councils, and organizations, working through a variety of programs, have the common goal of assisting New Jersey's agricultural community."⁶⁸ Enhancing the economic viability of the local agricultural sector cannot be done by one agency at one level of government. Rather, it will take mindful actions at all levels to ensure the vitality of the industry.

Finally, the next generation of farmers is needed in Somerset County. The average age of a farmer in Somerset County is 60 – one of the highest average ages for a farmer in the country. Who are the next

⁶⁸ NJDA. (2011). p. 15.

generation of young farmers? According to a 2017 survey by the National Young Farmers Coalition, 60 percent are women and 75 percent did not grow up on a farm.⁶⁹ In terms of production, 72 percent of survey respondents grew vegetables and 81 percent said they grew two or more types of products. While just 25 percent said livestock made up the highest percentage of their sales, many more are using animals to diversify their farms. Most respondents use CSAs and farmers' markets as their main marketing strategies.

The challenges are many, including the high price of land, the difficulty of renting land with irrigation and fencing for their production, and the uncertainty of viability of emerging agricultural trends. The 2014 Farm Bill encouraged a number of



USDA initiatives to support new farmers, young farmers, women in agriculture, and veterans in agriculture. A new webpage was launched that teaches farmers how to make a farm business plan, to obtain access to land and capital, to address risk management and protect land and resources, to build a market and grow a business, and so on.⁷⁰ The USDA also introduced low-interest loans for beginning farmers, expanded Value-Added Producer Grants, and provided additional resources for local and regional food systems. The Local Food Compass Map shows USDA and other federal investments in local and regional food systems since 2009, along

with data on such activities as farmers' markets, food hubs, and meat processing.⁷¹

Additional NJDA Strategies for Agriculture

Recommendations from the NJDA 2011 report include⁷²:

- **“Implement the New Jersey Crop Insurance Education Initiative** in partnership with the Risk Management Agency, USDA, and Rutgers Cooperative Extension to improve the financial health of all farmers, increase their skill and knowledge in using crop insurance, and to increase crop insurance participation as additional products and programs become available.
- **“Actively assist farmers as an advocate** with issues related to agricultural production, taxation, regulations, economic development, value-added opportunities as well as a variety of other matters that impact the long-term viability of New Jersey agriculture.
- **“Provide technical assistance concerning the New Jersey Uniform Construction Code** to farmers, architects, engineers, farm building consultants and agricultural contractors (administered by the New Jersey Department of Community Affairs as it relates to farm buildings).

⁶⁹ <https://www.youngfarmers.org/wp-content/uploads/2018/02/NYFC-Report-2017.pdf>

⁷⁰ <https://newfarmers.usda.gov>

⁷¹ <https://www.ams.usda.gov/local-food-sector/compass-map>

⁷² NJDA. (2011). p. 15, quoted verbatim.

- **“Assist farmers with interpreting the Real Property Appraisal Manual, Farm Building section** with changes in construction techniques and building materials as well as building specifications and cost schedules.
- **“Increase participation in New Jersey’s agricultural plastics recycling programs** and assess the feasibility of expanding the program to include other materials generated by farmers and aquaculturists. Assisting the state’s food processing industry in finding markets or utilization for soon-to-expire and expired food products and work closely with other agencies in matters that require creative recycling solutions for non-traditional materials.
- **“Provide farmers and agribusinesses with information about the requirements concerning motor vehicle regulations** and license plates for farm vehicles, requirements for the International Registration Plan, the International Fuel Tax Agreement, and commercial drivers’ license provisions. The Department will identify federal and state motor vehicle laws and regulations that impact interstate and intrastate movement of agricultural commodities and distribute information to continue the orderly transportation of New Jersey farm products. Continuing to update a user-friendly website providing the necessary information about the motor vehicle registrations, fuel taxes and commercial



driver licenses in an easily understood format.

- **“Disseminate information and respond to inquiries on the availability of financing** from federal, state, and commercial lending institutions for agricultural loans. Advise individuals on the importance of developing business plans, maintaining financial records, and asset requirements in obtaining financing.”

Since 2011, the NJDA website has been updated to include information on each of these areas, providing key educational resources to farmers.

Additional Recommended Strategies for Agriculture

This Farmland Preservation & Agricultural Development Plan

recommends that all stakeholders consider the following strategies to support agriculture:

- **Support the Profitability of Farms:**
 - **Encourage farmers to join the Somerset County Business Partnership (SCBP).** Members of the SCBP gain access to a network of business owners throughout the county, and the relationships there could assist farmers in linking directly with organizations that consume or sell agricultural goods. In addition, networking opportunities and business management training provided by the SCBP could help farm owners enhance their processes to improve profits.

- Consider the establishment of an **Agriculture Enterprise District** in Somerset County. The concept began in Cumberland County’s Farmland Preservation Plan, where it is listed as a potential tool to encourage farmers to preserve their land. In these districts, farmers who agree to preserve their land receive benefits in turn such as “streamlined and expedited water allocation certification, cost-free business plans, management and training services, financial and estate planning, expedited approvals on government loans and costs shares, minimum wage offset grants, broader exemption from sales tax, and other incentives.”⁷³ In essence, Agriculture Enterprise Districts are a tool to both enhance the viability of the farming industry and to inspire additional farmers to preserve their land. See Section 5.12, Goals & Strategies, Strategy 5.3.D, “Investigate the feasibility of establishing one or more Agricultural Enterprise Districts to reinforce the County’s Agricultural Development Area.”
- Monitor new federal farm bills and alert farmers of new opportunities for **beginning farmer programs and grants**



for value-added production, marketing, and conservation programs that assist the farm and the environment

- Consider applying for the following **federal grants to support local foods** (available to local governments and nonprofit organizations):

- **Specialty Crop Block Grants.** These grants fund projects that enhance the competitiveness (including “buy local” programs, marketing, and education) for specialty crops including vegetables, fruits, including grapes for wine, nuts, horticultural products including Christmas trees, honey, herbs, potatoes, sweet corn, and other similar crops. Available funding ranges from \$10,000 to \$40,000 per project.

- **Farm to School Mini Grants.** These grants can be used to cover class trips to local farms and to purchase local food for use in school cafeterias.

- **Ensure that farmers are aware of the various federal grant and loan programs** available to them, including:

- **Farmers’ Market Promotion Program (FMPP).** This program funds direct marketing projects in-cluding

⁷³ Delaware Valley Regional Planning Commission. (2009). Farmland Preservation Plan for the County of

Cumberland New Jersey. Retrieved from <https://www.dvrpc.org/reports/09009.pdf>.

markets, roadside stands, CSAs, and agritourism.

- **Local Food Promotion Program (LFPP).** These grants support local and regional business enterprises seeking to process, distribute, aggregate, and store locally grown food.
 - **Value-Added Producer Grants.** Federal funds to support producers either (a) in planning to develop value-added products (maximum grant \$75,000) or (b) in purchasing the capital required for such enterprises (maximum grant \$250,000).
 - **For a number of grant programs that can support conservation practices on farms,** many that can enhance farm profitability, *see Section 5.10*, Natural Resource Conservation, Sustainability, and Resiliency.
- **Support the Marketing of Local Farms:**
 - **Support farms in advertising agritourism, direct sale opportunities, and their products in general.** The SCADB can seek to assist farmers who are considering developing their own websites and publicity materials and also communicate to farmers the availability of such free promotional channels as *Jersey Fresh*, *Jersey Bred*, *Jersey Grown*, and *Jersey Equine* websites, Visit NJ Farms website, the Skylands website, and Somerset County Tourism’s website. Cross-reference those sites to make sure they are up to date and inclusive. The SCADB and the SCBP can also feed local agricultural event information to the New Jersey Division of Travel and Tourism website.
 - **Utilize county- and municipal-level public functions such as fairs and festivals to market** the local farming community’s products and benefits.
 - **Consider creation of an on-line local food guide or virtual farm market that details the local food options available to retailers and consumers** (i.e., local farms, farmers’ markets, CSAs, etc.). The literature has shown that lack of knowledge of availability of local food is the number one reason why consumers do not shop local⁷⁴ and institutional food service directors have not used local food sources.⁷⁵ For instance, the Delaware Department of Agriculture coordinated with universities in the state to create a virtual “Delaware Farm Market.” Such a guide should include where food is

⁷⁴ Martinez, S., et al. *Local Food Systems: Concepts, Impacts, and Issues*. ERR 97, U.S. Department of Agriculture, Economic Research Service, May 2010. Retrieved from https://www.ers.usda.gov/webdocs/publications/46393/7054_err97_1_.pdf?v=0.

⁷⁵ Berkenkamp, J. (2006). *Making the Farm/School Connection; Opportunities and Barriers to Greater Use of Locally Grown Produce in Public Schools*. University of Minnesota. Retrieved from <https://dr.lib.iastate.edu/entities/publication/0c4bdbbe-65e9-4323-afc4-02e88328915b>.

available, what food is available in what season, why local food is recommended, how to prepare local

- Encourage Land Use Innovation at the Municipal Level:

- Encourage updated local ordinances to require non-farm development adjacent to working farms to contribute its own buffer areas, limiting trespassing and right-to-farm conflict, rather than requiring farms to provide such buffers on their own land.
- Encourage local ordinances that permit temporary signage to promote agricultural events and activities. Such signage should include off-site signage directing local residents and tourists to the farm site.
- Coordinate with municipalities, local developers, and realtors to notify purchasers of properties close to active agriculture of both the benefits and possible conflicts that might arise due to this proximity.
- Encourage municipalities to exempt farm structures from certain code



(i.e., likely less processed than food at a supermarket), and other pertinent information.

requirements, such as height restrictions and setback requirements.

- Encourage flexible local ordinances that permit food processing, direct sales, and agritourism on-site. Many local jurisdictions “restrict on-farm activities and uses such as meat processing, operating a creamery, food packing, and the size and operation of farm stands and other non-traditional agricultural activities.”⁷⁶

○ Since it is not just farmland that makes farming possible, allow accessory uses to agriculture such as veterinarians and equipment/supply dealers to be located in close proximity to agricultural areas so they can serve farmers’ needs.

- Encourage flexible fencing ordinances, as discussed under wildlife management below.

- Support the Education and Training of Farmers:

- Work with the Extension Service to inform farmers of new pests and new cultivars.
- Promote the availability of state programs like the Agricultural Leadership Development Program and others

⁷⁶ Regional Agricultural Workgroup. (2012). *What Our Region Grows; A Look at Agricultural Production and Demand in the Washington Area Foodshed*. Retrieved

from: <https://www.mwcog.org/documents/2019/01/18/what-our-region-grows-farmers-market-farming-urban-agriculture/>.

- that enhance business management of farms.
- Coordinate with Extension to provide **marketing training** to farmers.
 - Ensure that farmers are aware of the extensive, **helpful educational information available** on the NJDA, USDA, and Sustainable Agriculture Research & Education (SARE) websites.
 - Food safety laws are complex, which particularly affect producers working to market their products directly. Work with the Somerset County Department of Health to provide **training to farmers regarding the various regulations and tips on how to manage safety risks.**
- A large, cylindrical hay bale sculpture of a man's face. The sculpture is made of straw and has a simple, stylized face with large, round eyes, a prominent mustache, and a small nose. It is set outdoors in a grassy field under a clear blue sky.
- **Support New Farmers:**
 - Support the creation of **mentorship** programs for beginning farmers.
 - **Support estate-planning workshops** to help transition farmland to the next generation.
 - Support Extension in providing **introductory classes for beginning farmers**, such as using and maintaining farm equipment, running a CSA, and scheduling crop planting. Market related opportunities to the farming community.
 - Continue to support **New Jersey's land link**.⁷⁷
 - Enhance **local vocational training** programs for new farmers in Somerset County: Somerset County Vocational-Technical High School already provides coursework in the area of Agricultural Science. Coordinate with the school to further develop the program, provide apprentice/ mentorship opportunities and onsite experiences, and market the program to high school students throughout the county:
 - Coordinate with the Somerset County Vo-Tech Future Farmers of America (FFA) chapter, seeking their feedback on how best to encourage the next generation to take up careers in agriculture. Reach out to Raritan Valley Community College (RVCC) and encourage the introduction of an agricultural curriculum, coordinating with the high school program where feasible.
 - RVCC could also provide continuing education programming for local farmers, supplementing Extension training in areas such as marketing, business management, and new technologies.
 - The State of New Jersey has recently emphasized enhancing vocational technology programs throughout the state, providing

⁷⁷ www.njlandlink.org/

- new grants to expand the programs. The county should advocate for expanding grant funding in the area of agricultural vocational training.
- Investigate the availability of federal funding to enhance and expand local vocational agriculture education.
 - Notify interested new farmers regarding **available loan opportunities**, including:
 - **Farm Service Agency (FSA) Loans:** FSA provides loans to beginning farmers and socially disadvantaged farmers, including loans to purchase capital and livestock and even loans to purchase property itself.
 - **Farm Credit East:** This organization provides loans and financial services for farmers in Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, New York, and New Jersey. Of particular interest, their program Farm Start provides new farmers with a low interest loan of up to \$75,000 and access to training and advisors on cash flow management.
 - **NJ Economic Development Authority (NJEDA):** This state agency provides loan opportunities for small businesses of which beginning farmers can take advantage.
 - **Support wildlife pest management on farms:**
 - Educate farmers regarding the fencing AMP described in Section 5.7, Stewardship and Post-Preservation
 - Encourage municipalities to adopt flexible fencing ordinances that allow for types of fencing on farms that might not otherwise be desirable in residential areas. Such ordinances both acknowledge farmers' needs to prevent wildlife damage and avoid the need for SADC intervention.
 - Support state programs that provide cost-share grants to farmers installing deer fencing on preserved farms. In January 2017, the state revived a program that provided 50 percent of the cost of fence installation, not to exceed \$200 per acre or \$20,000 in total per application.
 - Support the dissemination of Rutgers extension's helpful installation guides for construction of fencing, which includes instruction on avoiding footers.⁷⁸
 - Controlling wildlife not only benefits farmers, but also other local residences and businesses who may suffer from landscape damage, automobile accidents, and other negative implications of excessive wildlife intrusion. Encourage municipalities to adopt wildlife control ordinances that (a) ensure that farmers can hunt wildlife on their own land provided they maintain applicable licenses and follow restrictions regarding proximity to

⁷⁸ <https://snyderfarm.rutgers.edu/learning-center/deer-fencing/>



Controlling wildlife not only benefits farmers, but also other local residents and businesses who may suffer from landscape damage, automobile accidents, and other negative implications of excessive wildlife intrusion. (Photo by Ron and Pat Morris)

- nearby dwellings, (b) protect the rights of farmers using other means of control such as noises, baits, or repellants, and (c) forbid residents from feeding deer, geese, or bears.
- Hunting remains one of the most effective means of controlling deer populations, yet the number of hunters is on the decline. Encourage hunter mentoring programs to increase interest. Support coordinated hunting of nuisance animals on county and municipal lands, expanding existing programs throughout the county.
- **Other:**
 - **Support the supporters:** As was noted in Section 2.2, Somerset County farmers obtain farm supplies, equipment, and needed services such as repairs and veterinarian from a number of businesses in and near the county. A web-based directory for such services would assist the farm community in gaining greater access to them.
 - **Promote the idea of economic development through preservation:** Farmers who sell their development rights receive an influx of cash that can in turn be used to improve and/or expand agricultural operations (i.e., diversify, develop agritourism activities, expand marketing, build infrastructure for direct marketing, seek organic certification). Such spending tends to circulate locally, boosting its direct, indirect, and induced economic impacts (the “multiplier effect”).
 - A food policy audit: SCADB, in partnership with knowledgeable stakeholders in public health and food systems, can review food production, distribution, and access matters at the county and municipal levels, as well as community activities and policies that might help improve the local food system. This idea is further described in Strategy 5.1.B (“Explore ways to improve the local food system and access to healthy, affordable, local food for all county residents, to attain greater local food security and support

wellness”). The following ideas are related to a more holistic approach to the challenge of aligning the county’s food system with local food production:

- **Preferential treatment for local foods in purchasing rules:** Consider adding local food preferences to county procurement regulations and encourage municipalities to do the same.

Literature

estimates that every dollar spent on a local farm “has a multiplier effect of two to three times more in the local economy compared to that same dollar spent on an equivalent non-local business.”⁷⁹ Somerset County could consider a tiebreaker preference when comparing two offers, a price



percentage preference for local foods, or even a definite quota for local purchases. For example, Colorado gives a five percent preference to local foods and Illinois has a policy that encourages that at least 10 percent of food procurement dollars go to local foods. See Section 5.12, Strategy 5.4.F, “Establish preferential treatment for local foods in school purchasing rules.”

- **Boost spending by residents on local foods:** Consider launching a campaign challenging local residents to spend a certain percentage of their food purchases on local produce. For example, North Carolina initiated its 10% Campaign in 2010, setting the goal for the state at 10 percent and polling residents to collect data as to whether the challenge was successful.⁸⁰ See Section 5.12, Strategy 5.4.D, “Enhance coordination of local food marketing and

⁷⁹ Scully, M. (2011). *Government Purchasing Preference that Support Local Farmers: A 50 State Review*. Colorado Department of Public Health and Environment. Retrieved from <http://coloradofarmtoschool.org/wp-content/uploads/downloads/2012/11/State-food-procurement-report-FINAL.pdf>.

⁸⁰ It has been rated as successful. See “Extension Educators’ Perceptions About the NC 10% Local Food Campaign: Impacts, Challenges, and Alternatives,” in *Journal of Extension*, April 2014, Volume 52, Number 2.

<https://tigerprints.clemson.edu/joe/vol52/iss2/20/>. A key quote: “According to the study, LFCs [Local

Food Coordinators drawn from Extension educators] perceived that there are positive impacts of the NC 10% Campaign. The major impacts they perceived include increasing consumer awareness of the value of local food systems; providing new market opportunities for local foods and contributing to the growth of the local economy; increasing profitability of local growers; increasing consumer access to local foods; and creating an environment for sustaining local food systems. These impacts of the NC 10% Campaign perceived by LFCs have implications for other Extension systems to consider promoting local foods as a worthwhile Extension program for achieving sustainable communities.” (unpagged)

agritourism opportunities in Somerset County.”

- **Cottage food laws:** Farmers interviewed in Somerset County as part of this plan’s development stated that one of the major burdens on them is the myriad of governmental regulations they face, such as regulations affecting food safety, land use, and the environment. A common tool that states have used to ease regulations for local food is cottage food laws. These laws allow small farms to process and sell certain products where general food safety laws would require that such processing occur in licensed kitchens. Cottage food laws tend to be limited to producers who sell directly to consumers, to food that is not “potentially hazardous,” and to a certain sale size. Unfortunately, New Jersey is one of the few states without any cottage food law. In the context of considering the county’s local food needs holistically, described in Section 5.12, Goals & Strategies, Strategy 5.1.B (“Explore ways to improve the local food system and access to healthy, affordable, local food for all county residents, to attain greater local food security and support

wellness”), the SCADB can investigate and consider joining the already-strong advocacy movement to encourage state legislation to establish a state cottage food law.

G. Conclusion

The business of agriculture is not for the faint of heart, as this section surely demonstrates. It is complex, and change can be risky and expensive. Moreover, action and collaboration are needed at all levels and across many kinds of stakeholders to ensure the vitality of the industry – and with such a complicated challenge as agricultural profitability, it is hard to know what levers in the system to pull. Fortunately, as the extensive use of its work in this section shows, New Jersey’s Department of Agriculture has provided leadership, research, and vigorous marketing to support the industry statewide, together with support from Rutgers Cooperative Extension. It remains for local stakeholders to band together, identify their needs and express them to NJDA and SCADB, and seek the next level of industry success matching the needs of twenty-first century agriculture in a suburban community. The next section addresses one last, important aspect of farm management, natural resource conservation, sustainability, and resiliency – a critical aspect of farming in a suburban community where the residents county-wide are concerned about these issues.

5.10. Natural Resource Conservation, Sustainability, and Resiliency

The conservation of natural resources on farms is both necessary for their long-term survival – as agricultural production draws from the natural environment – and one of the major policy reasons for preserving farmland. A variety of agencies and nonprofit organizations at the federal, state, and local levels have programs supporting the conservation of these resources. The Somerset County Agriculture Development Board (SCADB) is in full support of the conservation of agricultural natural resources and encourages farmers to take advantage of available support to implement conservation projects. These projects can both enhance the environment and boost farmland productivity and, indeed, increase profitability as well.

A. Introduction

As this Farmland Preservation & Agricultural Development Plan has demonstrated, there is a wide variety of topics any farmer must master – perhaps especially in natural resource issues. This section covers water supply and water conservation, waste management planning (for both animal waste and recycling of non-organic wastes), energy conservation and generation (solar, wind, biofuels), and emergency preparedness, especially for mitigating the hazards of flooding, an ever-present concern across Somerset’s southern lowlands. Fortunately, there are also advisors available for advice and training, and grant programs designed to address many natural resource needs on farms.

B. Natural Resource Protection Coordination

Governmental and private entities have programs that finance and provide technical support for natural resource conservation activities on agricultural land. This section details the key organizations that can

support Somerset County farmers as they carry out natural resource conservation on their property.

Sustainable Jersey

In 2006, The College of New Jersey received a grant to create a network to assist municipalities with sustainable development. The network was to identify and promote best practices, provide technical assistance and support, and develop metrics to judge municipal performance. Concurrently, a “green mayors” group was also forming among localities in New Jersey to promote sustainable practices in their communities. These two groups joined with the New Jersey Department of Environmental Protection (NJDEP) and the New Jersey Board of Public Utilities, collaborating to form what officially launched as Sustainable Jersey in 2009.

Sustainable Jersey is a nonprofit organization, overseen by a 16-member Board of Trustees, which provides tools, training, and financial incentives to support communities as they pursue sustainability programs. The primary work of the organization is to

oversee a system of certification for municipalities in the state. Localities that apply for Sustainable Jersey certification must first establish a “green team” and then provide documentation showing that they have completed a series of actions in certain categories to enhance sustainability in their community. Categories of actions for certification include:

- Animals in the Community
- Arts and Creative Culture
- Brownfields
- Community Partnerships and Outreach
- Diversity and Equity
- Emergency Management and Resiliency
- Energy
- Food
- Green Design
- Health and Wellness
- Innovation and Demonstration Projects
- Land Use and Transportation
- Local Economies
- Natural Resources
- Operations and Maintenance
- Public Information & Engagement



Each action that is accomplished comes with a certain number of points towards certification. Certification comes in two levels:

1. **Bronze Level:** A municipality must reach 150 points, have a mandatory green team, and accomplish at least two out of 12 priority actions and actions in six out of 18 categories.
2. **Silver Level:** A municipality must reach 350 points, have a mandatory green team, and accomplish three out of 12 priority actions and actions in eight out of 18 categories.

As of 2021, 19 municipalities in Somerset County are participating in Sustainable Jersey, with four certified as bronze (Bernardsville, Bridgewater, Manville and Somerville) and five certified as silver (Bernards, Franklin, Hillsborough, Montgomery and Warren). The primary benefits of receiving Sustainable Jersey certification are as follows:

- **Savings:** Towns and cities that implement related practices attain cost savings in energy, water, and garbage bills through efficiencies and waste reduction.

- **Grants:** Participating towns get priority access to incentives and grants. The Sustainable Jersey Grants Program is supported through a combination of state and private resources, and has funded more than \$2.4 million in grants for local governments since 2009. Examples in Somerset County include Bernards Township, which received \$30,000 in 2015 for a sustainable winter maintenance project, and Hillsborough Township, which received \$20,000 in 2013 for a compilation of information learned from energy audits. The nonprofit also maintains a Sustainable Jersey Grants Portal, assisting local governments with finding grants for sustainability projects.

- **Training and technical assistance:** Sustainable Jersey provides “how to” guides, training workshops, webinars, and leadership meetings to assist municipalities working to implement sustainable practices.

- **Marketing:** The nonprofit promotes certified towns on its website and in the

media, and certified municipalities can use the Sustainable Jersey logo in their own materials. Towns that earn the highest number of points each year receive annual awards in various categories.

- **Sustainability:** Municipalities that attain certification are implementing actions that directly improve the quality of life in their community and conserve valuable resources.

Actions for municipalities to complete for certification that are most applicable to this plan include the following:

- **Farmland Preservation Plans:** Municipalities that complete such plans and achieve SADC approval receive 10 points.
- **Buy Fresh Buy Local:** Sustainable Jersey promotes consumption of local foods for related support of the local economy and family farms, health benefits, and positive environmental impacts. Municipalities that (a) develop a list of local farms, farmers' markets, CSAs, commercial gardens, restaurants and food businesses that sell local food and (b) actively publicize the list receive 10 points.
- **Community Gardens:** The organization promotes community gardens as a means for crime prevention, education, improved mental health, and providing a variety of environmental benefits. Communities with active gardens receive 10 points.

- **Farmers Markets:** Municipalities that actively support local markets through publicity, provision of land, liability insurance, traffic control, grants, or other means receive 10 points.
- **Making Farmers Markets Accessible:** If a municipality is receiving points for a farmers market, they can receive five further points if their market (a) is within a quarter of a mile of a transit stop or has para-transit to the market and (b) has at least one vendor that accepts Supplemental Nutrition Assistance Program (SNAP) Electronic Benefits Transfer (EBT) cards.

Somerset County Green Leadership Hub

It is Somerset County's goal to support its municipalities in attaining Sustainable Jersey certification. Related to this goal, Somerset County municipalities, the Somerset County Board of Commissioners, and Somerset Jersey formed the Somerset County Green Leadership Hub in 2014.⁸¹ The hub is one of nine across New Jersey, each hosting events that feature training and best practices as well as providing local-centric technical assistance to assist towns with participating in the Sustainable Jersey certification program. Somerset County's Hub has partnered with a variety of entities, including the Somerset County Energy Council, Somerset County Business Partnership, Ridewise, the Somerset County Agriculture Development Board, and the Somerset County Park Commission, in its mission to promote the certification program and assist municipalities.

⁸¹ <https://www.co.somerset.nj.us/government/public-works/planning/green-leadership-hub>

Natural Resources Service (NRCS) contact information:

The local NRCS office serves Somerset, Hunterdon, and Union counties and is in Franklin Township (mailing address of Frenchtown).

687 Pittstown Rd., Suite 2
Frenchtown, NJ 08825
(908) 782-4614, ext. 3

Somerset-Union Soil Conservation District (SCD) contact information:

Somerset County 4-H Center
308 Milltown Road
Bridgewater, NJ 0880
908-526-2701
soilconsvr@co.somerset.nj.us

Natural Resources Conservation Service

At the federal level, the Natural Resources Conservation Service (NRCS) within the USDA is an important resource and partner for local farmers in Somerset County. The NRCS oversees federal programs that help private landowners to conserve the soil, water, and other natural resources on their land.

Within one year of selling the development rights to their land via an easement financed, at least in part, by federal funding, owners of preserved farms are required under federal law to enter into a Conservation Plan for that land. Similarly, easements financed through state, county, and municipal funding also require Conservation Plans. Conservation Plans inventory the soil, water, air, plant, and animal resources on the property and list management and conservation practices that the landowner will implement to conserve these resources. Local NRCS offices assist farmers with the development and implementation of these Conservation Plans. This includes technical guidance, field visits during plan development, assistance with early implementation such as the installation of conservation practices, and inspection to ensure that the plans are implemented faithfully.

NRCS offers financial assistance programs to support farmers in developing and implementing conservation plans, described in detail in below.

Somerset-Union Soil Conservation District

The Somerset-Union Soil Conservation District (SCD) is part of a network of 15 local SCDs in the State of New Jersey, each overseen by the State Soil Conservation Committee (SSCC) in the NJDA Division of Agricultural and Natural Resources. The SCD's objective is to provide technical assistance and oversight of (a) standards related to the New Jersey Soil Erosion and Sediment Control Act Program and (b) the Stormwater Permitting Program. Specific to farmland preservation, SCD goals include retaining farmland, improving farmland productivity, prevention and control of soil erosion and sedimentation on agricultural land, protection of water quality, and prevention of storm and floodwater damages.

The SCD is a resource for Somerset County farmers as they prepare and implement Conservation Plans. The office promotes best management practices (BMPs) for natural resource management concerns, including soil erosion, sediment control, nutrient management, animal wastes, and water quality improvement. Local SCDs coordinate with NRCS local offices on these matters, and are part of the Conservation Plan review process.



Rutgers Cooperative Extension (RCE) of Somerset County

Rutgers, the State University of New Jersey, has Cooperative Extension offices in all 21 New Jersey counties. These offices are staffed with 4-H agents, extension specialists, educators in family and community health sciences, and agriculture and natural resources agents. Specific to the agriculture industry, the RCE offices provide education and technical assistance regarding BMPs that both protect natural resources and enhance farm economic viability.

New Jersey Department of Agriculture

In 2006, the NJDA set forth its *Agricultural Smart Growth Plan for New Jersey*.⁸² It includes five components identified by the NJDA as critical for the future of farming: Farmland Preservation, Innovative Conservation Planning for Agricultural Land Use, Economic Development, Agriculture Industry Sustainability, and Natural Resource Conservation. The state of New Jersey offers farmers a number of support services and programs ranging from technical advice to farm loans. One of these supports is the NJDA’s Smart Growth Toolkit,⁸³ which provides information to aid governments, businesses, nonprofit groups, and local citizens in their efforts to achieve the goals and objectives outlined in the 2006 plan. As a subset of the toolkit, NJDA has prepared a useful seven-page summary of ideas for natural resource

conservation.⁸⁴ It opens with this statement: “As stewards of the land, farmers must protect the

Rutgers Cooperative Extension of Somerset County contact information:

Rutgers New Jersey Agricultural Experiment Station
310 Milltown Road
Bridgewater, NJ 08807-3587
908-526-6293 (agricultural and natural resources program)
rcescnj@gmail.com
<http://somerset.njaes.rutgers.edu/ag/>

quality of our environment and conserve the natural resources that sustain it by implementing conservation practices that improve water quality, conserve water and energy, prevent soil erosion and reduce the use of nutrients and pesticides.”

C. Natural Resource Protection Funding Programs

The following is a synopsis of programs that provide funding for natural resource conservation.

Federal Conservation Programs

Federal funding for agriculture, including programs to assist farmers with natural resource conservation, is set by omnibus, multi-year laws called farm bills. The most recent farm bill passed into law in 2018 (Agricultural Act of 2018, P.L. 115-334). The NRCS is the source of local information about these programs. The 2018 law continues funding for the following conservation programs:

- **Conservation Stewardship Program (CSP):** CSP is NRCS’s largest agricultural conservation program. It provides annual payments to landowners for the

⁸²<https://www.nj.gov/agriculture/divisions/anr/agriassist/smartgrowth.html>

⁸³https://www.nj.gov/agriculture/divisions/anr/agriassist/smartgrowth_toolkit.html

⁸⁴<https://www.nj.gov/agriculture/divisions/anr/pdf/naturalresourceconservation.pdf>

Ecosystem Services and the Interplay between Farmland and Open Space

Section 6.9 of the Open Space Preservation Plan that accompanies this plan as part of the Somerset County Preservation Plan describes the many benefits of preserving open space and makes a point of describing “ecosystem services.” In fact, preservation of natural resources that provide the context for farming should be considered an important element of a systematic approach to farmland preservation – and farmland itself also contributes to ecosystem benefits. The benefits of open space preservation as it affects farmers include:

Water quality: Open space lands filter contaminants from stormwater runoff, protecting the quality of water flowing into rivers, streams, and groundwater – water sources that farmers often use for irrigation.

Flood mitigation: Open space, especially vegetated buffers along rivers and streams and forested steep slopes, helps mitigate the impact of flooding by absorbing stormwater runoff and slowing the flow of stormwater into rivers and streams. Many farms in Somerset County include lands that suffer from flooding.

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conservation strategies on their farms that exceed Conservation Plan requirements, in essence paying for the increased environmental benefits.

- **Agriculture Management Assistance (AMA) Program:** This program offers payments to beginning and limited-resource farmers, small farms, and producers who receive limited to no financial support from other USDA programs. Funded projects must enhance water management, water quality, erosion control, or improve local habitat. Federal

funding can be up to 75 percent of the project costs, capped at \$50,000 per participant per year.

- **Environmental Quality Incentives Program (EQIP):** Another payment program, EQIP supports landowners that implement specific practices determined by the NRCS to be particularly important to improving the environmental quality of each state. The NRCS also provides one-on-one help to farmers to assist them with implementation. In New Jersey, the State Technical Committee and NRCS have identified the following prime concerns and practices addressing them on farms will be prioritized for funding:
 - o Water quality degradation (nutrients, pesticides, pathogens, temperature, sediment)
 - o Soil erosion (sheet, rill, concentrated flow)
 - o Soil quality degradation (subsidence, compaction, organic matter depletion)
 - o Inadequate habitat for fish and wildlife (habitat degradation)
- **Conservation Loan Program (CLP):** This program provides low-interest loans to landowners for conservation practice implementation. To be eligible for such a loan, the project must be in the farm’s Conservation Plan. Loans are capped at \$300,000.
- **Conservation Reserve Program (CRP):** The Farm Service Agency (FSA) rents environmentally sensitive farmland from landowners for conversion to long-term, resource-conserving ground cover. Related

contracts vary from in length from 10 to 15 years:

- **Conservation Reserve Enhancement Program (CREP):** Part of the CRP, through CREP, FSA partners with states to rent farmland from landowners for establishing conservation buffers on active agricultural lands. In its agreement with New Jersey, the federal government pays 77 percent of the cost and the state pays 23 percent. The primary objective of CREP in New Jersey is to reduce non-point agricultural pollutants into streams while also enhancing farm viability.
- **State Acres for Wildlife Enhancement (SAFE):** Another subset of CRP, SAFE provides farmers with payments for enhancements to wildlife habitat.
- **Agricultural Conservation Easement Program (ACEP):** As was stated in Section 5.5, Farmland Preservation Program, ACEP is a federal conservation easement program created by the 2014 Farm Bill. Lands eligible for ACEP Agricultural Land Easements (ALE) include cropland, grassland, pastureland, and nonindustrial private forestland. Under ACEP, NRCS can provide a cost-share of up to 50 percent of the easement purchase. In instances where grasslands are of special environmental significance, this cost-share can increase to 75 percent. In Somerset County, two easements totaling 155 acres have been preserved through the ACEP program.

(Continued from page 180)

- **Natural diversity and resiliency:** Open space protects a diversity of natural areas offering habitat for a wider variety of plants and animals as well as protecting habitats of rare and at-risk species. Indigenous species in naturally functioning ecosystems are more resilient and are more likely to out-compete invasive species. Open space offers buffers and sanctuaries that harbor and protect humans and plant and animal species, helping all to cope with weather events stemming from climate change. For farmers, pollinators that rely on such diverse habitat are essential for growing crops.
- **Carbon storage:** Intact natural land cover and soils are capable of sequestering carbon, thereby offsetting greenhouse gas emissions. Increasingly, policymakers are also recognizing the potential for farmland to be farmed in ways that maximize carbon storage.*

**There are many references to be found about this topic, some of which reach back a decade or more. A useful general explanation is available from the National Sustainable Agriculture Coalition: Carbon Sequestration Potential on Agricultural Lands: A Review of Current Science and Available Practices, by Daniel Kane (November 2015), https://sustainableagriculture.net/wp-content/uploads/2015/12/Soil_C_review_Kane_Dec_4-final-v4.pdf.*

SADC Soil and Water Conservation Grant Program

Through this program, the SADC provides grants to preserved farms and farms in the eight-year preservation program, assisting them with the cost of installing soil erosion prevention projects on the land. Under the term preservation program, farmers agree to voluntarily restrict nonagricultural development on their land for eight years, in exchange for which they are eligible for the soil and water grants and receive great protection from nuisance complaints, zoning changes, and eminent

domain actions. The program most recently received funding in September 2017, when the Governor authorized \$500,000 for related grants.

In order to receive soil and water grant program funding, farmers apply to local SCD and NRCS offices for project approval. If they deem the project necessary and feasible, the offices send their recommendation to the State Soil Conservation Committee, which allocates funding. Participants in the program receive grants covering 50 percent of the approved project. Projects eligible for funding include:

- Terrace systems
- Diversions
- Contour farming
- Strip-cropping systems
- Sod waterways
- Windbreak restoration or establishment
- Stream protection
- Permanent vegetative cover on critical areas
- Land shaping or grading
- Water impoundment reservoirs
- Irrigation systems
- Sediment retention, erosion, or water control systems
- Permanent open drainage systems
- Underground drainage systems
- Developing facilities for livestock water
- Forest tree stand improvement
- Forest tree plantations
- Site preparation for natural regeneration
- Animal waste control facilities

- Agrichemical handling facility

Highlands Open Space Protection

According to the New Jersey Highlands Council:

Lands located within the “Preservation Area” of the Highlands Region are not necessarily preserved. In fact, approximately 4,500 lots in the Preservation Area are exempt and could be developed into single-family homes with septic systems. Additional units can be built through Highlands Area approvals and waivers unless these lands are preserved. Piecemeal development of these lots threatens the water and natural resources of the region, making clear the need for preservation to protect the underlying resources on these properties.

To meet this need, the Highlands Council operates two land preservation programs: the Highlands Open Space Partnership Funding Program (OSP) and Highlands Development Credit Purchase Program (HDCPP). Both programs are designed to increase protection of Highlands resources, while also advancing landowner equity priorities through acquisition or deed restriction of land throughout the region. They also fill a unique need among other preservation programs in the state since parcels of any size may qualify and the programs will consider applications for land that is forested, agricultural and/or mixed use.⁸⁵

⁸⁵ NJ Highlands Council annual report, 2018, p. 11, available at https://www.nj.gov/njhighlands/news/annual_report/

2018AR.pdf. The programs are administered under the provisions of N.J.A.C. 7:70, Highlands Open Space Partnership Funding and Highlands Development Credit Purchase Program.



Funding from the New Jersey Highlands Council, the NJ State Agricultural Development Committee, and Somerset County enabled the New Jersey Conservation Foundation and the Lamington Conservancy to protect 49 acres of farm and forest land along the Lamington River in Bedminster Township in 2019. (Photo by Norm Goldberg, courtesy New Jersey Conservation Foundation)

The Highlands Open Space Partnership Funding Program was created by the New Jersey Highlands Water Protection and Planning Council in April of 2016. This grant program supports property acquisition within the Highlands Region, protecting local resources and furthering preservation goals set by the Highlands Act and Highlands Regional Master Plan. State agencies, counties, and municipalities within the region and nonprofit conservancies are eligible to apply for the grants. Grant recipients can receive a maximum of 50 percent of the land purchase price. The following applicants are prioritized for funding: (a) applicants providing a higher percentage of matching funds, (b) properties labeled as either moderate or high conservation, (c) agricultural priority areas, and (d) lands adjacent to existing preserved open space, preserved farmland, and/or recreational facilities.

Recently, Somerset County saw its first transaction using open space funding available from the NJ Highlands Council. The council contributed \$400,000 toward a \$1.67 million purchase of 49 acres of farm and forest land along the Lamington River from the Chubb Insurance Company (pictured above). The land was purchased for commercial development about three decades earlier by Chubb's real estate arm, the Bellemead Development Corp., and is surrounded by preserved farmland and open space. The transaction also included funds from the SADC and Somerset County, and further involved two nonprofit partners, the New Jersey Conservation Foundation and the Lamington Conservancy.

The Chubb property was one of two that, combined, extended permanent protection to 125 acres in the

Lamington River watershed. The second transaction, a conservation easement on land along Black River Road donated to Bedminster Township in December with technical assistance from the New Jersey Conservation Foundation, ensures that 75 acres will remain farmland forever. Moreover, “preserving this farm adds to a large swath of preserved land in the community. To the north and south are other large, preserved farms, and to the west is a mile of preserved riverfront open space owned by Bedminster Township. To the east is the 170-acre Fairview Farm Wildlife Preserve, headquarters of the nonprofit Raritan Headwaters Association,” noted the Community News section of NJ.com in reporting the announcement on February 28, 2020.⁸⁶

The Highlands Council also has a program to purchase Highlands Development Credits (HDCs), which is a transfer of development rights program. Working through its HDC Bank, the council can directly purchase the HDCs, which are recorded as conservation easements, and is then able to allocate the development rights thus severed to voluntary receiving zones. The user of the development rights (a developer) pays the HDC Bank for the privilege of increasing the density of a development through use of the credits. The bank maintains a registry to keep track of HDCs that are in the pipeline, available, and used for development. Two properties in Somerset County, both in Bedminster Township, have been involved in this program so far: 39.46 acres zoned for residential use, approved and allotted 18.25 HDCs in 2016, and approved for HDC Bank purchase, which

was executed in 2018 at a cost of \$292,000; and 8.3 acres also zoned residential for which the owner applied in 2019, but the council granted no credits.⁸⁷

Highlands Receiving Zones can be anywhere in the state, the program is voluntary, and grant funding is available to explore the possibility in any municipality. Communities with approved receiving zones can charge impact fees up to \$15,000 (minimum five units per acre residential or equivalent commercial) that can be used for many kinds of infrastructure. They can also apply for enhanced planning grants to address a range of community development issues. For developers that choose to locate projects in Highlands TDR Receiving Zones, special incentives and priority funding are available through the New Jersey Economic Opportunity Act of 2013.⁸⁸

D. Water Resources

Water is a vital resource for all forms of land use, and agriculture is no exception. As development in Somerset County has increased through time, it has led to growing competition for an increasingly limited water supply. Section 5.2, Agricultural Land Base, describes the issue that peak water consumption is resulting in a net aquifer loss in a majority of the hydrologic units in the county. The *New Jersey Water Supply Plan 2017-2022*⁸⁹ projects that water supplies will only grow more constrained through time. Ensuring sufficient water allocations to support all needs for water while also conserving a limited natural resource is a difficult balance to strike.

⁸⁶ <https://www.nj.com/community-news/2020/02/125-acres-preserved-along-black-river-in-bedminster.html>

⁸⁷ Entries 120 and 170 at https://www.nj.gov/njhighlands/hdcbank/HDC_registry.pdf

⁸⁸ <https://www.nj.gov/njhighlands/hdcbank/receiving/>

⁸⁹ <https://www.state.nj.us/dep/watersupply/wsp.html>

Supply Characteristics

The primary water aquifer in Somerset County is the Brunswick Shale. The *Natural Resource Inventory for Somerset County, New Jersey* describes the features of this aquifer, including its limited capacity to both accept and transmit water. This reduced capacity for storage means that during times of prolonged withdrawal, water availability is reduced, such as particularly dry summers when farmers require increased irrigation and suburban lawns are also irrigated.

Agricultural Demand and Supply Limitations

Crops have varying needs for water, driving the degree to which farms that produce those crops require irrigation. For example, grapes require significantly less water than fruit trees or wheat.⁹⁰

In addition, crops have different growing periods, which also has an impact on their seasonal water needs. For instance, green onions have a growing season that ranges from 70 to 95 days while peppers range from 120 to 210 days. Finally, root depth and maturity affect the ability of a specific plant to draw water from the soil.

While access to water is crucial to any agricultural operation, agricultural uses actually represent a small portion of the water use in Somerset County. In the Raritan and Passaic water regions where Somerset County is located, agriculture averaged less than one percent of the water withdrawn between 1990



and 2015.⁹¹ Statewide, agricultural use represented only 4.6 percent of water withdrawal in 2015. Also, as was noted in Section 5.2 of this plan, only 1.5 percent of agricultural land in Somerset County used irrigation as of 2012.

Despite this low level of relative use, statewide water constraints as well as the local ones highlighted by Table 5.2.3 (Section 5.2, Agricultural Land Base) mean that availability of water for allocation to existing and agricultural operations has diminished

with time. Farmers are competing for water with a growing residential population – as was discussed in Section 5.4, Land Use Planning Context, Somerset County’s population grew by 88,415 (37 percent) between 1990 and 2014. In order to manage this increasing pressure on a limited

natural resource, the New Jersey Department of Environmental Protection (NJDEP), counties, and municipalities oversee a permitting and approval process for agricultural operations seeking to use more than 100,000 gallons per day.

Farmers in New Jersey have noted in interviews throughout the state, as documented in farmland preservation plans, that obtaining water permits is difficult. Mark W. Kirby, chairman of the SCADB, noted in an interview that related paper applications are becoming increasingly complex for farmers. While it is important to ensure that there is sufficient water for all uses, agricultural water permitting has become

⁹⁰ Food and Agriculture Organization of the United Nations. (2018). *Crop Water Needs*. Retrieved from: <http://www.fao.org/docrep/s2022e/s2022e02.htm>.

⁹¹ State of New Jersey Department of Environmental Protection. (2017). *New Jersey Water Supply Plan*

2017-2022. Figures 3.6, 3.7, and 3.10, and Table 3.2.

Retrieved from:

<http://www.nj.gov/dep/watersupply/wsp.html>.

a burden for farmers who seek to diversify or who are renting leased land and want to introduce irrigation to that land.

This situation demands all the more attention because of New Jersey’s changing climate. A memo on climate change included with Somerset County’s Flood Resiliency Framework⁹² notes that “changes in climate indicators and projected future conditions for things like temperature and precipitation are more than mere data points – a changing climate brings with it a host of altered environmental conditions that have the potential to result in an extensive range of impacts on the human/built environment as well as natural systems.”⁹³

Higher temperatures are projected for the state, leading to an overall increase in the frequency of extreme precipitation events, which for agriculture can mean increased risk of flooding (potential magnitude and/or duration) and more severe damage during floods in the future; increased risk of drought in some areas, meaning potential agriculture losses; and longer periods without rainfall during longer growing seasons, meaning drier growing seasons and lower soil moisture content, with consequent increased risk of crop losses and wildfires. Other risks to Somerset County will be shared across the board, by farmers and others alike, such as water shortages/rationing, increased energy expenditures for heating and cooling that could result in strain on

electrical grid during periods of increased demand and potential power outages, and repair and replacement costs for damaged buildings and infrastructure.⁹⁴

Farmers can also be part of the work to address climate change, by practicing conservation agriculture, which avoids tilling and employs cover crops and crop rotation. Protected soils are more resilient to natural hazards and sequester carbon.⁹⁵ Energy conservation, as described further below, is also an important activity.

Water Conservation and Allocation Strategies

Water conservation efforts by farmers not only relieve stressed natural resources but also can lead to improved crop yields and savings in water costs. While county-specific data is not available, USDA studies have shown that more than half of irrigated croplands in the United States continue to be irrigated with traditional, less-efficient systems.⁹⁶ In addition, fewer than 10 percent of irrigators in the United States use either commercial irrigation scheduling services or soil- or plant-moisture sensing devices, and fewer than two percent of farmers use computer simulation models to determine irrigation needs of their crops.

The low level of irrigation in Somerset County farmland means that water conservation strategies

⁹² Appendix K, Somerset County Flood Resiliency Framework, *Somerset County Multi-Jurisdictional Hazard Mitigation Plan*, adopted July 2019, available at <https://www.co.somerset.nj.us/government/public-health-safety/hazard-mitigation/approved-hazard-mitigation-plan-july-2019>.

⁹³ Somerset County Flood Resiliency Framework, Appendix FRF-8, p. 8, available at

<https://www.co.somerset.nj.us/home/showpublisheddocument/34418/637002574179300000>.

⁹⁴ *Ibid.*, pp. 9-12.

⁹⁵ *Ibid.*, p. 13.

⁹⁶ USDA ERS. (2018). *Irrigation & Water Use*.

Retrieved from:

<https://www.ers.usda.gov/topics/farm-practices-management/irrigation-water-use/>



Farmers commonly employ conservation tillage, leaving stubble after harvest to help hold soils in place, as seen here on a preserved field in Hillsborough Township. Conservation tillage also helps build healthy soils that hold water and carbon more effectively.

will have a somewhat limited impact. Nonetheless, the following are suggested strategies for implementation by county farmers:

- Farmers should consult Rutgers Cooperative Extension annual guides to crop production, which include crop-specific irrigation guidelines and recommendations.⁹⁷
- Water crops in the cooler parts of the day to minimize evaporation.
- Use drip irrigation where feasible, such as in nursery and vegetable farming.
- For field crops where drip irrigation cannot be implemented, upgrade pressurized irrigation systems to newer, more efficient ones.
- Employ floats and timers in animal water troughs.
- Maintain healthy soils – as healthy soils hold water more effectively – through the use of such techniques as conservation tillage and no-till farming.
- Deploy conservation farming methods that hold water on the landscape, such as swales.
- Harvest rainwater in barrels or other methods, and make use of enhanced on-site storage techniques.
- Use information from the Office of the New Jersey State Climatologist at Rutgers University, School of Environmental and Biological Sciences, which operates the New Jersey Weather and Climate Network of weather monitoring stations.⁹⁸ These stations, located throughout the state, provide data including air temperature, precipitation, wind speed, soil temperatures, and barometric pressure.

⁹⁷ <http://njaes.rutgers.edu/pubs/>

⁹⁸ <https://climate.rutgers.edu/stateclim/>

Water conservation strategies should not only focus on limiting the use of water, but should also work to reduce the introduction of pollutants to the water supply. The following are examples of such strategies:

- Curtail the use of synthetic chemicals such as fertilizers, herbicides, pesticides, and fungicides.
- Provide riparian buffers along watercourses in order to protect streams from chemicals and erosion.
- Practice organic farming methods when feasible.

Regarding farmers who face water allocation issues such as difficulty receiving water permits, local strategies would have a limited impact given that regulation is primarily at the state level. However, the delegates of the 93rd State Agricultural Convention in 2008 made a number of reasonable recommendations regarding agricultural water allocation⁹⁹, now incorporated into Strategy 5.4.H in Section 5.12, Goals & Strategies, “Insure Somerset County farmers’ access to adequate water for farm operations.”

Flooding

Goal 5 in Somerset County’s Flood Resiliency Framework¹⁰⁰ calls for maximizing “the flood-buffering capacity of natural and ecological systems” through nature-based solutions and includes this objective and strategy:

Objective 5E: Promote agriculture, community gardens and other low-impact land uses that are compatible with ecological floodplain functions and can withstand nuisance flooding in flood risk areas.

Strategy 5f: Plan and implement linear parks and greenways along stream corridors thereby protecting flood hazard areas and wetlands using various methods including fee-simple public open space acquisition, conservation easements, farmland preservation, deed restrictions and other mechanisms.¹⁰¹

The framework further states:

Strategically preserving lands at the watershed and floodplain levels, and integrating preservation with flood mitigation, stormwater management and water quality protection can achieve green infrastructure goals at the landscape-wide level and allow the community and region to benefit from the flood mitigation natural systems provide. 6,256 Acres or 53.4 percent of Floodway Areas county-wide have been permanently preserved for open space, farmland, and water resource purposes.... However, it is clear... that many opportunities for permanently preserving riparian corridors still exist, particularly in

⁹⁹ Delegates of the 93rd State Agricultural Convention. (2008). 2008 Resolutions. Retrieved from: <http://newjersey.gov/agriculture/conventions/2008/water.html>.

¹⁰⁰ Appendix K of the Somerset County Multi-Jurisdictional Hazard Mitigation Plan, adopted July

2019, available at <https://www.co.somerset.nj.us/government/public-health-safety/hazard-mitigation/hazard-mitigation-plan>.

¹⁰¹ Ibid., p. 22 (emphasis added).

headwater areas and along various tributaries...

The continuation of agricultural activities on existing farmland within floodprone areas is a compatible land use, since farmland can accommodate over-bank flows without incurring the comparatively costly flood damages that effect urbanized areas. Farmland allows a higher degree of groundwater recharge as compared to impervious cover found in urbanized areas, which also mitigates flooding. When regenerative agriculture, biodynamic farming and no-till agricultural methods are used that increase the amount of organic material in soil, its water absorbing capacity can be dramatically increased. The use of “River Friendly” agricultural best management practices are strongly encouraged on farms, particularly those that involve floodprone areas in order to avoid erosion, pollution, soil compaction and other potentially detrimental impacts. The conversion of natural riparian areas into farmland for agricultural purposes is discouraged in order to protect the water supply and maximize their flood-buffering and ecological services.¹⁰²

The River-Friendly Farm Certification Program, currently available only in northern and central New Jersey, promotes sound soil health management, stream corridor protection, nutrient and pest

management, and irrigation water management.¹⁰³

To date, three farms in Somerset County have achieved this certification: Mountain Valley Preserve, Hillsborough Township (produces lumber and firewood); Liberty Farms, Montgomery Township (Belle Mead; Christmas trees and winter wheat); and Hidden Brook Farm, Far Hills (forest products).

E. Waste Management Planning

The primary waste management issues relating to conservation that face farmers in Somerset County are (1) the management of animal waste from livestock, and (2) recycling.

Animal Waste

Livestock waste, if not managed properly, can have a strong negative impact on soil and water quality as well as the health of the farm animals themselves. Animal waste contains high levels of nutrients that pollute surface and groundwater and can also spread bacterial pathogens.

Because of this risk of soil and water contamination, the NJDEP administers permits for large Concentrated Animal Feeding Operations (CAFOs) and the NJDA administers regulations for other farms with animals. Related regulations are outlined in the Criteria and Standards for Animal Waste Management (N.J.A.C 2:91), adopted March 16, 2009. The NJDEP and NJDA’s regulatory strategy relies on self-certified Animal Waste Management Plans (AWMPs), high-density AWMPs, and Comprehensive Nutrient Management Plans (CNMPs) for farms that generate, handle, or receive animal waste. Farmers with livestock were required to



¹⁰² Ibid, p. 49 and p. 51 (citation omitted).

¹⁰³ <https://www.riverfriendlyfarm.org/>

comply with these regulations by March 16, 2012, meeting both general requirements and those that depend on the number and density of animals.

General requirements for all producers are as follows:

- Agricultural animal operations shall not allow animals in confined areas to have uncontrolled access to the waters of the state;
- Manure storage areas shall be located at least 100 linear feet from surface waters of the state;
- The land application of animal waste shall be performed in accordance with the principles of the NJDA Best Management Practices Manual;
- Dead animals and related animal waste resulting from a reportable contagious disease or an act of bio-terrorism shall not be disposed of without first contacting the State Veterinarian; and
- Any person entering a farm to conduct official business related to these rules shall follow bio-security protocol (NJDA Animal Waste Management Rules).

Requirements that are specific to operation size and animal density are as follows:

- Operations with 7 or fewer animal units (AU=1,000 pounds) or receiving or applying less than 142 tons of animal waste per year are encouraged, but not required, to develop a self-certified AWMP;
- Operations receiving or applying 142 or more tons of animal waste per year are required to develop and implement a self-certified AWMP;

- Operations with 8 to 299 AUs at densities of equal to or less than 1 AU per acre are required to complete a self-certified AWMP;
- Operations with 8 to 299 AUs at densities greater than 1 AU per acre are required to complete an AWMP, which must be reviewed by a conservation professional; if 181the standards are met, the SCD will approve the plan; and
- Operations with 300 or more AUs are required to develop a Comprehensive Nutrient Management Plan (CNMP), which must be certified by the NJDA.

The following are resources that farmers can use as they seek to meet the regulations:

- The Rutgers New Jersey Agricultural Experiment Station Cooperative Extension which coordinates review of AWMPs, assists famers with completion of plans and with implementation of environmental BMPs.
- Federal conservation programs can be used to help fund animal waste facilities on farms such as holding tanks, which both prevent animal waste runoff and serve as a source of fertilizer.
- Commercial businesses exist in the state that collect and redistribute animal waste products, selling farm wastes to landscapers and garden centers.



Somerset County's recycling team supports twelve First Saturday Drop-off events each year. In early April, the County's Facebook page stated, "Jumpstart your Spring Cleaning! Recycle cardboard, scrap metal, tires and more at our First Saturday Drop-off." (Photo courtesy Somerset County Public Works Department)

Recycling and Disposing of Non-animal Waste

Recycling is a vital component of natural resource conservation for the agricultural community. It reduces stress on natural resources, saves on solid waste disposal costs, and can lead to inventive reuse options that also save on costs. While the dominant crops in Somerset County – corn, soybeans, and hay – use limited products that can be recycled, opportunities remain to both recycle and reduce waste disposal costs.

One area of opportunity for Somerset County farmers is nursery and greenhouse film. The NJDA runs a nursery and greenhouse film recycling program year-round at two regional collection sites listed on the NJDA website.¹⁰⁴ In addition, the

website lists programs across the state where farmers can dispose of pesticide containers for reuse provided that they have a pesticide license. There are also seven vendors around the state that collect nursery pots, plastic flats, and trays free or for a reduced charge compared to full market rates.

At the county level, Somerset provides several recycling opportunities of which farmers can take advantage. The Household Hazardous Waste Collection Program holds five events annually where farmers can dispose of unwanted hazardous materials such as pesticides or motor oil at no cost. The County also hosts First Saturday of the Month events at the Somerset County Recycling Center where residents can bring up to eight tires for recycling. In addition, farmers can also participate in

¹⁰⁴<https://www.nj.gov/agriculture/divisions/anr/nrc/recycling.html>.

Farmers growing vegetables or horticultural products in greenhouses or hoop houses are especially conscious of energy conservation.



two scheduled week-long tire drop-off events held each year. Finally, the County hosts composting workshops each year where residents can learn the benefits of composting activities that are particularly beneficial for agricultural operations.

Farmers in Somerset County should look into opportunities to cooperate with other agricultural operations regarding the distribution of compost, particularly composted manure, as the excess nutrients of one farm may assist in crop production at another farm. Natural resources are thus protected and farmers reduce disposal and fertilizer costs.

F. Energy Conservation Planning

Energy conservation by farmers has the dual benefit of helping the environment and reducing energy costs. The promotion of energy conservation in New Jersey was recently given new life through the May 2018 signing of the Clean Energy Act of 2018 by Governor Phil Murphy. The bill raises the state's goal to 50 percent renewable energy use by 2030. Furthermore, Governor Murphy also signed Executive Order 28 requiring the state's 2019 Energy Master Plan to plan for 100 percent "clean

energy" by 2050. Meeting these aggressive goals will require participation by every component of New Jersey's economy.

Somerset County has also prioritized energy conservation as a policy, indicated strongly by the creation of the Somerset County Energy Council in 2008. The council meets monthly, reviewing opportunities for energy conservation and efficiency in the community, promoting outreach on related issues to the public, and advising the commissioners regarding opportunities.

Reduction of Energy Use

Reducing the energy requirements of an agricultural operation can involve a wide variety of practices. A suggested way for farmers to determine what methods will best reduce their energy consumption is to obtain an energy audit. Through such an audit, the energy used throughout a farm is quantified and analyzed, inefficient energy usage is identified, and recommendations are made for enhancing



efficiency.¹⁰⁵ Examples of recommendations can include everything from improved equipment maintenance to installation of high-efficiency lighting or motors.

Farmers can receive support through EQIP to obtain energy audits, develop Agricultural Energy Management Plans, and even implement energy audit recommendations. Also, farmers seeking to construct new facilities or renovate existing ones can seek funding from New Jersey SmartStart to cover up to 50 percent of an energy audit's cost and up to \$10,000 for implementing related recommendations.

Solar Energy

As was stated in Section 5.8, Right to Farm, SADC rules that went into effect in 2013 enabled preserved farms to install solar energy systems, provided that landowners follow rules regarding the acreage devoted to solar panels, state and local approvals, and preventing interference with agricultural activity on the farm. As of 2015, tax assessment data shows that county farmers had 20.7 acres dedicated to solar energy generation. Specifically, this acreage was located in Franklin (8.5 acres), Bernardsville (5.5 acres), Hillsborough (4.9 acres), Montgomery (1 acre), and Bedminster (0.8 acres).

At the state level, New Jersey's Clean Energy Program supports the installation of solar energy through the Solar Renewable Energy Certificate (SREC) Registration Program. Through this program, owners of solar energy systems enter the energy they generate into a tracking system. That energy can then be sold to generate revenue for the first 10

years of the solar operation. Note that under the Clean Energy Act of 2018, the program will close to new applicants by 2021. A new program is being designed to take its place.

The federal government also supports solar installations. EQIP provides some funding for solar panels on farms for on-farm use, and local NRCS offices can provide technical support for interested landowners. In addition, homeowners receive a federal tax credit equal to 30 percent of the cost of a solar panel system minus any cash rebates.

Wind Energy

The law that initially authorized the installation of solar panels on preserved farms also legalized the installation of wind turbines (P.L. 2009, c.213). Wind speeds in Somerset County average at 4.5 to 5.0 meters per second, sufficient to power a small turbine if not a utility-grade one.¹⁰⁶ The same federal tax credits that incentivize the purchase of solar systems also support wind turbine construction.

A major barrier to county farmers constructing wind turbines on their land is that to date only Hillsborough has adopted a zoning ordinance allowing the use of wind turbines.

Biofuels

Biofuels are produced through biological processes, such as agriculture, compared to fossil fuels like coal and petroleum which are produced through geological processes. Farms can serve as both sources and end users of biofuel energy. The primary biofuels used today are as follows:

¹⁰⁵ <https://sustainable-farming.rutgers.edu/farm-energy-use-self-audits/>

¹⁰⁶ U.S. Office of Energy Efficiency & Renewable Energy. (2010). *Wind Energy in Jew Jersey*. Retrieved from: <https://windexchange.energy.gov/states/nj>.

- **Ethanol:** Corn, soybeans, and hay can all be used to source this renewable fuel which has a much lighter environmental footprint than the burning of fossil fuels.
- **Biodiesel:** This fuel, made from the oils of soybeans, burns much cleaner than traditional petroleum diesel and can be used in diesel engines without modification.
- **Switchgrass Pellets:** *Panicum virgatum*, commonly known as switchgrass, is a tall perennial warm-season bunchgrass native to North America. These pellets can be used instead of oil, gasoline, or coal as fuel for heating structures such as greenhouses. Its potential for broader application is still being studied, but county farmers should be aware of this potential up and coming market.
- **Biogas:** Anaerobic digestion converts fats, oils, greases, manure, and other waste material into energy. In 2019, the American Biogas Council reported that New Jersey has 62 biogas systems but possesses the potential for more than 120 additional projects based on the estimated amount of biomass produced.¹⁰⁷ However, the council's data show that none of the existing systems in the state are based in agricultural operations. Also, the council sees little potential for biogas systems on farms going forward due to the smaller size of animal operations in the state.

Both ethanol and biodiesel represent significant opportunities for the county's farmers, as related crops are dominant ones already produced widely in the county, and the viability of these markets for county farmers deserves exploration by the SCADB.

Energy Conservation Grant Programs

In addition to the energy source-specific programs listed above, the USDA runs the Renewable Energy Systems and Energy Efficiency Improvements Program. Funded at more than \$500 million in FY 2018, the program provides grants and loan guarantees to agricultural producers and rural small business for assistance with purchasing renewable energy systems and making energy efficiency improvements.¹⁰⁸ Applicants can receive from \$5,000 to \$25 million in loans, from \$2,500 to \$500,000 in grants for purchase of renewable energy systems, and from \$1,500 to \$250,000 for energy efficiency upgrades. Loans can be for up to 75 percent of a project, and grants are for up to 25 percent of a project. Applicants can receive both a grant and a loan for the same project.

G. Emergency Preparedness Planning

Agricultural operations are vulnerable to the spread of contagion and other natural resource-based emergencies. The NJDA actively works with agricultural producers in the state to monitor for possible diseases spreading through livestock or crops, with a particular eye for agro-terrorism. More

¹⁰⁷ https://americanbiogascouncil.org/wp-content/uploads/2019/02/ABCBiogasStateProfile_NJ.pdf

¹⁰⁸ USDA. (2018). *Rural Energy for America Program Renewable Energy Systems & Energy Efficiency*

Improvement Loans & Grants. Retrieved from: <https://www.rd.usda.gov/programs-services/rural-energy-america-program-renewable-energy-systems-energy-efficiency>.



information and resources for farmers can be found at NJDA's Emergency Preparedness website.¹⁰⁹

In addition, the Somerset County Flood Resiliency Framework states:

NJDA coordinates with the United States Department of Agriculture (USDA), the National Association of State Departments of Agriculture, the Northeastern Association of State Departments of Agriculture, and the Communications Officers of State Department of Agriculture to participate in national and regional planning and crisis communications initiatives regarding agriculture and agricultural livestock. Agricultural groups such as the New Jersey Agricultural Society and New Jersey Farm Bureau, as well as individual agricultural commodity groups, participate in routine communications with NJDA on issues of response to manmade agricultural emergencies. NJDA coordi-

nates with both governmental agencies and industry groups and maintains emergency response procedures for agricultural emergencies, including serving as a central communications point for those agencies and groups.¹¹⁰

H. Conclusion

For farmers and non-farming residents alike, natural resource conservation in support of farms' sustainability and resiliency is a critical part of farming. From its inception, the SCADB has supported and encouraged the implementation of programs to aid in natural resource conservation. The county government and its partners in Rutgers Cooperative Extension and state and federal government agencies can provide training and assistance to farmers. The next section also concerns farmer education and training, along with other forms of public outreach programs to educate a wide variety of audiences.

¹⁰⁹<https://www.nj.gov/agriculture/news/hottopics/topics050107.html>

¹¹⁰ Appendix FRF-8, p. 16, a memo in Appendix K, Somerset County Flood Resiliency Framework, of the

Somerset County Multi-Jurisdictional Hazard Mitigation Plan, available at <https://www.co.somerset.nj.us/home/showpublisheddocument/34418/637002574179300000>.

5.11. Public Outreach & Education to Support Farmland Preservation and Agricultural Development

Through interpretation, understanding; through understanding, appreciation; through appreciation, protection.

—Freeman Tilden, writing in his classic work for the National Park Service, *Interpreting Our Heritage*, 1957, 1st ed., p. 38

Saving farms and farmland in Somerset County relies in part on continued public outreach and educational initiatives that will inform the county’s residents and build and engage a united constituency to support county initiatives. Public outreach and education related to agriculture are recognized responsibilities of the Somerset County Agricultural Development Board (SCADB), along with Rutgers Cooperative Extension, a strong partner.

A. Introduction

Promoting the significance of agricultural preservation in Somerset County is an important first level in building a program to reach out to the public and provide learning opportunities. Every Somerset County resident should, at some level, be aware that their tax dollars support the County’s efforts to preserve farming. Somerset County leaders and agency staff will continue to take every opportunity to make sure that residents and taxpayers know this, through publicity, word-of-mouth, reports, and public meetings and events. A goal in such messaging is that residents also come to know the “why” of preservation – why it is wise to budget the funds needed to maintain the county’s quality of life through farmland preservation.

The next level builds from this simple idea of messaging, which is working to inform residents about how to access local farms and to help shape their behavior as customers. There are some very real

public health needs to be met through encouraging residents to seek out fresh local produce. Farmers would benefit greatly from increased demand for their products, and a standing request from farmers is that the public – especially their neighbors – understand the rights of farmers under New Jersey’s right-to-farm law. Ensuring that Somerset County residents are knowledgeable users of the protected resources created by county preservation programs is good business.

A third level, however, provides the greatest benefits, in educating various audiences about the benefits of saving farms and farmland. Using multiple educational programs tailored to a wide variety of audiences, it is possible to create a high level of engagement with audiences, and from that engagement, build allegiance and support for the County’s preservation work.



Aiming for high engagement includes teaching K-12 students about the county’s farming, and its open space and heritage in general – which prepares them to be good citizens of the county (and if they should leave, to want to come back) and exposes them to dimensions of their world that can lead to careers and lifetime leisure interests.

K-12 programming has the further benefit of also reaching entire families, not simply the students (and teachers). Offering adult education programs can have similar results, and furthermore creates social opportunities that can cultivate “social capital,” a fundamental building block of a functioning society (involving such concepts as shared sense of identity and shared values and

norms that enable trust and cooperation). Seeking deeper engagement with county residents creates a virtuous cycle, whereby county residents enjoy the learning and activities associated with the county’s farms and return the favor by supporting further preservation.

B. Existing Conditions

In 1983, the New Jersey State Legislature passed the State Agriculture Retention and Development Act, which resulted in the creation of the State Agriculture Development Committee (SADC). The SADC administers funding for farmland preservation

programs, establishes farmland preservation policy statewide, and operates the program in general. In April 1983, the Somerset County Board of Chosen Freeholders created the Somerset County Agriculture Development Board (SCADB), which oversees the County’s farmland preservation. Much

of the SCADB and staff’s work is taken up with the administration of the easement program that achieves actual preservation – advising farmers on transactions; assembling funding packages – often with other local, state, and even federal funds; and monitoring protected farms to assure that the terms of the easement are met year after year. Mediation is also a part of the SCADB’s work.

Teaching K-12 students about the county’s farming, and its open space and heritage in general, prepares them to be good citizens of the county and exposes them to dimensions of their world that can lead to careers and lifetime leisure interests. Seeking deeper engagement with county residents creates a virtuous cycle, whereby county residents enjoy the learning and activities associated with the county’s farms and return the favor by supporting further preservation.

In general, with the exception of its leadership related to 4-H youth development ¹¹¹, RCE focuses more on farmer training and technical assistance. The opening statement on the RCE website provides this overview: “RCE of Somerset County helps both youth and adults improve their knowledge and skills, and resolve problems in the areas of food, nutrition, health and wellness; food safety; agriculture; environmental and natural resource management; and youth development. This is accomplished through the use of science-based knowledge and university research. RCE is an educational organization within the New

¹¹¹ <https://somerset.njaes.rutgers.edu/4h/>



The green shoots of a fall cover crop sprout through the stubble of a previous crop in a field in Hillsborough Township. This form of no-till (or low-till) agriculture with a following cover crop limits erosion harmful to streams, sequesters carbon, and is a conservation “best practice.”

Jersey Agricultural Experiment Station at Rutgers, The State University.”¹¹² RCE is further described in Section 5.9, Economic Development.

Following is a brief description of public outreach and educational programming pursued by these agencies.

Training

The extensive training opportunities made available to farmers is a more focused form of education. Both training and individualized technical assistance are important elements of the work of both the SCADB and RCE. Below, a latter part of this section summarizes the training called for in other sections of this plan.

Internships

Working with interns through the Raritan Scholars Program at Rutgers University has proven to be a highly beneficial experience for both students and SCADB. The program enables undergraduate students to spend at least 125 hours directly involved in a project that benefits the Raritan River Basin¹¹³ and has added to the County’s capacity for providing technical assistance to county farmers. For example, one intern, working in cooperation with the Somerset County Business Partnership, helped three farms enroll in the New Jersey Sustainable Business Registry, which recognizes such sustainable business practices being implemented as stormwater management; recycling/composting; fuel savings;

¹¹² <https://somerset.njaes.rutgers.edu/>

¹¹³ <http://raritan.rutgers.edu/raritan-scholars-looking-for-internship-proposals/>

erosion control; and use of renewable energy and energy efficiency measures. The program provides registered businesses with use of a logo, access to consulting hours, marketing materials, and advertising space on not only registry’s website but also the Somerset County Business Partnership’s website.¹¹⁴

Other internship projects have included researching emergency preparedness for farms and creating a template for the “Making Farmers Markets More Accessible” action item under Sustainable Jersey’s program encouraging local governments to take multiple steps toward greater sustainability (see the Farmland Preservation & Agricultural Development Plan, Section 5.10, Natural Resource Conservation, Sustainability, and Resiliency; and the Historic Preservation Plan, Section 7.4, Preservation Framework).

Publicity and Educational Programs

Publicity and educational programs promoting agriculture more generally by SCADB include National Agriculture Month and farm-to-school events.¹¹⁵ Recent public outreach and education activities undertaken by the SCADB, generally in relation to National Agriculture Month (March) or National Agriculture Day (mid-month in March), have included:

- A storymap, *Somerset County: Growing Our Future*, highlighting the growth and history of agriculture in Somerset County (2021);

- An activity booklet, *Somerset County Goes Hog Wild for Agriculture*, highlighting females in agriculture-(2020)
- A youth gallery exhibit, *What Does Agriculture Mean to You?* (part of the 2019 Weekend Journey Through the Past exhibit);
- A multigenerational public art project (2016);
- A gallery exhibit, *Agriculture in Art* (month of March 2016);
- A roundtable discussion with the New Jersey Secretary of Agriculture (2016);
- Library displays at various branches of the Somerset County Library System (2013-2015);
- A meeting devoted to Right-to-Farm and Agritourism for municipal officials and staff (2015);
- A “Reading and Art” project focused on potatoes for children at the Bound Brook Library (2015);
- A beekeeping presentation to seniors at the Franklin Senior Citizens Center (2015); and
- A “Reading and Learning” event to teach children how to plant a seed, held at the Bound Brook Library (2014).

Interpretation

If there are three basic levels of public outreach and education, as presented earlier in this section,

¹¹⁴ <http://registry.njsbdc.com/>

¹¹⁵<https://www.farmtoschool.org/our-network/new-jersey/>; see also, <https://nj.gov/agriculture/farmtoschool/>

interpretation represents a fourth, much higher level of effort to engage and offer learning opportunities to willing audiences. One pioneer of interpretation, Freeman Tilden, said in *Interpreting Our Heritage*, a book he wrote in 1957 for the National Park Service, “Through interpretation, understanding; through understanding, appreciation; through appreciation, protection.”¹¹⁶ Interpretive planning helps identify the themes, information, and relevance to be conveyed to audiences (and identify the audiences themselves) and then determine the best methods and media to be used in providing interpretation. The practice of interpretation is discussed in detail in Chapter 7 of the Somerset County Preservation Plan.

In the realm of Somerset County farming, there is almost no interpretation, other than what farms offer when visitors partake of agritourism, explaining the heritage of the farm and how the business is run. The county owns quite a few barns in parks or on other land managed by the Park Commission, most of which are restored, each of which could be interpreted to explain the county’s farming heritage. In addition, there are a number of historic sites relating to farming that are owned or managed by nonprofit historical organizations; these similarly offer opportunities for interpretation of farm heritage. To enlist historic sites (which at least expect to provide interpretation) and farms and farm-based product sellers (which generally do not) in a systemic approach to improving interpretation would first take organizing a collaborative network where operators have the opportunity to learn more about



possibilities. The SCC&HC, sister agency to SCADB, is best positioned for helping to lead a conversation about improving interpretation of farming and farm heritage.

The 2008 Farmland Preservation Plan envisioned creating a farm for public education events. Although that never happened through county initiative, in 2012, in Hillsborough Township along the Raritan River at the center of the county, Duke Farms opened as a major environmental education and farming program that is now a regional destination. It is further described in Chapter 8, Tourism, of the combined Somerset County Preservation Plan.

Other Educational Resources

Academic institutions readily available to Somerset County include both Rutgers University and Raritan Valley Community College, a bi-county community college serving Somerset and Hunterdon County residents and offering more than 90 associate degree and certificate programs to a student body of 8,200. In addition, the college offers professional development and personal enrichment courses as well as corporate training and small business assistance. Both institutions can be sources of student interns (see description of the Raritan Scholars program in the preceding discussion); interested faculty who can help design or present engaging programs; and

¹¹⁶ Freeman Tilden, *Interpreting Our Heritage*, 1957, 1st ed., p. 38.

organized classes and training programs to reinforce Somerset County's preservation programs.

C. Strategies and Priorities

The 2008 Farmland Plan, of which this Farmland Preservation & Agricultural Development Plan is an update, strongly states its support for public engagement:

Over the last 50 years, Somerset County and New Jersey have transformed from a largely rural and agricultural landscape to a more urban and suburban landscape. However, farming remains strong and viable in many portions of the state, including Somerset County. If the County's remaining agricultural areas are to survive and prosper, the non-farming public needs to be aware of, and be financially supportive of, the continuing economic, cultural, scenic, and agricultural contributions made by Somerset County's farmers. Public education and outreach will increase the recognition of the farm industry's importance to the non-agriculture resident, and should be continued and expanded whenever possible. Agritourism is one form of public outreach that exists in Somerset County, as is the annual 4-H Fair, and educational programs at schools. These should all be expanded wherever possible, and other public outreach mechanisms should be explored and instituted when feasible. (pp. 8-7)

Training for Farmers

The overarching economic approach needed to improve the viability of farming as an industry in Somerset County relies on enhancing farmer access to consumers, as discussed in detail Section 5.9,

Economic Development. Among the strategies for the SCADB are many that rely on training farmers on how to market their products, coordinate more on agritourism, and improve their connections to heritage and ecotourism planning.

Agricultural development in Somerset County must take advantage of sales of farm products that benefit from the proximity to high densities of people in a suburban environment, such as horticulture, equine, farm-to-table, and direct sales of local foods. Expansion of local food source partnerships with restaurants, schools, and service industries and of local food retail products and outlets is a critical strategy. For example, encouraging farmers to provide value-added products to the marketplace, such as jams and jellies (through RCE training), would help to expand the availability of local food products.

The ideas here build on training topics for farmers prescribed in the 2008 Farmland Preservation Plan, including hospitality training, marketing strategies and other, issue-specific workshops such as liability, grant, traffic, signage; a forum for farmers getting into agritourism to interact with those who already are involved; and publicizing state outreach programs that educate farmers about government grants and services (including technical support services for those entering into new agribusiness with value-added agricultural commodities) (pp. 6-13, 14, 17).

Thus, the updated Farmland Plan calls for a great deal of training for farmers, called out in Section 5.12, Strategy 5.4.A, which states the objective of educating existing and new farmers on methods to enhance profitability, with reliance on RCE as the primary responsible actor. Important topics to build into this program include:



A preserved lavender farm in the Skillman area, Montgomery Township.

- **Direct Sales:** Training is needed on such matters as the fundamentals of direct marketing operations, the various types of operations (farm stands, farmers' markets, community supported agriculture (CSA), etc.), and how to decide which direct sales option best fits the farm.
- **Agritourism:** Local farmers and municipal representatives surveyed during the development of this plan emphasized that technical assistance and training on the business of agritourism would be extremely helpful.
- **Value-Added Products:** Ensure that farmers are aware of the availability of Value-Added Producer Grants provided by the federal government. Provide technical support and workshops regarding the implementation of value-added farm production.
- **Organic Production:** The RCE office can hold education workshops regarding how farmers become organic and about federal financing that can cover up to 75 percent of certification costs.
- **Diversification:** Vegetable, fruit, and horticultural products have high sales and profitability potential, particularly in a suburban region. Farmers need to be educated about the benefits of diversifying beyond field crops into these alternative crops, as well as more specialty crops not found in supermarkets but of interest to the local population (e.g., ethnic foods, goats).
- **Marketing:** Stakeholders surveyed in the development of this plan emphasized the need to provide farmers with training on how best to market their products to customers, whether via website develop-

ment or other forms of publicity. RCE can provide guidance on marketing techniques as well as the availability of many free promotional channels, including *Jersey Fresh*, *Jersey Bred*, *Jersey Grown*, and *Jersey Equine* websites, Visit NJ Farms website, the Skylands website, and Somerset Tourism’s website.

- **Conservation Programs:** The federal government provides funding for conservation practices through a variety of grant programs, highlighted in Section 5.10, Natural Resource Conservation. Farmers can use this grant funding both to enhance conservation on their land and to supplement their income.
- **Related ideas discussed in Section 5.9, Economic Development** (Subsection G, General Strategies for Agriculture, “Support the Education and Training of Farmers”) include:
 - Enhancing farmers’ knowledge of business management;
 - Making farmers are aware of the extensive, helpful educational information available on the NJDA, USDA, and Sustainable Agriculture Research & Education (SARE) websites; and
 - Training farmers about managing safety risks.



In addition, while the RCE is the natural institution to provide training and technical assistance to farmers,

the SCADB will work to encourage regular communication with the local farmer community and the RCE to gather feedback on the education provided and help to identify the most useful areas of training.

A Periodic Roundtable

Enhancing farmers’ capacity to compete in the changing environment of farming in a suburban environment (and in the twenty-first century in general), however, is only half of the equation. Somerset County residents themselves must be regarded as a major audience for public outreach and education about the County’s farmland preservation program, the county’s farmers and farms, and opportunities to enjoy both.

Thus, Section 5.12, Strategy 5.1.A, states the objective of creating an annual forum following adoption of the Farmland Preservation & Agricultural Development Plan, with the first to take place in 2022 or 2023 with enough lead time for the planning and marketing effort this concept entails. A first step in this initiative is to organize collaboration among multiple responsible actors: SCADB and staff within the Somerset County Office of Planning, Policy and Economic Development, with assistance from the Somerset County Green Leadership Hub (which focuses on helping local government entities succeed in implementing sustainability best management practices, including support for agriculture and local foods), the Somerset-Union Soil Conservation District, Rutgers Cooperative Extension, and Healthier Somerset.

Such an event can feature presentations, breakout workshops, and exhibits with experts on topics

ranging from preservation issues to enhancing farm profitability to funding sources for conservation projects, and more.

The roundtable is intended to cultivate the synergy needed to ensure the success of the coordinated efforts listed in this updated plan and build energy and enthusiasm across the county for its mission.

On occasion, such an event might be designed to reach an audience of non-farmers, featuring tastings from restaurants offering local foods, a mock farmers' market with exhibits from the many local farm stands and markets, cooking demonstrations, and other entertaining and educational activities attractive to families and children. Somerset County Tourism and the Somerset County Business Partnership could help to market such a special event and advise on



shaping it into an economically impactful gathering and serving local needs and interests. Ultimately, the goal for these consumers would be to improve their knowledge of how to access and enjoy local foods throughout the community. County staffing for such an effort might be supplemented through a consulting contract with a knowledgeable event organizer. Federal and state grants may also be available to support the cost of mounting such a special event.

Continued Work

Publicity and reports to the public: The SCADB will continue to hold (and publicize) annual meetings and publish periodic reports to update partners on progress in meeting this plan's preservation and policy goals.

Other actions: SCADB will also continue to carry out the actions prescribed in the original 2008 plan, which also identify target audiences:

- Educate county residents about local farming, and work with municipalities in order to minimize right-to-farm conflicts (p. E-3);
- Educate municipalities about building agricultural retention elements and regulations supportive of agritourism into their master plans and ordinances (p. 6-13); and
- For K-12 students and other farm visitors, identify and compile farm-related curriculum for different grade levels; provide opportunities for farmers to participate in school programs (on their farms or in the schools); develop "fast facts" to educate farm visitors; and act as a clearinghouse or coordinating link between schools and available farmers (pp. 6-14,15).

Staffing for Farmer Training, Public Outreach, and Education

As stated in the 2008 plan, "Many of the ideas suggested here require manpower as much as dollar power and the SCADB is seeking to expand its staff, which should help in its ability to provide outreach to farmers, municipalities, event organizers, business organizations and individual citizens to expand marketing efforts and awareness and acceptance of agriculture as a valuable contributor to the economy and quality of life in Somerset County." (p. 6-33) This need is further recognized in this plan's update, Section 5.12, Strategy 5.6.A ("Supplement available administrative resources for preservation and agricultural industry promotion efforts"), which

states that “the county will explore opportunities to expand the staffing of the Office of Planning, Policy and Economic Development related to agricultural promotion and preservation and supporting the staffing needs of the SCADB....Spending on staffing to support the many ideas in this plan to support the local agricultural industry can also result in more profitable farms and greater food security – the return on investment may not be as direct as with gaining outside dollars directly for preservation, but it would be a substantial benefit to Somerset County, nonetheless.” There are many opportunities for outreach and education, in collaboration with others, that will require the attention of staff to provide momentum and timely achievement.

A New Initiative to Support Agritourism (and Inform County Residents)

The Somerset County Preservation Plan’s Chapter 8, Tourism, includes Strategy T-7 encouraging the development of a marketing program of consistent messaging and up-to-date, accurate information regarding local food opportunities in the county available to both local audiences and visitors, including using events such as fairs and festivals to market the local farming community’s products and benefits. A major new initiative for consideration in this regard, and in preparation or follow-up to the

conference and exhibit, is creation of a booklet, map, website, or other “farm tour/local foods” guide product that would enable local consumers to find local foods, visit local farms, and understand their role in supporting the county’s agricultural community.

D. Conclusion

This section has examined existing public outreach, educational, and interpretive programs and described opportunities. Chapter 7 of the Somerset County Preservation Plan approaches the topic more holistically, both within the individual efforts to support open space, farms and farmland, and history and historic sites, and also across these planning topics. It concludes that existing programs are robust and commendable, but there are opportunities to enhance them. As always, such enhancements will require adequate staffing, investment, and collaboration among stakeholders – not simply by the commissioners, Park Commission, SCADB, and SCC&HC, but also operators of other natural sites, farm owners, and local-history organizations. Building an enthusiastic and knowledgeable constituency, however, is well worth the effort, for such outreach and education can result in greater public goodwill and support for Somerset County’s preservation objectives.

5.12. Moving Forward: Goals and Strategies for Farmland Preservation and Agricultural Development

Agriculture remains an integral part of Somerset County's heritage, culture, and economy and preserving farmland for future generations is a priority for the County and its municipalities. And, as the Covid-19 pandemic that began in early 2020 has shown in stark light, local food security is a policy goal not to be taken for granted. With this updated Farmland Preservation & Agricultural Development Plan, Somerset County continues the ambitious goal from 2008 of growing the existing 8,393 acres of preserved farmland to 16,000 acres, or by more than 7,000 acres.

This last section of this plan lays out strategies designed to enable the Somerset County Agricultural Development Board (SCADB) and its partners to achieve this preservation goal in order to sustain a stable supply of farmland. They are also designed to enable them to collaborate to develop the agricultural economy that depends on farmland across the county, preserved or not. Beneath the overarching goal of 16,000 acres, the strategies are organized by a series of goals – critical topics – that describe the overall program.

A. Introduction

Farmland preservation and agricultural development are multifaceted areas of policy that touch multiple levels of government and various economic actors. Somerset County by no means can or should undertake all of the important ideas documented here. Thus, strategies below are directed toward a variety of actors, not only SCADB but also ranging from the private sector to municipalities up to state government. Each recommendation includes the primary actor(s) identified as responsible as well as potential funding sources if applicable.

Key Topics

Goals and strategies in this section are organized to reflect the need for more public outreach and the critical factors limiting farmland preservation described in Section 6.5, Farmland Preservation Program:

- Building Momentum through Public Outreach
- Funding and Projected Costs
- Land Supply and Landowner Interest
- Farmer Supply
- Administrative Resources

B. The Farmland Preservation Goal

This plan sets the ambitious goal of preserving 6,300 more acres of eligible farmland by 2030, above and beyond the currently preserved figure of 8,393 acres:

- **One-year target:** 10,150 acres (446 acres net by 2022)
- **Five-year target:** 13,000 acres (2,850 acres net cumulative by 2026, an accelerated rate of 713 acres per year averaged over four years)
- **Ten-year target:** 16,000 acres (6,300 acres net cumulative, rounded, by 2031, or a rate of 600 acres per year averaged over five years)

C. Goals and Strategies

KEY TOPIC: Building Momentum through Public Outreach

Goal 5.1: Build community awareness and support for local farming and local foods.

The forum described in Strategy 5.1.A is intended to add energy to existing coordination among SCADB and other stakeholders and build understanding and enthusiasm across the county for the mission of this plan. As continuing follow-up, the SCADB will hold an annual forum and publish periodic reports to update partners on progress in meeting this plan's preservation and policy goals. Other forms of public outreach and education that can build community interest and support are discussed in Chapter 7 of the Somerset County Preservation Plan, which focuses on those topics.

¹¹⁷ For a starting point, see <https://sustainableagriculture.net/publications/grassrootsguide/farm-bill-programs-and-grants/>.

The greater, community-wide realization of the urgency of local food security because of the Covid-19 global pandemic beginning in 2020 has impressed on policymakers, consumers, and farmers alike the essential nature of local food production. This can be one theme of the forum to draw many partners into the discussion of the need to promote farming in Somerset County. (See more discussion with Goal 5.4.) Mutual education, among farmers, policymakers, and consumers, and multiple institutions supporting community health, is needed now more than ever to provide new pathways to successful farming in Somerset County.

Strategy 5.1.A: Create a Somerset County farmland preservation forum.

Primary Responsible Actors: Somerset County Agricultural Development Board (SCADB), with assistance from the Somerset County Office of Planning, Policy and Economic Development, Rutgers Cooperative Extension (RCE), the Somerset-Union Soil Conservation District, the Somerset County Green Leadership Hub, the Somerset County Business Partnership (with Somerset Tourism), and Healthier Somerset

Potential Funding Source: A grant writer experienced in research may be able to pair this idea with existing governmental grant funding for marketing and farmer education ¹¹⁷ and community health initiatives related to food access.¹¹⁸

Because of the breadth of recommendations and the holistic approach needed to both bolster Somerset County agriculture and enhance farmland preservation, the County will convene its first forum

¹¹⁸ For a starting point, see <http://thefoodtrust.org/centerforhealthyfoodaccess>.

in 2022 or 2023, with enough lead time for the planning and marketing this concept entails. Such an annual event – going well above and beyond the traditional and well-regarded county fair and to be held after the farming season – has the potential over time to showcase a wide variety of agricultural preservation strategies, programs, and products, but also to attract participants from beyond the county.

To be organized by the SCADB as assisted by county staff, Rutgers Cooperative Extension (RCE), and the Somerset-Union Soil Conservation District, this gathering's design will include multiple actors involved in this plan's recommendations. The agenda might include presentations and breakout groups with experts on topics ranging from preservation issues to enhancing farm profitability. For physical gatherings, participants can experience exhibits by local farmers and businesses using local foods. The Somerset County Green Leadership Hub, with its focus on helping local government entities succeed in implementing sustainability best-management practices, including supporting local agriculture, and Healthier Somerset, with its concern for access to healthy affordable food, are excellent candidates to provide added coordination, presentations, and exhibits for the conference. Somerset Tourism and the Somerset County Business Partnership can help to market this event and advise on shaping it into an economically impactful gathering.

This strategy offers an opportunity for supporting a number of other strategies presented below, including but not limited to 5.2.C, encouraging innovative municipal preservation planning techniques; 5.4.C, developing linkages in the business

community between local food sources and retailers; and 5.4.D, coordinating local food marketing and agritourism opportunities.

KEY TOPIC: Funding and Projected Costs

The farmland preservation program in Somerset County faces a diminished state funding source, declining municipal funding, and growing land values. Funding, therefore, is the most critical limiting factor for Somerset County's farmland preservation program. It will be difficult for the County to reach its acreage goals if relying solely on the private property easement programs that are supported largely by state, county, and municipal funding.

Strategy 5.1.B: Explore ways to improve the local food system and access to healthy, affordable, local food for all county residents, to attain greater local food

security and support wellness.

Primary Responsible Actors: SCADB, Healthier Somerset, Rutgers Center for Food Systems Sustainability (CFSS), Rutgers Cooperative Extension, Somerset County Business Partnership

Potential Funding Source: County appropriations, foundations, local donors

Healthier Somerset's 2019-2021 *Somerset County Community Health Improvement Plan* notes, "In addition to financial and environmental barriers, access to healthy foods presents a barrier to maintaining one's personal health. In order to eat healthier, people need better access to healthy and affordable food...Approximately 7% of Somerset





Local Foods - A Bridge to Better Health

Healthier Somerset's initiative "Building Bridges to Better Health" (BBBH), serving Bound Brook and South Bound Brook, includes a focus on access to healthy food. The program seeks to improve the health of underserved populations through communication about resources and services and free and low-cost programs, including school-based programs. Among the program's recent successes:

- Bound Brook launched a community garden in the spring of 2019 (pictured above), and South Bound Brook plans to start a community garden at the Abraham Staats House.
- A farmer's market voucher program has helped improve residents' access to fresh produce for the past three years. Both towns are exploring options for a farmer's market.
- Produce was donated to the Salvation Army Food Pantry in Bound Brook for the past three years. Duke Farms donates the food, and the Sheriff's Office delivers it.

(Photo and text courtesy Healthier Somerset and BBBH, <https://www.buildingbridgestobetterhealth.org/>)

County residents had limited access to healthy food" in the community needs assessment done in the lead-up to the plan itself.¹¹⁹ This point, however, is lost in the plan's (highly important) focus, in "Priority 4: Access to Care," on access to health care services. Access to healthy food is regarded as foundational to human health and wellness; access to healthy *local* food is likely limited for a much larger number of county residents than 7 percent. The planning done to create the recommendations in this final section of the Farmland Preservation & Agricultural Development Plan has identified an opportunity: The next round of planning for Somerset County wellness could include a greater focus on local food policy and address ways to improve the local food system overall. Perhaps Healthier Somerset could help pave the way for such action by including a survey of access to local, healthy, affordable foods in its next community health assessment and the post-2021 version of its community health improvement plan. Additional resources for such analysis are potentially available from Rutgers, both Rutgers Cooperative Extension and the Rutgers Center for Food Systems Sustainability (CFSS).

Other communities are taking similar approaches through such actions as establishing local food councils, conducting food policy audits¹²⁰, and creating local food action plans. For example, Franklin County, OH (the home of the state capital, Columbus), established a Food Policy Council, which in 2012 conducted a food policy audit.¹²¹ In 2013,

¹¹⁹<https://www.healthiersomerset.org/wp-content/uploads/2020/07/2019-RWJUH-SOM-CHIP.pdf>, p. 16.

¹²⁰ One excellent resource is available here: <https://fyi.extension.wisc.edu/foodsystemstoolkit/food-policy-audit/>

¹²¹ The Franklin County Food Policy Audit, by Caitlin Marquis (Local Food Systems Intern, Mid-Ohio Regional Planning Commission), available at <https://static1.squarespace.com/static/53068bfee4b>

the council partnered with Columbus Public Health to create a Food Balance Ratio Analysis “in order to identify areas of Columbus where it may be more difficult to buy fresh, nutritious food compared to foods of poorer quality....Knowing where these areas are offers an opportunity for more targeted, more effective community interventions. [The analysis] offers a geographic picture of these ‘unbalanced’ food areas.” In 2014, the region created its *Columbus & Franklin County Local Food Action Plan*, which “provides common goals and actions to unify efforts in growing, processing, transporting, selling, consuming and disposing of food. The Plan seeks to address inequalities in access to healthy food, affordable food, and local food.” A website maintained by the council describes the plan and also provides links to resources for “food access.”¹²²



The potential for this more holistic, community-wide, community-led work to support the local food system would help to power investigation of the many ideas described in Section 5.9, Agricultural Development (especially but not limited to Subsection G entitled General Strategies for Agriculture), as well as strategies advanced in this section under Goal 5.4, “Increase economic opportunity and food security in Somerset County through farming.” As staff resources available to the SCADB and the County’s farmland preservation program are limited and focused on the goal of preserving farmland,

creativity and partners are needed to address the full scope of the county’s needs as described in this plan.

Goal 5.2: Build partnerships to preserve farmland.

Strategy 5.2.A: Coordinate preservation efforts with local land trusts.

Primary Responsible Actors: Somerset County Agricultural Development Board (SCADB), local land trusts

Potential Funding Source: N/A

A land trust is a charitable organization that acquires land or conservation easements (or both) and stewards land or easements (or both), for conservation purposes. As a nonprofit, a land trust has greater flexibility than governmental agencies to scale staff and resources up and down in times of need, as well as fewer decision-making barriers. Therefore, such organizations are in a unique position both to move faster than public agencies to preserve land and to assist local governments with the management of that land.

The Somerset County Preservation Plan overall has identified a new concept of protecting “farmbelts” beyond the Agriculture Development Area’s project areas. It also supports continuing efforts under the County’s Open Space Preservation efforts to assemble continuous swaths of preserved lands either through the Open Space Preservation

0b4d1ce2e0bcf/t/5306a8dce4b04d9d2fa96cbd/1392945372437/FCFPA+Report+Final+w+pics.pdf. In particular, the report offers “recommendations for future audits,” including best practices.

¹²² <http://www.fclocalfoodcouncil.org/food-policy-franklin-county-resources> and <https://www.columbus.gov/publichealth/programs/Local-Food-Plan/Implementing-the-Plan/>

Program, or through the Farmland Preservation Program. Indeed, if mutually acceptable to the owner and the funder or funders, some portion of farmland identified for incorporation into greenways could even be preserved through open space funding, which can enable potential recreational use sooner or later. (Greenways, defined in this plan as natural corridors providing environmental and ecological benefits, do not necessarily require recreational access, but they are enhanced by such access – trails, boating and fishing access, etc.). The County may pursue properties outside of the ADAs, without State participation, where it makes most sense to preserve.

When key parcels come on the market in such desirable locations, the County will need to have the means and support to move as quickly as possible to respond to opportunities for acquiring land and easements. Land trusts can supply this quick response. In addition, the County is positioned best simply to acquire easements from current owners; in some situations, however, a land trust may be needed to acquire the entire parcel, create a conservation easement through the County program, and then sell the protected property to a different owner. Finally, in cases where a land trust decides to acquire and retain title to farmland, it can maintain the land's agricultural nature through leases to farmers for a variety of purposes. Land trust farm leases can be a particularly useful tool to increase land availability for new and beginning farmers.

An excellent example of the collaboration encouraged under this strategy is found in Section 5.10.C, concerning open space protection in the Highlands. In 2019 two properties were protected in Bedminster Township with the assistance of the New Jersey Conservation Foundation and the Lamington Conservancy along

with funding from the New Jersey Highlands Council, SADC, and Somerset County (which received an agricultural conservation easement from one of the transactions).

There are five land trusts operating in Somerset County that are interested in preserving farmland (generally in support of open space goals):

- **Montgomery Friends of Open Space:** MFOS was founded in 2002 and operates a farmers' market every summer in Montgomery Township.
- **New Jersey Conservation Foundation:** This organization has assisted in permanently preserving more than 6,500 acres of open space and farmland within Somerset County. In the past 10 years, the foundation has been focusing preservation efforts in Bedminster Township (farmland) and Hillsborough Township (Sourlands).
- **Open Space Institute (OSI):** OSI operates in New Jersey, New York, and South Carolina, and has conserved more than 200,000 acres across those states with a staff of nearly forty.
- **Passaic River Coalition Land Trust:** Focused on conserving lands in the Passaic River watershed in New Jersey, the coalition has two full-time staff and manages nearly a thousand acres of dedicated open space, largely outside Somerset County (which occupies very little of the watershed). It remains a resource, however, for protecting parcels in the Passaic River watershed.
- **Raritan Headwaters Association:** With nine full-time staff, the association manages 6,340 acres in Somerset County.

Other land trusts that may be able to participate in the preservation of farmland in Somerset County, depending on location and resources involved, are described in the Open Space Preservation Plan within this Somerset County Preservation Plan:

- D&R Greenway Land Trust
- Lamington Conservancy
- The Land Conservancy of New Jersey
- The Nature Conservancy
- Natural Lands Trust (NJ)
- New Jersey Audubon Society
- Surlands Conservancy
- Trust for Public Land

SCADB leaders and Somerset County staff will work with nonprofit land conservation organizations to identify how the County can support them in ramping up preservation and management of agricultural land in the county. Local land trusts will be asked to serve as featured participants in the proposed Somerset County farmland preservation conference.



Strategy 5.2.B: Identify new partnering opportunities and grant funds.

Primary Responsible Actors: SCADB, local land trusts

Potential Funding Source: Somerset County Preservation Trust Fund

Related to Strategy 5.2.A, nonprofits often need access to a swift infusion of funding to initiate land-saving projects while they seek grants and donations to cover project costs – and sometimes a conservation buyer (a farmer or a landowner willing to buy and lease out the land for farming) to purchase land after development rights are removed

through a conservation easement transaction as part of the overall deal. As noted in discussion of the preceding recommendation concerning the advisability of encouraging greater land trust involvement, it is sometimes necessary to act as soon as a parcel comes onto the market, before all of these ingredients for a successful project are in place. For example, if the County were to seed a revolving no-interest loan fund with \$1 million, the County could support and incentivize nonprofits to participate in the state’s farmland preservation program for

nonprofits by assuring that such funding is readily available when necessary. That same million dollars can be used again and again as land trusts repay; one option would be to maintain such a fund as a special reserve within the Somerset County Trust Fund when not in use, as a part of the

funds allocated for farmland preservation. In such a way, nonprofit resources can be combined with state funding (up to 50 percent in the SADC’s nonprofit program), to supplement available county and municipal dollars, increasing local capacity to fund preservation.

Strategy 5.2.C: Encourage the use of innovative municipal preservation planning techniques.

Primary Responsible Actors: Municipalities

Potential Funding Source: N/A

With approximately half of the county in urban and suburban land use, the agricultural industry faces increasing competition for the remaining land base. Simply put, suburban residential development is crowding out the remaining county farmland because Somerset County is a highly desirable place to live. Also, as noted above, of the remaining



unpreserved land assessed as farmland, 38,715 acres, a little more than 18,000 acres are located in candidate farms, making it critical to preserve this shrinking pool of land that can be offered for preservation easements by potential applicants. Beyond supporting the viability of farming options and encouraging landowners to participate in preservation programs, the primary tools available to ensure that agricultural land remains agricultural stem from plans and zoning ordinances at the municipal level.

Section 5.4, Land Use Planning Context, provides an overview of the four primary techniques in use by municipalities in Somerset County to direct growth away from rural areas towards areas targeted for growth: cluster zoning, non-contiguous cluster zoning, transfer of development rights (TDR), and lot averaging. None of these strategies requires funding as they do not entail purchasing easements. They will also help to maintain Somerset County's highly desirable countryside, which overall is an asset to the County and municipalities in sustaining demand for housing, current or future.

In addition, these planning tools tie directly into the 1987 Somerset County Master Plan, which encouraged adoption of a variation of the Transfer of Development Rights (TDR) concept at the local level in order to require mandatory open space "set asides" and transfer the development rights to appropriate building sites elsewhere in the community.

In addition, the 1987 master plan encouraged the use of clustering and special site design techniques so that the values and heritage of the rural countryside and existing villages are preserved and enhanced. This approach may be especially appropriate for supporting the "farmbelt" concept advanced by this plan – doing as much as possible to preserve rural characteristics in allowing development of those parts of the county that are outside the agricultural project areas, but which are still rural. (Inside the agricultural project areas, the County would prefer to see as much agricultural land saved as possible.) For example, as expressed in Strategy 5.2.C, in areas where farming and open space are to be favored in the design of new development, municipalities could require

Municipal land use management strategies to protect farmland will also help to maintain Somerset County's highly desirable countryside, which overall is an asset to the county and municipalities in sustaining demand for housing, current or future.

non-farm development adjacent to working farms (especially if preserved) to contribute its own buffer areas designed to limit trespassing and right-to-farm conflict, rather allowing development that would all but force farms to provide such buffers on their own land.

The Somerset County farmland preservation forum described in Strategy 5.1.A is an ideal way to create a forum for New Jersey municipalities that have implemented these strategies successfully to date, providing an opportunity for local officials to learn from the experiences of others and employ the techniques in their own jurisdictions. As an alternative, SCADB could organize a separate gathering to exchange ideas specifically for municipalities seeking to protect farmland (and open space).

Greater understanding of opportunities for inter-municipal collaboration on implementing TDR approaches in New Jersey is especially needed.

On a national level, TDRs have proven to be the most successful among these non-acquisition strategies in preserving large tracts of farmland. Unlike cluster zoning and lot averaging, the use of TDRs fully redirects growth away from rural areas rather than concentrating it in one section of a site. In addition, TDRs do not rely on one developer moving development concentrations between two parcels of the same project as is done with noncontiguous cluster zoning. However, TDRs are also the tool that has been least implemented in Somerset County – adopted only in Bernards, Hillsborough, and Montgomery and rarely utilized in those jurisdictions.



It may be helpful to bring in outside advisors from counties in New Jersey and other states who have successfully used this tool. In New Jersey, Chesterfield and Lumberton townships in Burlington County are known for their successful TDR programs. Speakers from those jurisdictions can be invited to present at the Somerset County farmland preservation forum. Representatives from Montgomery County, Maryland, which has the most successful TDR program in the nation, would also be good resources.

Strategy 5.2.D: Encourage the revision of municipal ordinances to support local agricultural operations.

Primary Responsible Actors: Municipalities

Potential Funding Source: N/A

By providing flexible regulations that still protect health, safety, and welfare, municipalities can allow farmers the freedom to make a living and contribute to local food security while also being good neighbors and stewards of the environment:

- **Building Code Exemptions:** When deemed feasible, exempt farm structures from certain code requirements, such as height restrictions and setback requirements.
- **Agritourism and Value-Added Production:** Many local jurisdictions “restrict on-farm activities and uses such as meat processing, operating a creamery, food packing, and the size and operation of farm stands and other non-traditional agricultural activities.”¹²³ Municipalities should consider adopting flexible ordinances that permit food processing, direct sales, and agritourism on-site.
- **Support Services:** Since it is not just farmland that makes farming possible, allow accessory uses to agriculture such as veterinarians and equipment/supply dealers to be located in close proximity to

¹²³ *What our Region Grows: A Look at Agricultural Production and Demand in the Washington Area Foodshed*, by the Metropolitan Washington Council of Governments and the Regional Agricultural

Workgroup, December 2012, p. 18, <https://www.mwcog.org/documents/2019/01/18/what-our-region-grows-farmers-market-farming-urban-agriculture/>



Van Liew-Suydam House (1875) and barn. The property, owned and restored by the Meadows Foundation, is located in the Six Mile Run Historic District, Franklin Township, New Jersey's largest rural historic district listed in the National Register of Historic Places.

wildlife control ordinances that (a) ensure that farmers can hunt wildlife on their own land provided they maintain applicable licenses and follow restrictions regarding proximity to nearby dwellings, (b) protect the rights of farmers using other means of control such as noises, baits, or repellents, and (c) forbid residents from feeding deer, geese, or bears.

agricultural areas so they can serve farmers' needs.

- **Wildlife Management:** Deer, geese, and other wildlife cause millions of dollars in damage in New Jersey, not only to farmers but also to residents and other businesses in the form of landscape damage and automobile accidents. In interviews with local farmers, deer in particular were repeatedly mentioned as animals that have caused excessive damage to crops in recent years. Adopt flexible fencing ordinances that allow for types of fencing on farms that might not otherwise be desirable in residential areas. Such ordinances both acknowledge farmers' needs to prevent wildlife damage and avoid the need for SADC intervention (the SADC has the power to countermand municipal regulation if found to be adverse to farming; see Section 5.8, The Right to Farm). In addition, municipalities should consider adopting

- **Farm Marketing**

Space Set-Asides: Plan for agricultural marketing sites in future developments with major residential/ commercial projects, setting aside prime marketing sites for indoor and/or outdoor marketing venues for New Jersey-grown products. The food hall concept (grouping food stands providing both meals and produce) is an increasingly popular means of attracting visitors and serving residents. Unlike food courts in malls that provide shoppers with quick access to popular fast food chains, food halls typically group counter-sales by local artisan restaurants, butcher shops, delis, and other food providers under one roof. They are the modern version of the public markets still seen in a few older cities, like the Reading Terminal Market in Philadelphia (est. 1893), but generally smaller and with more places for customers to enjoy dining on-site.

- **Buffer Areas:** Require non-farm development adjacent to working farms (especially if preserved) to contribute its own buffer areas designed to limit trespassing and right-to-farm conflict, rather allowing development that would all but force farms to provide such buffers on their own land.
- **Temporary Signage for Marketing:** Adopt ordinances that permit temporary signage to promote agricultural events and seasonal activities. Such signage should include off-site signage directing local residents and tourists to farm sites and equestrian events and activities.
- **Labor Housing:** Consider passage of a farm labor housing ordinance at the municipal level. These ordinances establish farm labor housing as a permitted accessory use while still ensuring public health and safety. The American Farmland Trust has developed a model farm labor housing ordinance for Burlington County, NJ, that can serve as a model for Somerset County municipalities.
- **Energy Use:** Consider how and where to work with farmers to permit greater use of renewable energy generated for on-farm use. For more information on this topic, see Subsection 5.10.F, Energy Conservation Planning, and consult with SCADB.

KEY TOPICS: Land Supply and Landowner Interest, Farmer Supply

Somerset County's easement program relies entirely on landowners volunteering to sell or donate the development rights to their property. A critical need is to maintain enough interested landowners and enough land in farming that over time Somerset County's farmland preservation program can target

suitable properties. Furthermore, farmers need enough profitability to stay in farming so that there is a supply of farmers to preserve and work the land, and a conscious effort is needed to encourage a supply of new farmers.

Goal 5.3: Aggressively pursue efforts to preserve farmland in Somerset County.

Strategy 5.3.A: Increase the number of Candidate Farms.

Primary Responsible Actors: SCADB

Potential Funding Source: N/A

Candidate farms are farms "in waiting" for the right time for the owner and the availability of local and state (and sometimes federal) funds – they are, in effect, pre-qualified for the moment when everyone is ready to move on the idea of permanently preserving the land for farm use. Of the remaining unpreserved land in Somerset County that is assessed as farmland, 38,715 acres, a little more than 18,000 acres are located in candidate farms.

While there is some downside in setting landowner expectations that they will be able to readily sell their development rights sooner than might be reasonable given limited funding, there is great benefit in having a land supply ready when there *is* available funding. To encourage more landowners to enroll their farmland as Candidate Farms, as an early action resulting from this planning process, SCADB has removed its requirement that candidate farms be 25 acres or larger, to match the State Agriculture Development Committee (SADC) requirement of 10 acres or larger. SCADB could also impose additional requirements for accepting these smaller parcels as Candidate Farms, such as adjacency or close proximity to already-preserved farmland, open space, or designated greenway corridors (even though the farmland would generally not be identified for

recreational value, the act of keeping land in farming in such corridors can have environmental and scenic benefits).

One policy justification for this shift: smaller parcels of farmland can support production of local foods for local consumption – vegetables, fruits, animals. If farmland is protected, its price can be made lower for purchase by beginning farmers, who may not be able to afford the initial outlay needed for a larger farm operation.

Strategy 5.3.B: Increase availability of Preservation Trust Fund monies for farmland.

Primary Responsible Actors: Somerset County Board of Commissioners, Somerset County voters

Potential Funding Source: Somerset County Preservation Trust Fund

Somerset County, subject to annual budget decision-making by the Board of Commissioners with regard to the allocation spending by the Preservation Trust Fund, intends to increase the allocation on a yearly basis to the farmland program (that is, a greater amount from what is already collected by the trust fund).

A longer term strategy would be to require the increase of the Preservation Trust Fund overall by the Board of Commissioners in concert with the county’s voters. Such a strategy would first need careful study, development of policy and program justifications, and a campaign to explain the need to the public. If the

A further economic reason for preservation is the idea of economic development through preservation. Farmers who sell their development rights receive an influx of cash that can in turn be used to improve and/or expand agricultural operations (i.e., diversify, develop agritourism activities, expand marketing, build infrastructure for direct marketing, seek organic certification). Such spending tends to circulate locally, boosting its direct, indirect, and induced economic impacts (the “multiplier effect”).

overall amount of the funding devoted to the Preservation Trust Fund could be increased, Somerset County would have more funds available for not only farmland, but also open space and historic resources.

One immediately identifiable policy justification for reinforcing the capacity of the Preservation Trust

Fund is that the cost of land and easements for both farmland preservation and open space purchases has increased significantly since the last time voters were asked to support an increase, more than two decades ago in 1997, as described in Chapter 3 of the Preservation Plan and Section 5.6 here, Future Farmland Preservation. As discussed in the last part of this section, however, there is another limiting factor besides funding, which is assembling the administrative resources

that would be needed to amplify the number of farmland acres protected each year. Both needs should be addressed together.

For farmers drawn by high land values or other business or personal reasons to sell their land for development, many strategies in this entire section of the Somerset County Farmland Preservation & Agricultural Development Plan are designed to help them to remain in farming. In addition, county staff will work to convey the message to supporters working to sustain and expand funds for farmland preservation that a further economic reason for

preservation is the idea of economic development through preservation. Farmers who sell their development rights receive an influx of cash that can in turn be used to improve and/or expand agricultural operations (i.e., diversify, develop agritourism activities, expand marketing, build infrastructure for direct marketing, seek organic certification). Such spending tends to circulate locally, boosting its direct, indirect, and induced economic impacts (the “multiplier effect”).

Strategy 5.3.C: Increase the availability of publicly owned open space for long-term farm use.

Primary Responsible Actors: SCADB; Park Commission; NJ Green Acres Program

Potential Funding Source: N/A



The more stable, profitable farm operations there are in the county, the more the entire agricultural industry will benefit. For open space land owned by Somerset County not foreseeably needed for recreational development and capable of being leased for agriculture, advocate for state policy to allow the extension of agricultural lease terms – currently at a maximum of five years for agricultural operations – to 10 years or longer. This would encourage the up-front infrastructure investments farmers must make to install irrigation systems, construct fencing and storage, and purchase equipment.

Strategy 5.3.D: Investigate the feasibility of establishing one or more Agricultural Enterprise

Districts to reinforce the County’s Agricultural Development Area.

Primary Responsible Actors: SCADB, Somerset County Business Partnership, Somerset County Office of Planning, Policy and Economic Development

Potential Funding Source: N/A

The concept of an Agriculture Enterprise District began in Cumberland County’s Farmland Preservation Plan, where it is listed as a potential tool

to encourage farmers to preserve their land. In these districts, farmers who agree to preserve their land receive benefits in turn such as “streamlined and expedited water allocation certification, cost-free business plans, management and training

services, financial and estate planning, expedited approvals on government loans and costs shares, minimum wage offset grants, broader exemption from sales tax, and other incentives.”¹²⁴ In essence, Agriculture Enterprise Districts are a tool to both enhance the viability of the farming industry and to inspire additional farmers to preserve their land, and could complement Agricultural Development Areas established under state law.

Strategy 5.3.E: Continue to expand Agriculture Management Practices (AMPs).

Primary Responsible Actors: New Jersey State Agriculture Development Committee (SADC); SCADB

Potential Funding Source: N/A

¹²⁴ Delaware Valley Regional Planning Commission. (2009). *Farmland Preservation Plan for the County of*

Cumberland New Jersey. Retrieved from <https://www.dvrpc.org/reports/09009.pdf>.

New Jersey’s Right to Farm Act authorizes the SADC to designate AMPs and thus add over time to the list of protected agricultural practices and activities under the act. Recent additions include on-farm direct marketing, solar generation, beekeeping, and enhancements to existing equine industry protections. As additional AMPs are added, farmers on preserved land are provided with increased flexibility with how they can utilize their land as well as expanded protections under New Jersey’s Right to Farm Act, thus providing a source of encouragement to remain in farming (or keep the land in farming and lease to others). The SCADB will monitor local farming to communicate needs for AMPs over time to the SADC.



Strategy 5.3.F: Provide ongoing marketing, coordination, training, and technical expertise to stakeholders in the preservation program.

Primary Responsible Actor: SCADB, Somerset County Office of Planning, Policy and Economic Development

Potential Funding Source: N/A

The Somerset County farmland preservation forum described in Strategy 5.1.A is an ideal opportunity for county staff to extol the virtues of farmland preservation to municipalities and local farmers. Additional opportunities to sell the program to farmers include participating in local fairs and farm bureau meetings and making one-on-one appointments with owners of candidate farms and potential candidates. If farmers are not coming to the program, the program must go to the farmers.

Survey responses from stakeholders during the development of this plan indicate that issues remain that may tend to suppress landowner participation in the preservation program:

- High land values, which make selling for development an attractive option.
- The lengthy process to be approved for preservation, which can take up to two years.
- The detailed level of information and knowledge required to apply for preservation and the record-keeping and other administrative activities required following preservation.
 - Concern over easement restrictions regarding housing and agricultural practices (e.g., use of nutrients), agriculture-related businesses (greenhouses, wineries), nonagricultural uses (wind turbines, cell phone towers), and/or residential dwelling opportunities.

SCADB will continue to monitor trends and seek ways to streamline the administrative burden on both staff and farmers in maintaining the program, and also seek continued opportunities to educate farmers and other landowners about the program’s requirements.

Once farmers are interested in applying to preserve, in-depth technical support is provided to help them work through the detailed elements of the process. Also, communication channels must remain wide open while the application works through the process of review and approval. Even though the County may not be able to increase the speed with

which applications are processed, regular communication and transparency will increase farmer patience and improve their experience, therefore leading them to recommend preservation to others.

County staff already do provide these services, but the additional staffing resources recommended under Goal 5.6 will enable the SCADB to increase outreach and support.

Strategy 5.3.G: Carefully evaluate farm properties for impacts of farmland preservation on opportunities for historic preservation, trail access, alignment with greenway corridors, and open space conservation.

Primary Responsible Actors: SCADB, Somerset County Cultural & Heritage Commission, Park Commission

Potential Funding Source: N/A

Section 5.5. of this plan, in text concerning coordination with preservation programs for open space and historic resources, describes the need and procedures for evaluating farm properties for impacts of farmland preservation on opportunities for historic preservation, trail access, and alignment with greenway and open space conservation, and educating involved property owners about the specifics of such opportunities. Future agricultural conservation easements can be adjusted during the acquisition process to encourage trail access and the preservation of historic resources, subject to the willingness of the farm owner, which does not require a new SCADB policy. (Indeed, with regard to trail access, this practice is already in place.)



Goal 5.4: Increase economic opportunity and food security in Somerset County through farming.

As this Preservation Plan entered its final stages of completion in the first quarter of 2020, the global Covid-19 pandemic emerged. The experience has impressed on policymakers, consumers, and farmers alike the essential nature of local food production.

Preserving farmland and assuring local food production are not simply steps for promoting a high quality of life, but for promoting life, period. Just as local governments spend money to address other essential needs, they must pay attention to mutually supporting policies that encourage farmers to stay in business, conserve land for food production, and increase the access by local residents to safe, healthy, local foods. The strategies

here address both economic opportunity and enhancing local food security at one and the same time. Farmers cannot stay in business long enough to adapt to the new realities of local food demands and needs unless they are profitable.

Strategy 5.4.A: Educate existing and new farmers on methods to enhance profitability.

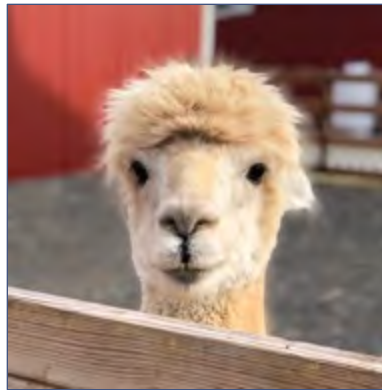
Primary Responsible Actors: Rutgers Cooperative Extension (RCE); SCADB

Potential Funding Source: N/A

The Somerset County RCE office provides education and technical assistance to property owners regarding best management practices that both protect natural resources and enhance farm economic viability. This is the ideal organization to continue and enhance educational programming and

training for farmers, while contributing to the enhancement of food security for local consumers across Somerset County. Important topics to build into this program include:

- **Direct Sales:** Direct marketing, or selling products straight to customers rather than through wholesalers, enables farmers to keep a larger percentage of the revenue from their product and sell at a price that actually reflects the cost of production. Training is needed on such matters as the fundamentals of direct marketing operations, the various types of operations (farm stands, farmers' markets, community supported agriculture (CSA), etc.), and how to decide which direct sales option best fits the farm.
- **Agritourism:** With profits from product sales declining or becoming unreliable, farms are increasingly turning towards agritourism (i.e., corn mazes, pumpkin patches, apple picking, pony rides) to generate on-farm supplemental income. Local farmers and municipal representatives surveyed during the development of this plan emphasized that technical assistance and training on the business of agritourism would be extremely helpful. (See also Strategies 5.4.D and 5.4.D.)
- **Value-Added Products:** Ensure that farmers are aware of the availability of Value-Added Producer Grants provided by



the federal government. Provide technical support and workshops regarding the implementation of value-added farm production.

- **Organic Production:** Organic crops are in high demand in the U.S., and receive a significant price premium over non-organic farming. Experience in Vermont and elsewhere has shown that farmers who are given sufficient support can be encouraged to move into organic production, resulting in both profitability and environmental benefits. The RCE office can hold education workshops regarding how farmers become organic and about federal financing that can cover up to 75 percent of certification costs.
 - **Diversification:** Vegetable, fruit, horticultural products, and meats have high sales and profitability potential, particularly in a suburban region. Farmers need to be educated about the benefits of diversifying beyond field crops into these alternative crops, as well as more specialty crops not found in supermarkets but of local interest (e.g., ethnic foods, goats).
- **Marketing:** Stakeholders surveyed in the development of this plan emphasized the need to provide farmers with training on how best to market their products to customers, whether via website development or other forms of publicity. RCE can provide guidance on marketing techniques as well as the availability of many free promotional channels, including Jersey Fresh, Jersey Bred, Jersey Grown,

and Jersey Equine websites, Visit NJ Farms website, the Skylands website, and Somerset Tourism's website.

- **Conservation Programs:** The federal government provides funding for conservation practices through a variety of grant programs, highlighted in Section 5.10, Natural Resource Conservation. Farmers can use this grant funding both to enhance conservation on their land and to supplement their income.

These subjects – in particular such hot-topic issues as direct marketing and agritourism – are also excellent candidates for matters to be covered at the proposed conference under Goal 5.1. In addition, while the RCE is the natural institution to provide training and technical to farmers, the SCADB will work to encourage regular communication with the local farmer community and the RCE to gather feedback on the education provided and help to identify the most useful areas of training.



Strategy 5.4.B: Expand the number of farmers' markets in Somerset County.

Primary Responsible Actors: Municipalities

Potential Funding Source: Federal Farmers' Market Promotion Program (FMPP), Sustainable Jersey Grants Program

Ten out of 21 municipalities in the county currently have farmers' markets. Expanding the geographic coverage of markets in the county will both provide producers with increased direct-sales opportunities and expand access to local foods for county residents,

thus enhancing local food security. An incentive for municipalities is that localities receive Sustainable Jersey credit (discussed in Section 5.10, Natural Resource Conservation) for operating farmers' markets and for actively promoting businesses that sell locally grown food.

Strategy 5.4.C: Develop linkages in the business community between local food sources and retailers.

Primary Responsible Actors: Somerset County Business Partnership (SCBP); SCADB

Potential Funding Source: Federal Specialty Crop Block Grants, Federal Local Food Promotion Program

The SCADB will work with the business community to encourage local farmers to join the SCBP. Members of the SCBP

gain access to a network of business owners throughout the county, and the relationships there can assist farmers to link directly with organizations that consume or sell agricultural goods. In particular, SCBP can assist farmers to build supplier relationships with:

- Landscaping firms;
- Restaurants;
- Hotels;
- Grocery stores;
- Other farms in need of livestock feed;
- Wineries in need of grapes;
- Other retail outlets; and
- Other services needed by farmers, such as legal and accounting.

In addition, the networking opportunities and business management training provided by the

SCBP can help farm owners enhance their processes to improve profits.

Strategy 5.4.D: Enhance coordination of local food marketing and agritourism opportunities in Somerset County.

Primary Responsible Actors: Somerset Tourism, SCBP, SCADB

Potential Funding Source: Federal Farmers’ Market Promotion Program (FMPP)

The literature has shown that lack of knowledge of availability of local food is the number one reason that both consumers do not shop for local foods and institutional food service directors have not used local food sources. SCADB, Somerset Tourism, and SCBP will work together to coordinate state, county, and municipal websites and written advertising materials to achieve consistent messaging and up-to-date, accurate information regarding local food opportunities in the county. In addition, the County will work with municipalities and nonprofits to utilize such events as fairs and festivals to market the local farming community’s products and benefits.



The county will explore the idea of launching a county or multi-county campaign challenging residents to spend a certain percentage of their food dollars on local produce. For example, North Carolina initiated its 10% Campaign in 2010, setting the goal for the state’s residents to spend at least 10 percent of their food budget on local food. The program has included polling residents to collect data as to whether the challenge has been successful.

Strategy 5.4.E: Establish regional food preparation and transportation infrastructure.

Primary Responsible Actor: Local farmers, New Jersey Farm Bureau

Potential Funding Source: Federal Local Food Promotion Program (LFPP), Federal Value-Added Producer Grants

A single farm may wish to avoid purchasing and maintaining the infrastructure needed to process, package, and transport food for sale to consumers, restaurants, and stores, even though value-added products can boost profits considerably – and also add considerably to food security in Somerset County. If multiple farms pool their resources and receive some additional assistance in the form of grants,

however, the prospect becomes much more feasible. With assistance from the Farm Bureau, local farmers in Somerset County should consider coordinating with other area farmers to purchase such infrastructure as a food preparation facility for value-added products, a grain mill, freezer trailer to transport slaughtered livestock, and/or meat processing facility.

Strategy 5.4.F: Support the equine industry in Somerset County.

Primary Responsible Actors: SCADB, Rutgers University Equine Science Center, RCE, Somerset Tourism

Potential Funding Source: N/A

After the Great Recession began in 2008, the equine industry nationwide was particularly affected. Discretionary spending plummeted and many owners and investors who needed to sell their

animals lost a great deal of money. This resulted in major shrinkage in the United States equine industry. Compounding these fiscal woes was the rising cost of animal feed following the recession – affecting local non-equine farmers as well. New Jersey’s horse industry was not immune to these problems¹²⁵ and the likelihood of their repetition and that other difficulties will arise as the result of the Covid-19 pandemic has become an even greater concern as this plan was being completed in late 2020. Despite the larger trends after 2008, however, Somerset County did not lose its equine industry during these years. In fact, its numbers of animals actually increased between 2005 and 2010 (farmers may have adapted to the reduction in sales to racing-related customers in part by moving to a non-racing customer base) and then leveled off slightly by 2015. (In Section 5.3, Agricultural Industry, see Tables 5.3.8 and 5.3.9.) Sales of equine represented 43 percent (\$2.5 million) of livestock sales in 2017.

The equine industry has great potential for increasing Somerset County’s agritourism. The Hamilton Farm, located in Bedminster, is home to the U.S. Equestrian Team and was recently listed in the National Register of Historic Places.¹²⁶ This is the perfect type of asset for agritourism/heritage tourism that can strengthen Somerset County’s long-term economic viability.

Section 5.9, Agricultural Economic Development, recommends that the County follow the

recommendations of NJDA in supporting its equine industry. Furthermore, county-specific recommendations include the following:

- **Right-to-farm education:** Educate municipalities regarding the rights of equine farmers contained in the SADC’s AMPs, especially the equine AMP adopted in 2008.
- **Promote the equine industry as a whole to county residents** to help it gain a wider audience, not only as a lifestyle for the wealthy, but as an accessible recreation activity for families.
- **Promote the agritourism aspect of the equine industry** through farm tours, horse and pony rides, and boarding and riding lessons.
- **Publicize the equine industry in Somerset County** in county publications and websites, and at local shows and festivals, such as the annual 4-H Fair.

Strategy 5.4.G: Ensure Somerset County farmers’ access to adequate water for farm operations.

Primary Responsible Actor: NJDEP and NJDA, with SCADB

Potential Funding Source: N/A

Regarding farmers who face such water allocation issues as difficulty receiving water permits, local strategies would have a limited impact given that regulation is primarily at the state level. However, the

¹²⁵ Rutgers Agricultural Experiment Station. (2014). *2014 State of the New Jersey Horse Racing Industry: Post-Report of the Governor’s Advisory Commission on New Jersey Gaming, Sports and Entertainment*. Retrieved from <https://esc.rutgers.edu/wp-content/uploads/2014/11/2014-Health-Of-Horse-Racing.pdf>.

¹²⁶ Tapinto Horses Staff. (2018). *Hamilton Farm, Home to the U.S. Equestrian Team Listed on Historic Registry*. Retrieved from <https://www.tapinto.net/towns/nutley/articles/hamilton-farm-home-to-the-u-dot-s-equestrian-team-l-8>

delegates of the 93rd State Agricultural Convention in 2008 made a number of reasonable recommendations regarding agricultural water allocation, as follows:

- “Request the NJDEP to amend their water allocation restrictions to exempt farming operations that have already implemented water management practices and reduced their water consumption from further water allocation reductions.”
- “Request the NJDA and NJDEP to explore the establishment of an Agricultural Water Allocation Credit Program, whereby farmers who employ water conservation practices that utilize water at a rate that is below their permit allocations at certain times, be permitted to correspondingly increase water use at other times. Such a program would encourage the implementation of water conservation measures within the agricultural community and improve the viability of the agricultural industry by allowing water usage to be tailored to fit the needs of each agricultural operation.



We also request that all agricultural water use authorizations that are reverted back to the NJDEP be set aside for agricultural use only.”

- “Ensure that all water-related plans, policies and programs of the state recognize the critical role that farmland plays in providing recharge of water to underlying aquifer systems and surface water supplies.”
- “Support legislation that aids the nursery and landscape industry in establishing a drought emergency protocol for implementation of predictable, effective and sound restrictions for future emergencies and working on this protocol with the nursery and landscape industry, the NJ Department of Environmental Protection, and the Department’s Agricultural Water Working Group prior to future drought emergencies.”¹²⁷

As New Jersey’s climate alters in ways predicted in the County’s hazard mitigation plan, including greater risks of drought, it is now more urgent to attend to these state policy ideas.¹²⁸ The SCADB will monitor farmers’ issues with water permits and allocations and, as appropriate, support efforts to incorporate the 2008 recommendations into state law.

¹²⁷ Delegates of the 93rd State Agricultural Convention. (2008). *2008 Resolutions*. Retrieved from: <http://newjersey.gov/agriculture/conventions/2008/water.html>.

¹²⁸ See Appendix FRF-8, a memo in Appendix K, Somerset County Flood Resiliency Framework, of the Somerset County Multi-Jurisdictional Hazard

Mitigation Plan, available at <https://www.co.somerset.nj.us/home/showpublisheddocument/34418/637002574179300000>. Among other points, the memo states that New Jersey can expect “longer periods without rainfall resulting in longer, drier growing seasons.” For further discussion in this plan, see Section 6.10, Natural Resource Conservation.

Strategy 5.4.H: Provide educational and technical assistance opportunities to farmers to encourage them to conserve energy.

Primary Responsible Actors: Somerset County Energy Council, SCADB, Rutgers Cooperative Extension (RCE), and NRCS

Potential Funding Source: N/A

Energy savings can enhance farm profitability. As discussed in Subsection 5.10.F, Energy Conservation Planning, Somerset County has prioritized energy conservation as a policy, coordinated since 2008 by the Somerset County Energy Council. The county will build on this strong foundation through collaboration between the SCADB and the Energy Council to identify which energy conservation technologies and strategies make the most sense for Somerset County farms. In coordination with Rutgers Cooperative Extension and NRCS partners, SCADB and the council will further reach out to farmers, educating them regarding energy conservation opportunities and providing technical support where necessary.



Strategy 5.4.I: Coordinate Somerset County and municipal agritourism opportunities.

Primary Responsible Actors: Somerset Tourism, SCADB, Somerset County Cultural & Heritage Commission, municipalities, nonprofit historical organizations

Potential Funding Source: Federal Specialty Crop Block Grants

There are many low-cost ways (primarily publicity and coordination) to develop multi-farm agritourism opportunities to drive tourism in the county, boost agricultural profits, and generally market the local food opportunities in Somerset. Examples include:

- Cross-marketing agritourism with heritage tourism and ecotourism. For example, farm tours can be organized in coordination with groups like the Somerset County Heritage Trail Association.
- Educational tours for school groups.
- An Open Farm Week, where local farms provide special agritourism activities and give visitors a behind-the-scenes look into their operations. Vermont holds such an event annually in August.¹²⁹
- And – once value-added farms using locally grown milk and grapes appear – developing the always-popular ideas of a local wine trail and ice cream tours to creameries and retail outlets using local products.

¹²⁹ <https://www.diginvt.com/blog/open-farm-week-events-in-central-vermont/>



Strategy 5.4.J: Support state policy improvements for liability exposure in agritourism.

Primary Responsible Actors: NJ Legislature, Somerset County Board of Commissioners, SCADB, Somerset Tourism

Potential Funding Source: N/A

One of the major challenges for farmers interested in developing agritourism is health and safety liability. Concerns over visitor injuries and other liability exposure, and the expense of liability insurance, may cause farmers to determine that agritourism is simply not worth it. The SCADB will work with other stakeholders to advocate for the introduction of state-level agritourism limited-liability legislation, modeled after similar laws in Virginia and North Carolina. Reducing the cost of liability insurance for local farmers engaged in agritourism might in turn encourage farmers to expand into such less-visible agritourism areas as hunting, fishing, and trapping.

Goal 5.5: Increase the number of next-generation farmers available to undertake farming in Somerset County.

Strategy 5.5.A: Provide training for new farmers.

Primary Responsible Actor: Rutgers Cooperative Extension (RCE)

Potential Funding Source: N/A

New farmers lack knowledge of how to install irrigation or drip tape systems and other tools of the trade that enhance production, particularly beginning farmers who did not grow up on a farm. Extension training can fill the gaps in their knowledge. In

addition, RCE can reach out to Somerset County Vocational-Technical High School and Raritan Valley Community College (RVCC) to determine how best to coordinate/enhance the existing training that the three institutions provide.

Beyond lack of knowledge, new farmers find it difficult to finance the up-front expense of maintaining valuable specialty crops with the prospect of sustainable profitability over several years until the plants, vines, bushes, or trees are ready to bear for the first time. RCE can include in their training information on the various loans available to them:

- **USDA Farm Service Agency (FSA) Loans:** FSA provides loans to beginning farmers and socially disadvantaged farmers, including loans to purchase capital and livestock and even loans to purchase property.¹³⁰
- **Farm Credit East:** This organization provides loans and financial services for farmers in Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, New York, and New Jersey. Of particular interest, its Farm Start program provides new farmers with a low-interest loan of up to \$75,000 and access to training and advisors on cash flow management.¹³¹
- **NJ Economic Development Authority (NJEDA):** This state agency provides loan opportunities for small businesses, including beginning farmers.¹³²

¹³⁰ <https://www.fsa.usda.gov/programs-and-services/farm-loan-programs/>; for further research on this topic, visit

<https://www.nal.usda.gov/afsic/grants-and-loans-farmers>

¹³¹ <https://www.farmcrediteast.com>

¹³² <https://www.njeda.com/>

Strategy 5.5.B: Link potential new farmers to available land in Somerset County.

Primary Responsible Actors: Rutgers Cooperative Extension (RCE) and SCADB

Potential Funding Source: Beginning Farmer and Rancher Development Program¹³³

New farmers in particular find access to land to be a major barrier for beginning farming. RCE and SCADB will work to ensure that existing farmers and new farmers are aware of New Jersey's land link.¹³⁴

KEY TOPIC: Administrative Resources**Goal 5.6: Direct county resources where possible to increase farmland preservation and encourage agricultural economic development.**

The administrative costs of implementing the County's farmland preservation program are substantial. By state law, the trust funds are reserved exclusively for land and easement acquisition and recreational improvements. If the coordination efforts described throughout this plan as necessary to promote preservation and support the agricultural industry are to be implemented, and if the County is to compete for the most desirable farmland in need of protection, staffing enhancements will be required.

Strategy 5.6.A: Supplement available administrative resources for preservation and agricultural industry promotion efforts.

Primary Responsible Actor: SCADB

Potential Funding Source: County appropriations

The county will explore opportunities to expand the staffing of the Office of Planning, Policy and Economic Development related to agricultural promotion and preservation and supporting the staffing needs of the SCADB. Additional staff could be able to add to the administrative hours needed to undertake the purchase of development rights with interested farmers and owners of Candidate Farms and provide enhanced coordination with the County's many partners as Somerset County seeks to support the local agricultural industry. Spending on staffing for preservation may be leveraged by the County to gain many thousands of dollars more from state Green Acres and other grant sources. Moreover, spending on staffing to support the many ideas in this plan to support the local agricultural industry can also result in more profitable farms and greater food security – the return on investment may not be as direct as with gaining outside dollars directly for preservation, but it would be a substantial benefit to Somerset County, nonetheless.

D. Conclusion: Moving Forward

This Farmland Preservation & Agricultural Development Plan is technically an update to Somerset County's 2008 Comprehensive Farmland Preservation Plan Update. Information and guidance in that plan remain quite useful and thus it will continue to provide an additional reference.

A critical insight in this update, more than a decade later, is that the SCADB and Somerset County leaders and farmers recognize even more that while it has proven possible to save farmland for posterity,

¹³³ <https://nifa.usda.gov/funding-opportunity/beginning-farmer-and-rancher-development-program-bfrdp>; see also, website of the National Young Farmers Coalition on the same topic,

<https://www.youngfarmers.org/beginning-farmer-and-rancher-development-program-bfrdp/>

¹³⁴ <https://www.njlandlink.org>



more and more, farming itself is threatened with economic forces for change. Without profitable farming, the temptation for farmers with unprotected land to sell for development can be the most logical individual choice. Without profitable farming, where will new farmers come from, who will want to farm the protected land? And without enough farmers, how will the farm economy support those services needed by farmers – the nearby equipment suppliers, the vets? And finally, without enough local farmers to provide safe, healthy, local food, will Somerset County be able to improve food security?

It should not be up to the farmers, alone, to make the changes and choices to keep Somerset County's long-standing farm economy alive and vibrant for future generations. Voters have long supported farmland preservation out of a consciousness of the importance of that heritage to their quality of life, resulting in a Preservation Trust Fund program that has given Somerset County considerable maneuverability in the marketplace of land protection.

Today, those voters must be enlisted in the effort to support farmers willing to produce food for local consumption, by making such foods widely available and accessible. "Eaters" in Somerset County – those making their meals at home, restaurant patrons, and the many whose meals are provided in institutions – are eager for fresh, locally grown food, and often willing to pay the premium that makes such production possible. For those who prepare their own food, knowing who has grown and made their foods is an added social benefit.

Wellness is another concern – healthy, plentiful food is the foundation of human health. Public policy to support farming and connect its benefits to all residents is emerging as a part of a national movement for healthy living and local food security.

Long ago, just before the middle of the nineteenth century when McCormick's reaper brought a technological revolution to farming and railroads changed markets for farm products, groups of neighboring farmers worked together to figure out how to prosper in the emerging conditions of a wholly new way of farming. In more recent times, about a hundred years ago, the Dust Bowl, the Great Depression, and rural electrification presented challenges that required new forms of governmental and cooperative agencies that still benefit farmers today – Rutgers Cooperative Extension and the Somerset-Union Soil Conservation District, for example, both come out of those solutions.

Today, all concerned have yet another challenge, to figure out how to collaborate with as many partners as possible to protect and maintain farmland, Somerset County's farming heritage, and a high quality of life in a suburbanizing landscape where farming and local food security are not favored by modern economics. This plan represents a way to move forward to meet such a challenge and create a new and renewed system of vibrant connections among all who have a stake in Somerset County's success in preserving farms and farming.

Ref. #	Pg. #	Summary: Goals & Strategies for Farmland Preservation & Agricultural Development	On-going	Short Term (1-3 years)	Mid-term (4-7 years)	Long Term (8-10 years)
		Goal 5.1: Build community awareness and support for local farming, local foods, and local food security.				
5.1.A	207	Create a Somerset County farmland preservation forum.	✓	✓		
5.1.B	208	Explore ways to improve the local food system and access to healthy, affordable, local food for all county residents, to attain greater local food security and support wellness.	✓	✓		
		Goal 5.2: Build partnerships to preserve farmland.				
5.2.A	210	Coordinate preservation efforts with local land trusts.	✓		✓	
5.2.B	212	Identify new partnering opportunities and grant funds.	✓		✓	
5.2.C	212	Encourage the use of innovative municipal preservation planning techniques.	✓		✓	
5.2.D	214	Encourage the revision of municipal ordinances to support local agricultural operations.	✓		✓	✓
		Goal 5.3: Aggressively pursue efforts to preserve farmland in Somerset County.				
5.3.A	216	Expand the number of Candidate Farms.	✓			✓
5.3.B	217	Increase availability of Preservation Trust Fund monies for farmland.	✓	✓		
5.3.C	218	Increase the availability of publicly owned open space for long-term farm use.		✓	✓	
5.3.D	218	Investigate the feasibility of establishing one or more Agricultural Enterprise Districts to reinforce the county's Agricultural Development Area.	✓		✓	
5.3.E	218	Continue to expand Agriculture Management Practices (AMPs).	✓			
5.3.F	219	Provide ongoing marketing, coordination, training, and technical expertise to stakeholders in the preservation program.	✓			
5.3.G	220	Carefully evaluate farm properties for impacts of farmland preservation on opportunities for historic preservation, trail access, alignment with greenway corridors, and open space conservation.	✓			
		Goal 5.4: Increase economic opportunity and food security in Somerset County through farming.				
5.4.A	220	Educate existing and new farmers on methods to enhance profitability.	✓			
5.4.B	222	Expand the number of farmers' markets in Somerset County.	✓		✓	
5.4.C	222	Develop linkages in the business community between local food sources and retailers.	✓		✓	

Ref. #	Pg. #	Summary: Goals & Strategies for Farmland Preservation & Agricultural Development	On-going	Short Term (1-3 years)	Mid-term (4-7 years)	Long Term (8-10 years)
5.4.D	223	Enhance coordination of local food marketing and agritourism opportunities in Somerset County.	✓		✓	
5.4.E	223	Establish regional food preparation and transportation infrastructure.				✓
5.4.F	223	Support the equine industry in Somerset County.	✓	✓		
5.4.G	224	Ensure Somerset County farmers' access to adequate water for farm operations.		✓	✓	
5.4.H	226	Provide educational and technical assistance opportunities to farmers to encourage them to conserve energy.	✓			
5.4.I	226	Coordinate Somerset County and municipal agritourism opportunities.	✓			
5.4.J	227	Support state policy improvements for liability exposure in agritourism.		✓	✓	
		Goal 5.5: Increase the number of next-generation farmers available to undertake farming in Somerset County.				
5.5.A	227	Provide training for new farmers.	✓		✓	
5.5.B	228	Link potential new farmers to available land in Somerset County	✓		✓	
		Farmland Preservation & Agricultural Development Plan				
		Goal 5.6: Direct county resources where possible to increase farmland preservation and encourage agricultural economic development.				
5.6.A	228	Supplement available administrative resources for preservation and agricultural industry promotion efforts.	✓	✓		



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