New Jersey Pinelands Commission
Long-Term Economic Monitoring Program

2009 Annual Report

Norman F. Tomasello, Vice Chairperson

John C. Stokes, Executive Director

December 2009

NEW JERSEY PINELANDS LONG-TERM ECONOMIC MONITORING PROGRAM
2009 ANNUAL REPORT

December 2009

Pinelands Commission
P.O. Box 359
New Lisbon, NJ 08064
(609) 894-7300
http://www.nj.gov/pinelands

Acknowledgments

The 2009 Annual Report of the Pinelands Long-Term Economic Monitoring Program was prepared by Pinelands Commission economist Tony O'Donnell.

The report will be available for review on the Pinelands Commission's web site at http://www.nj.gov/pinelands. The raw data used to create the report will also be available for download.

The report is also available from the Pinelands Commission free of charge on CD-ROM. Requests can be mailed to:

The Pinelands Commission
P.O. Box 359
New Lisbon, NJ 08064

Requests can also be made via phone at (609) 894-7300 or email at economist@njpines.state.nj.us

In addition, the 2009 Annual Report is available for review at the following libraries:

Alexander Library, Rutgers University, New Brunswick
The New Jersey State Library, Trenton
The Stockton State College Library, Pomona
The Burlington County College Library, Pemberton

For more information, please contact the Pinelands Commission at (609) 894-7300.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

Executive Summary

This report provides results of an ongoing economic monitoring program that tracks economic conditions in the Pinelands region. The Pinelands is the nation's first federal reserve. Established in 1978, it covers an area of over one million acres in the heart of Southern New Jersey. The Pinelands Comprehensive Management Plan (CMP) was adopted in 1981. The plan establishes minimum standards for land use throughout the region, which are implemented at the local level through municipal ordinances.

This report presents demographic data and describes key trends in the areas of population, real estate, economic growth, and municipal finance. Several core variables are continually monitored in each of these areas every year. A smaller number of supplemental variables are also examined but change from year to year. The basic unit of analysis is determined by the data. Municipal-level data is available in most cases, and county-level data is utilized when municipal data is not available. The general analytical approach involves comparing economic trends (from 1980 onward) of the Pinelands municipalities to other regions outside of the Pinelands (i.e., Non-Pinelands, Southern New Jersey, and the State). In this report, "The Pinelands" refers to an aggregate of 47 municipalities that have at least 10% of their land area within the state-designated Pinelands boundary. The "Non-Pinelands" refers to an aggregate of the remaining 155 municipalities in the eight counties of Southern New Jersey. In some instances, certain variables from the US Census are available below the municipal level at the census block or census block group level. Trends inside and outside the Pinelands boundary can be distinguished at those geographic levels.

Supplemental population estimate data for 2001 through 2007 reveal that the Pinelands municipalities continue to grow at a faster rate than the Non-Pinelands municipalities. According to the estimates, the Pinelands municipal population grew by 67,300 between 2000 and 2007, an increase of 10.9% (compared to an increase of 4.2% in the Non-Pinelands). Previous population analysis at the census block level revealed that 277,000 people lived within the actual Pinelands boundary in 2000, a 5.5% increase over the 1990 population of 262,510. By contrast, the population in the portion of the Pinelands municipalities that lie outside of the Pinelands boundary grew by 14.3%, from 361,009 in 1990 to 412,557 in 2000. Additional analysis of population demographics demonstrated that a number of Pinelands municipalities have a high concentration of senior residents. A census block group level analysis determined that a somewhat higher percentage of senior citizens live in the portion of Pinelands municipalities that lies outside the boundary compared to the portion inside the boundary.

New data for local property values and residential development reflect the continued and steady decline of the national real estate market in 2008. On average, more building permits continue to be issued in Pinelands municipalities than all other regions of the state. However, building permit activity decreased for the fifth consecutive year in the Pinelands in 2008, while also declining to an even greater extent in the Non-Pinelands. Close examination of the data reveals that this year's decline in activity was again uniform across the region. Most building permits were issued along the northern, eastern, and western edges of the Pinelands region where development pressures and permitted residential densities are greatest. Real estate transactions slowed significantly again in 2008, following 2007's sharp decline in activity. Real estate transactions dropped by more than 20% across all regions in 2008, with the Pinelands experiencing its largest one-year drop in activity (-31%) in the monitoring period covered by this report. Similar to building permits, the bulk of home sales took place along the northern, eastern, and western edges of the Pinelands

region. The inflation-adjusted median selling prices of homes dropped in all regions for the second consecutive year in 2008. This follows a five-year period from 2001-2006 that saw Pinelands home prices increase by 87%. For the third year in a row, the median sales price in the Pinelands was higher than in the Non-Pinelands (by 3.0%). As recently as 2001, Pinelands median sales prices were 7% lower than in the Non-Pinelands.

Findings in the area of economic growth revealed the impact of the national recession on New Jersey and the Pinelands region. After a one-year drop in unemployment in 2007, unemployment rates showed a dramatic, uniform increase across all regions in 2008. The unemployment rate rose 1.3% in the Pinelands and 1.4% in the Non-Pinelands in 2008, finishing the year at 6.0% and 6.2% respectively. Both the Pinelands and the Non-Pinelands are slightly above the national unemployment rate of 5.8%, while statewide (5.1% for 2008) the rate is considerably lower than the national rate. No new municipal data for employment, establishments, and wages was available this year, but previous analyses show that the Pinelands region has made significant gains in both employment and new establishments during the period from 1998 to 2003. The largest private employment sectors in Southern New Jersey in 2003 were retail, healthcare, and accommodation and food service. According to the US Census Bureau's 2002 Census of Retail Trade, per capita retail sales increased by 20% in the Pinelands from 1997 to 2002. In contrast, statewide per capita sales increased only 6.8% over the same period, and the Non-Pinelands essentially remained the same (+0.2%).

Assessed farmland acreage declined for the third straight year in 2006 across all regions, although the decrease in the Pinelands was much more moderate than the 8.4% drop in acreage experienced in 2005. Assessed acres in the Pinelands dropped by 1.3% in 2006, while farm acreage decreased in the Non-Pinelands in 2006 by 0.4%. This marked the seventh consecutive year of decline in acreage for the Non-Pinelands, and the third consecutive year of decline in the Pinelands. Since one-year changes in acreage can be affected by seasonal factors such as weather and economic conditions, it is often more helpful to look at five-year averages to confirm trends in agriculture. In this respect, somewhat more encouraging news comes from the U.S. Census of Agriculture. According to the 2007 census, the seven Pinelands counties now account for more than half of the agricultural sales statewide. They continue to be more efficient than the rest of the state, achieving this level of sales while comprising only 35% of acres farmed statewide. However, the five-year trend in farm acreage mirrors the most recent annual data available: over the five-year period from 2002 to 2007, Pinelands counties decreased their acres in farming by 12.5% while the remainder of the state experienced a 6.9% decline in farm acreage. Favorable growing and economic conditions led to across-the-board increases in prices, production, and value of utilized production for both the cranberry and blueberry industries in 2007. For the year, cranberry prices increased by 6% while production increased by 11%. This led to an overall 18% increase in the value of utilized production for cranberries in 2007. Meanwhile, the blueberry industry followed the explosive growth of 2006 with another solid year in 2007. Blueberry prices increased 1% on the year while production increased by 4%, resulting in a value of utilized production increase of 5% in 2007. This marks the third consecutive year that the value of utilized production for blueberries set an all-time high. In addition to the annual monitoring of the cranberry and blueberry industries, this year's report also has expanded its coverage to identify other important agricultural commodities in the Pinelands. Farmland assessed acres were calculated from the 2006 data across 117 different agricultural commodities, and growing patterns were isolated for

Pinelands and Non-Pinelands municipalities. Nine additional crops were found to have a significant critical mass in the Pinelands. The following crops had at least 500 acres planted in the Pinelands in 2006, in addition to accounting for at least 25% of the entire State's acreage for that commodity: Sweet potatoes, snap beans, cabbage, sod, unattached woodland, cut flowers, sweet corn, lettuce, and bedding plants.

Monitoring in the municipal finance category indicates that the Pinelands' financial picture remains relatively strong compared to the rest of South Jersey. Historically, average residential tax bills and effective property tax rates have been lower in the Pinelands than the remainder of the State. The latest data reinforces the positive gap between property taxes in the Pinelands region versus other regions. The Pinelands was the only region to experience a decrease in average residential property tax bills in 2008 (Pines -0.5% vs. +0.1% for the Non-Pines and +0.4% Statewide). The average total residential tax bills were $756 lower in the Pinelands than in the Non-Pinelands in 2008. After 10 consecutive years of increases, equalized property values began to fall in all regions of the state in 2008 as a result of the national downturn in real estate. However, the Pinelands region registered a decrease of just 1.5% compared to a decrease in the Non-Pinelands of 2.2% for the year. As a result of the drop in property values, effective tax rates halted their string of seven consecutive years of decreases across all regions. For the year, effective taxes remained unchanged in the Pinelands while increasing slightly in both the Non-Pinelands and statewide (+0.5% and +1.1% respectively). Data on local municipal-purpose revenues indicated that the local municipal budgets of both the Pinelands and Non-Pinelands municipalities returned to previous levels in 2008 after a large, one-year decrease in 2007 that was due to a drop in miscellaneous tax receipts. State aid decreased to all regions in 2008, falling by 6.1% in the Pinelands and by 11.4% in the Non-Pinelands. Updated statistics collected for 2008 continue to show that the Pinelands have a greater percentage of valuation in the vacant and residential categories than the Non-Pinelands region. The percentage of valuation in the vacant category continued to decrease, while the percentage in valuation in the residential category continued to increase. Analysis of a new supplemental variable for 2008 indicates that the Pinelands has a higher proportion of its assessed property values in tax exempt categories than in the Non-Pinelands, with public uses (e.g parks and forest, prisons, and developmental centers) being the predominant cause of the difference between the two regions.

In addition to ongoing data collection and analysis, special studies represent the second major component of the economic monitoring program. Because the overall trends tracked by the Long-Term Economic Monitoring Program can mask the conditions of individual municipalities, a current special study focuses on characterizing and identifying municipalities that are experiencing poor fiscal health. Although difficult to define, poor fiscal health can be described as being below a given standard with respect to municipalities' social, economic, physical, and fiscal conditions. The project is being administered by Pinelands Commission staff and conducted in consultation with the Pinelands Municipal Council. A preliminary draft of the report for the project was released in July 2008 and may ultimately provide a basis for legislation to allocate special aid to the most strained towns.

1. Introduction

1.1 The Long-Term Economic Monitoring Program

The Pinelands National Reserve was established in 1978 and is the nation's first federal reserve. It covers an area of over one million acres in the heart of southern New Jersey. The Pinelands Comprehensive Management Plan (CMP) was adopted in 1981 and manages land use activities at regional and local levels. A blend of federal, state, and local programs is responsible for safeguarding the environmental and cultural resources of the region. Of particular importance to the regional economy are land use policies and controls that are included in the CMP and are implemented by municipalities. Some of these policies and controls significantly limit development in designated Preservation, Forest, and Agricultural management areas and encourage development in other districts, particularly Regional Growth and Town Areas. These growth areas tend to be located in and around already developed areas, many of which have access to central sewer systems and other infrastructure. Recent studies have suggested that the CMP has successfully steered growth away from conservation areas toward growth areas.[1]

Of major interest to landowners, residents, and businesses in the region is the economic impact of the regulations on land values, real estate markets, local government finances, and the economic performance of farms and businesses. A number of studies have been conducted since the inception of the CMP that have addressed these issues (see Appendix A). These efforts, while directed at measuring the short-term impacts of the CMP, have recognized the importance of monitoring economic and fiscal impacts over the long term.

As part of its second full review of the CMP, the Commission convened a panel of economic experts in 1992 to review the prior studies and develop recommendations for future Commission efforts. Later that year, the Commission formally endorsed the panel's recommendation to monitor the region's economy on a continuing basis. Consequently, the Pinelands Commission prepared a proposal (July 1994) to the National Park Service (NPS) to institute a long-term economic monitoring program, which was incorporated into a September 1994 Cooperative Agreement between the two agencies.

The *New Jersey Pinelands Commission Long-Term Economic Monitoring Program First Annual Report* was released after three years of planning in 1997. The document, the first in a series of annual reports, presented data and described trends for key indicators in the areas of property values, economic growth, and municipal finance. The *First Annual Report* and its accompanying Executive Summary also identified potential topics for future study. Subsequent annual reports updated most of the data in the *First Annual Report.* This *2008 Annual Report* is the twelfth in the series and augments most of the data used to develop the previous reports but also includes a variety of information not found in previous reports. A copy of the *2008 Annual Report* is available on CD-ROM by writing to the Pinelands Commission at P.O. Box 359, New Lisbon, NJ, 08064. The report will be available on the Pinelands Commission Web site at http://www.nj.gov/pinelands.

1.2 Program Goal and Objectives

The fundamental goal of the Long-Term Economic Monitoring Program for the Pinelands is **to continually evaluate the health of the economy of the Pinelands region in an objective and reliable way.** The economic monitoring program, in conjunction with an ongoing

1 See "Managing Land Use and Land-Cover Change: The New Jersey Pinelands Biosphere Reserve" by Walker and Solecki, *Annals of the Association of American Geographers*, 89(2), 1999, p. 220-237.

environmental monitoring program, provides essential information for consideration by the Pinelands Commission as it seeks to meet the mandates set forth in the federal and state Pinelands legislation.

The program was designed to accomplish several principal objectives:

1. Address key segments of the region's economy while being flexible enough to allow for the analysis of special topics that are identified periodically;

2. Establish a means for comparing Pinelands economic segments with similar areas in the state not located within Pinelands-designated boundaries;

3. Establish a means for evaluating economic segments over time so that Pinelands-related trends can be distinguished from general trends;

4. Provide for analyses to be conducted in an impartial and objective manner; and

5. Be designed and implemented in a cost-effective manner so that the program's financial requirements can be sustained over time.

These objectives are accomplished by two means: through the publication of an annual report of indicators, and through the commissioning of periodic special studies. The annual report takes the “temperature” of the regional economy, while special studies take a more in-depth look at specific topics. The following two chapters outline the structure and design of both components.

1.3 Program Administration

The development and implementation of the Long-Term Economic Monitoring Program is a collaborative effort. Under the terms of the cooperative agreement with the National Park Service (NPS) the Commission receives funding for personnel and other resources, including a full-time economist, managerial, and technical support staff (GIS staff and others on an as-needed basis), expert consultants, data acquisition, equipment, and informational materials. The NPS also can provide oversight and substantive input on an ongoing basis through its own Technical Advisory Committee.

The Commission staff members have primary responsibility for the day-to-day implementation of the program, including acquisition and analysis of data; coordination with the NPS, expert advisory committee, and public; and development of all reports and other products. Perhaps most importantly, the Commission will consider the results of these monitoring efforts as it identifies the need for in-depth economic studies and continues to refine and improve Pinelands protection policies. The data will also be used for other Commission analyses and independent efforts.

2. Annual Reports

2.1 Data Categories

Ongoing data collection and analysis involves continual monitoring of key economic indicators to establish a historical basis for trend comparison and enables analysis of Pinelands activity in relation to regional and statewide patterns. The ongoing reporting of data will allow the Commission to target topics for in-depth research in determining the basis of Pinelands communities' economic well-being and potential cause-and-effect relationships. Data for key variables are collected annually when possible and provide information essential to an understanding of the character of the Pinelands economy. In general, these data are collected from secondary sources. The annually-updated data are considered to be the core variables of the report.

The first annual report included a provision for adding supplemental data, and this provision was used for the first time in the 2003 annual report. The 2008 annual report continues this trend with the introduction of some new supplements. Supplemental variables provide valuable information and insight into the Pinelands and regional economy, but are not considered core variables because they cannot be updated regularly. For instance, the US Census data is extremely valuable, but since it is only updated every 10 years, most of it cannot be considered core. If reliable data can be obtained for a sufficient period of time, supplemental variables can become core in the future.

2.2 Core Variables Selected for Long-Term Monitoring

Four primary areas of inquiry are monitored: population and demographics, land and housing values and residential development, the business climate and commerce of the region, and the fiscal health of municipalities. Within each of these areas, several core variables are monitored. Collectively, these variables provide insight into the overall health of the Pinelands' economy; individually, they offer detailed information on specific features of interest. Table 2.2 identifies the monitoring period, frequency of collection, and method of analysis for the core variables tracked for this report. Each of the variable groups is described below.

Population and Demographics

This section examines basic information regarding the population of Southern New Jersey and the Pinelands that is necessary for any economic or geographic analysis. The core variables in this section are: population at the municipal and census block level, population change, age demographics, and annual population estimates. Population growth drives both consumer demand and reflects labor supply, and therefore is an extremely important indicator of economic growth. Age demographics affect the level and type of municipal services provided and influence housing markets.

Property Values and Residential Development

The issue of land values is at the heart of many of the controversies generated by the implementation of the Pinelands land use regulations. To the extent that development controls affect the value of land, current and prospective landowners will be affected, as will tax ratables associated with vacant land. This group of variables identifies trends in development pressures and measures the differences in values of housing and land in different areas of the region. The value of property depends in part on the permitted use that yields the highest rate of return to the owner, often called "the highest and best use." Permitted uses on vacant land and

farmlands in many parts of the Pinelands have been limited significantly and therefore land prices may be adversely affected.

In addition, land use regulation may also affect the value, type and supply of housing and other development activities. For example, the implementation of the CMP has the potential to increase housing prices, both through a reduction in supply in certain areas and by providing a permanent amenity to residents of the region. Conversely, other factors, such as declining or shifting job markets, if they exist, may cause housing price decreases. Building permits, median selling price of homes, and volume of residential real estate transactions are the three variables tracked annually for this variable group.

Economic Growth

The observation of trends in indicators that are directly tied to the prosperity of a region's residents is central to the measurement of the economic well-being of the region. As such, monitoring of employment, income, and the business climate is essential to this program. This group of variables measures the prosperity and viability of business in the region. Tracking economic growth variables over time and comparing them across regions may show differences and indicate areas for special study. To the extent that the CMP has had an effect on the regional economy, there will be both direct and indirect (multiplier) impacts on employment and wages. Impacts (positive or negative) may be substantially different across business sectors.

Seven economic growth variables are tracked annually for this report: (1) Retail sales per capita, (2) Per capita income, (3) Unemployment, (4) Employment, establishments, and wages, (5) Farmland assessed acreage, (6) Census of Agriculture data, and (7) Blueberry and cranberry production.

Municipal Finance

The long-term monitoring of municipal fiscal trends is interesting for several reasons. As discussed in previous studies, Pinelands regulations have affected vacant land assessments in some municipalities (see, for example*, Economic & Fiscal Impacts of the Pinelands Comprehensive Management Plan*, New Jersey Pinelands Commission, 1983 and 1985). In all but one case, however, the short-term impact on tax rates was relatively minor. Public acquisitions of land in a few municipalities have also resulted in a loss of tax ratables. While these problems were mitigated in the short-term by state reimbursement programs, their long-range impacts should be evaluated.

The level of development in a municipality also affects both municipal ratable bases and expenditures for public services and facilities. Development is associated with growth in ratables, although capital and operating costs for schools, roads, and other public facilities will also increase. Whether development results in a net fiscal benefit or cost to the community depends in large part on the type of development (e.g., commercial, industrial, apartments, single-family houses, or retirement communities). Density may also have an effect.

Data is obtained from the New Jersey Department of Community Affairs (DCA), Division of Local Government Services, which publishes property tax information on an annual basis. Four variables are tracked annually for this variable group: average residential property tax bill, state equalized valuation (total value of taxable property), effective tax rate, and assessment class proportions in municipal tax revenues.

Table 2.2 Summary of Core Variables in Annual Report

Name	Years Collected[2]	Years Added[3]	Frequency of Collection	Method of Analysis
Municipal Population	1980, 1990, 2000	None	Decennial	Inside/Outside Pinelands
Census Block Population	1990, 2000	None	Decennial	Census Block, Inside/Outside Pinelands Boundary
Age Demographics	1980, 1990, 2000	None	Decennial	Inside/Outside Pinelands, Census Block Group (2000)
Population Estimates	2001-2006	2007	Annual	Inside/Outside Pinelands
Building Permits	1980-2007	2008	Annual	Inside/Outside Pinelands
Median Selling Prices of Homes	1988-2007	2008	Annual	Inside/Outside Pinelands
Volume of Real Estate Transactions	1988-2007	2008	Annual	Inside/Outside Pinelands
Retail Sales & Establishments	1992, 1997, 2002	None	Quintennial	County, Place
Income	1979, 1989, 1999	None	Decennial	Inside/Outside Pinelands
Unemployment	1980-2007	2008	Annual	Inside/Outside Pinelands
Employment	1993-1999, 2003 (municipal level)	None (county level)	Annual	Inside/Outside Pinelands (93-99), County (91-02)
Number of Establishments	1993-1999, 2003 (municipal level)	None (county level)	Annual	Inside/Outside Pinelands (93-99), County (91-02)
Payroll by Major Industry Sector	1993-1999, 2003 (municipal level)	None (county level)	Annual	Inside/Outside Pinelands (93-99), County (91-02)
Farmland Assessed Acreage	1980-1984, 1986-2005	2006	Annual	Inside/Outside Pinelands
Agricultural Census Data	1982, 1987, 1992, 1997, 2002	2007	Quintennial	County
Blueberry and Cranberry Production	1972-2006	2007	Annual	State
Average Residential Property Tax Bill	1983-2007	2008	Annual	Inside/Outside Pinelands
Equalized Property Value	1980-2007	2008	Annual	Inside/Outside Pinelands
Effective Tax Rate	1980-2007	2008	Annual	Inside/Outside Pinelands

[2] Data acquisition is based on the availability of data. An effort is made to acquire data for every year available from 1980 to the present.

[3] Refers to addition from previous report and specifies which years of data are new in this update.

Name	Years Collected[2]	Years Added[3]	Frequency of Collection	Method of Analysis
Assessment Class Proportions in Municipal Valuation	1980-1994, 2002-2007	2008	Annual	Inside/Outside Pinelands
Local Municipal Purpose Revenues	1995-2007	2008	Annual	Inside/Outside Pinelands

2.3 Supplemental Variables

One new supplemental variable has been added to this year's report in the Municipal Finance section. Supplemental variables provide valuable information and insight into the Pinelands and regional economy, but are not tracked annually as core variables because they are not updated regularly. If the data is viable and a sufficient time series can be obtained, supplements could become core variables.

The new supplement added this year examines the amount of tax exempt property that comprises each municipality's tax ratable base. Municipalities in New Jersey are required by law to maintain an accurate assessment of all property values within their jurisdiction by block and lot. The primary use for this data is to provide a fair and equitable basis upon which to levy taxes among property owners. Historically, a number of classes of property have been exempted from paying taxes, although they are still required to have property value assessments. At present, there are six distinct classes of property in New Jersey that qualify for a full tax exemption: (1) Public property (e.g. municipal property, federal property, publicly-owned parks, etc.), (2) Public schools, (3) Other non-public schools (e.g. private universities, charter schools, and any other private schools), (4) Church and charitable organizations, (5) Graveyards/cemeteries, and (6) Any other exemptions not included in the aforementioned categories. The analysis presented in this report examines the disparity between municipalities in the amount of land dedicated to these tax exempt uses.

Table 2.3a Summary of Supplemental Variables in the 2009 Annual Report

Name	Source	Years Collected	Method of Analysis
Tax Exempt Property	NJ Department of Community Affairs	2008	Inside / Outside Pinelands

Table 2.3b Summary of Supplemental Variables in the Previous (2008) Annual Report

Name	Source	Years Collected	Method of Analysis
Uniform Crime Report Statistics	NJ State Police	2007	Inside / Outside Pinelands
Estimated Cost of Construction by Building Permit Type	NJ DCA Division of Codes and Standards	1997-2006	Inside / Outside Pinelands

2.4 Geographic Scale: Defining the Pinelands

Concise definitions of the various levels of geography used in this report can be found on page 14, which is the first page of the indicators section. This section provides a detailed geographical description and the definition of the "Pinelands" that is used in this report.

The state-designated Pinelands Area encompasses portions of seven counties in Southern New Jersey: Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, and Ocean. There are 53 municipalities that have part or all of their land in the Pinelands Area. Most of the variables monitored in the report are obtained at the municipal level, since this is typically the most precise level of geography available. Municipal values are aggregated into Pinelands and Non-Pinelands regions, based on a "10% rule." Any municipality with at least 10% of its land in the Pinelands Area is considered to be in the Pinelands region, and all remaining municipalities in southern New Jersey (those located in the seven counties mentioned above, plus Salem County) are considered to be Non-Pinelands municipalities. Of the 53 municipalities

completely or partially located in the Pinelands Area, 47 were classified as inside, while six[4] were classified as outside, joining the remaining 149 municipalities located entirely outside the Pinelands Area. In summary, the term "Pinelands," as used in this report, refers to 47 municipalities that have at least 10% of their land in the state-designated Pinelands Area, while the term "Non-Pinelands" refers to the remaining 155 municipalities of Southern New Jersey.

While the aggregate method used in this report is the best currently available, it is not ideal. Many municipalities are split by the Pinelands boundary, so activities and phenomena present outside the Pinelands boundary are counted as occurring inside the Pinelands. In some cases, areas that are inside a Pinelands municipality, but outside the Pinelands boundary, are growing rapidly. This growth can distort the Pinelands aggregate, indicating that the Pinelands is growing rapidly, while in reality much of the growth is occurring just outside of the Pinelands boundary.

Obtaining data at a sub-municipal level circumvents this problem. For instance, the population for each Pinelands municipality was calculated at the block level to obtain population counts for areas of Pinelands municipalities inside and outside the Pinelands boundary. The results of the count showed that approximately 277,000 people lived inside the Pinelands boundary in 2000, while approximately 413,000 people lived outside the boundary, but within Pinelands municipalities. Population growth between 1990 and 2000 was 5.5% inside the boundary, and 14.3% outside the boundary within Pinelands municipalities. Clearly, the Pinelands aggregates are including a fair amount of Non-Pinelands activity. Additional data at the census block and census block group level is being sought. Other methods of obtaining sub-municipal data are also being explored, such as using GIS to pinpoint variables with address information to streets, so an inside / outside boundary count can be made. For variables where sub-municipal census data is available, the terms "Pinelands Municipal Area Inside the Boundary," and "Pinelands Municipal Area Outside the Boundary," are used to refer to the areas of Pinelands municipalities that are split by the state-designated Pinelands Area boundary.

Despite these limitations, the Inside / Outside Pinelands municipal aggregate system is currently the most viable method for comparing the Pinelands to the Non-Pinelands regions based on data currently available. The census block analysis revealed that certain municipalities with as much as 30% of their land in the Pinelands had practically no residents in the Pinelands. Analysis has shown that altering the 10% percent rule in favor of a 20, 25 or 30% rule yields no significant difference in the value of the aggregates. Strictly identifying whether an activity is occurring inside or outside of the boundary may be unnecessary to some extent, as economic activity occurs regardless of where boundaries exists. Areas inside and outside of the boundary interact economically with each other, and both interact with other regions. Consequently, this report retains the 10% rule to define inside and outside municipalities.

Municipal-level data is unavailable in certain cases. The Agricultural Census and Retail Census are restricted to county-level data. For the Agricultural Census data, Pinelands counties (Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, and Ocean) are compared to Non-Pinelands counties (Salem plus the 13 counties of North Jersey). For the Retail Census and Covered Employment data (employment, establishment, and wages), information is presented for the eight Southern New Jersey counties along with totals for the entire state. Because county-level data are necessarily limited in the amount of geographic information they can convey, a chart showing the contribution of each county to Pinelands acreage is provided in Appendix B to aid in interpretation whenever county data are presented.

4 The six are: Corbin City, North Hanover Township, Springfield Township, Berlin Borough, Vineland City, and Dover Township.

Blueberry and cranberry production data are available only at the state level, but since these crops are found almost exclusively within the Pinelands, statewide figures provide ample information for the purposes of this analysis.

2.5 Presentation of Data

Data in the annual report is arranged by variable and is grouped into four main sections. Each core variable is designated by section (population, real estate, economy, and municipal finance) and by number. When a new section begins, numeration restarts at 1. For instance, there are population variables 1 through 4, Real Estate variables 1 through 4, etc. Numbers followed by an "S" indicate supplemental variables. Supplemental variables always appear at the end of a section. A checkbox in the upper right hand corner of the page indicates whether a variable was updated since the last report. A variable is considered updated if additional years of recent data were added or further analysis of previous data was conducted.

Pinelands and Non-Pinelands aggregates are charted, along with Southern New Jersey and state averages. Data is obtained as far back as 1980, when possible. In most cases, averages for each region are calculated by averaging the values for all municipalities in the region. In a few instances, values are not averages but are sums for the region.[5] For example, retail establishments per capita for each region is calculated by dividing the total population of the region by the total number of establishments in each region. It is not calculated by averaging the ratio of each municipality to get a regional average.

Data is presented by Pinelands municipality for some variables in the form of tables, and certain variables are mapped for all of Southern New Jersey. While the aggregates provide a regional picture, the tables and maps illustrate the degree of variation that exists among the municipalities. Tables display and sort data for the 47 "inside" municipalities, and record data for five[6] of the "outside" municipalities separately at the bottom of the table. The sorting column(s) for each table vary and are indicated by a shaded column heading. Tables and graphs embedded in the text are not enumerated.

Variables in the Annual Report that describe monetary amounts are adjusted for inflation using the Consumer Price Index (CPI-U) from the U.S. Bureau of Labor Statistics, shown in 2008 dollars. This is an update from the 2008 annual report, where variables were keyed to the 2007 CPI. Only sections that received a substantial update this year (as indicated by a check mark in the upper right hand corner "Update" box) have been adjusted to the 2008 CPI. Variables in the Fact Book are not inflation adjusted, as the purpose is to display the most recent information available and not to monitor change over time.

Indexes were derived for many variables in this report. Indexing is a common technique for characterizing economic time series data, and it measures how variables change over time. Change is measured relative to a pre-selected base period. In this report, the base period selected is usually the first year that data for the variable are available. As an example, if 1988 were selected as the base period for housing transactions, the 1988 index number for housing transactions would be 1.00. The remaining index numbers are calculated by dividing each year's total housing transactions by total 1988 housing transactions. A 1999 index number of

5 See "Unit of Analysis" for each variable to ascertain whether municipal averages or regional sums are used.
6 The five municipalities counted as "outside" the Pinelands in this report have between one and ten percent of their land in the Pinelands. Toms River Township is excluded, as less than ½ of one percent of its land is in the Pinelands.

1.10 indicates that 1999 housing transactions are 10% greater than 1988 levels. Portraying multiple indexes for different regions on one graph enables easy comparison of relative changes among those groups.

The Municipal Fact Book was a new addition to the 2002 Annual Report, and was significantly updated and enhanced for the 2003 and 2004 reports. The 2009 Report uses the same format with a few minor changes. Economic data are arranged by Pinelands municipality rather than by variable, in order to provide a better understanding of the unique economic characteristics of each municipality. The fact sheets are arranged alphabetically by county, then by municipality. Variables for each municipality are listed beside the average value for all municipalities in Southern New Jersey and the municipality's rank for that variable among the 202 municipalities in Southern New Jersey. Additional information, such as census block data, population graphs, and map of development zones, is also provided. Fact sheets for each of the Southern New Jersey counties are also included in this year's report. The county sheets use the same format as the municipal sheets, with county values displayed beside the average Southern New Jersey County value and the county's rank among the eight counties.

The fact book is located in Appendix G. Additional resources in the appendix include: a list of reference materials, a table of Pinelands and southern New Jersey acreage by county, a map showing place names for all 202 towns in southern New Jersey, a description of Pinelands Management Areas, a map of Pinelands Management Areas, and a map of housing unit construction trends at the block group level from the 1940s to the 1990s.

3. Special Studies

Special studies represent the second major component of the monitoring program. Studies may be initiated in any year of the program. The ongoing data program will be highly instructive in selecting topics for special study to provide an in-depth examination on apparent differences between Pinelands and Non-Pinelands economic trends. Special studies may also provide an opportunity to augment ongoing data collection should a need be identified for primary (rather than secondary) data or for more geographically specific data.

First Study: Value-Added Blueberry Products (Complete)

The blueberry study was a partnership between Cook College at Rutgers University, the Pinelands Commission (supported through the National Park Service), and New Jersey's blueberry growers for the purpose of boosting the blueberry industry by creating a value-added product. The study was successfully completed in November 2001, and a detailed explanation of the project can be found in the 2001 Annual Report. Development and marketing of value-added blueberry products will continue indefinitely through Blueberry Health, Inc. Blueberry Health buys blueberry pulp for products from New Jersey farmers, and reinvests its profits in blueberry research and product development.

Second Study: Indicators of Municipal Health (Underway)

At its September 1999 meeting, the Pinelands Municipal Council unanimously recommended that the Long-Term Economic Monitoring Program conduct a special project to identify and characterize municipalities experiencing poor health. Although difficult to define, poor municipal health can generally be described as being below a given standard with respect to municipalities' social, economic, physical, and fiscal conditions. The project is being administered by Pinelands Commission staff and conducted in consultation with the Pinelands Municipal Council.

In November 1999, the Pinelands Commission authorized the project as the second special study. The goals of the project are to: 1) produce a database of indicators that are reflective of municipalities' social, economic, physical, and fiscal conditions; 2) produce an objective, systematic and repeatable model which identifies municipalities that are experiencing poor health using the database of indicators; 3) select economically-challenged communities using the results from the model; and 4) develop methods to calculate financial aid and/or other resources that may alleviate the degree of strain in the identified municipalities.

In January 2001, a short questionnaire was administered to municipal officials (i.e., mayors, CFO's, administrators, council members, etc.) of 36 municipalities.[7] The questionnaire was designed to reveal municipal officials' opinions on indicators of fiscal health and on ways to measure and compare fiscal health among municipalities. In general, the results of the questionnaire suggest that the most pressing municipal health concerns of the Pinelands municipalities relate to a healthy tax base (i.e., a mix of commercial, industrial, and residential land), tax rates, and school costs. These themes are being examined more closely during the course of this project.

The preliminary design of the study consists of two parts. The first part focuses on a Pinelands and Non-Pinelands analysis of fiscal indicators. Based on responses from the

7 All municipalities with at least 50% of their land within the Pinelands were included (33 municipalities) plus three additional municipalities which requested to be included.

questionnaires and the availability of data, a number of variables were examined, including unemployment rates, tax rates, income levels, and the level of commercial and industrial ratables. The second part of the study identifies Pinelands towns that are most in need of fiscal assistance, and will design a corresponding funding model.

A preliminary draft for this study was presented to the Public and Governmental Programs Committee of the Pinelands Commission in July 2008. A copy of this draft is available for public review on the Pinelands Commission's web site. The final model to measure fiscal stress will use principal components analysis to arrive at a single fiscal stress number for all 566 municipalities in New Jersey. Principal components analysis is an objective statistical approach that combines several different variables into a single measurement (in this case, overall fiscal health). This method has been challenged and upheld in New Jersey courtrooms and is the basis upon which the NJ Department of Education assigns district factor groups that are used in state testing analysis. Preliminary findings show that the most severely stressed municipalities in the Pinelands region do rank among the top 10% of municipalities statewide in regards to fiscal stress.

The final steps of the fiscal health study are now underway. Various stakeholders are being asked to offer suggestions for improvement to the preliminary draft, and once that is done a finalized model will be adopted. At that point, the model will be run again with the most current data available and the results tabulated on an annual basis. It is anticipated that the findings from this study can act as a guideline for more efficiently channeling state aid to those municipalities who may have been shortchanged in the past.

Special Project: Housing Task Force (Complete)

In October 2003, the Pinelands Commission formed a Housing Task Force in order to update housing demand estimates in the Comprehensive Management Plan. The Economic Monitoring Program has been an integral part of the process, through analysis of population data, the collection and evaluation of population projections, estimating future housing units, defining and calculating vacant developable land using land-use and land-cover data, and allocating future population and housing to Pinelands development areas based on vacant land. The Task Force issued its final report in January 2007.

As part of this process, a *Pinelands Population Reference Guide* was created in order to gather population and housing data for the Pinelands for a range of geographic scales from 1970 through 2000 into one document. The reference guide is available on the Long-Term Economic Monitoring Program's 2004 Annual Report CD-ROM.

Special Project: Pinelands Development Credit Supply & Demand Study (Underway)

In 2005, the Pinelands Commission staff began a reexamination of the effectiveness of the Pinelands Development Credit (PDC) program. The PDC program is an integral tool in the implementation of the Comprehensive Management Plan. In order to facilitate the process of directing growth to appropriate areas in the Pinelands region, the PDC program was established to create a market for development rights in the Pinelands. Owners of properties in designated sending areas are afforded the opportunity to "sever" their development interests in their properties and sell those rights to land developers in receiving areas. The developers then use these rights to expand their allowable development densities in regional growth areas, thus directing growth from preservation areas to more suitable growth areas. The owners of land in preservation areas are thus compensated monetarily in exchange for deed-restricting their land from future development.

Since the PDC program is market-driven, its ultimate success depends upon a healthy balance between supply and demand pressures in the land development market in the Pinelands. Initially, the PDC program was slow to be utilized by both developers and land owners in the region. However, in recent years there has been quite a bit of activity in the PDC market, with the price of a development right rising from an initial value of $2,500 in 1981 to a high of $40,000 in 2006. Prices fell during 2008; the mean sales price for a development right in 2008 was just over $19,000.

This study is a comprehensive review of what has worked well to this point, in addition to examining new ideas on how to further stimulate use of PDCs in the coming years. A preliminary package of recommendations was submitted to the Policy and Implementation Committee in the summer of 2007, and after further review a final set of policies and rules will be presented to the Commission for consideration over the course of the next year.

NJ Pinelands Commission Long-Term Economic Monitoring Program
2009 Annual Report of Indicators

Geographic Definitions

State-Designated Pinelands Area: area designated by The Pinelands Protection Act. This is the state-designated area under the jurisdiction of the Pinelands Commission.

Pinelands National Reserve: area designated by The National Parks and Recreation Act of 1978. This is the federally designated area that includes the state-designated area plus areas under CAFRA and DEP jurisdiction. This report focuses on the state-designated area only.

Pinelands: 47 municipalities in southern New Jersey that have at least 10% of their land within the state-designated Pinelands Area.

Non-Pinelands: the remaining 155 municipalities in southern New Jersey that have less than 10% of their land in the state-designated Pinelands Area (6 municipalities have between 0.1% and 9% in the Pinelands Area; the remaining 149 have no land in the Pinelands Area).

Southern New Jersey: the Pinelands municipalities plus the Non-Pinelands municipalities (47 + 155 = 202 municipalities total). Defined as the counties of Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Ocean, and Salem.

State of New Jersey: data for the state as a whole that includes southern (202 municipalities) and northern (364 municipalities) New Jersey (566 municipalities total).

Pinelands Municipal Area Inside the Pinelands Boundary: all census blocks or census block groups that have their geographic center within the state-designated Pinelands Area boundary. Provides the most accurate measure of Pinelands activity. Available in limited instances.

Pinelands Municipal Area Outside the Pinelands Boundary: all census blocks or census block groups that have their geographic center outside the state-designated Pinelands Area boundary, but within a municipality that has at least 1% of its land within the state-designated Pinelands boundary. Available in limited instances.

Population 1

Population

US Census Bureau 1980, 1990, 2000

Updated

Box checked if Updated for 2009

- Population growth in Pinelands municipalities outpaced Non-Pinelands municipalities between 1980 and 2000.

Population 1980 - 2000

	1980	1990	2000	Change 1980-1990	Change 1990-2000	Change 1980-2000
New Jersey	7,365,011	7,730,188	8,414,350	5.0%	8.9%	14.2%
South Jersey	1,854,074	2,083,938	2,263,516	12.4%	8.6%	22.1%
Non-Pinelands	1,430,609	1,534,417	1,647,532	7.3%	7.4%	15.2%
Pinelands	423,465	549,521	615,984	29.8%	12.1%	45.5%

Description: Population data is useful both as an indicator of demand for housing and for private and public goods and services, as well as for various per capita and per household calculations.

Unit of Analysis: Population data are compiled at the municipal level and aggregated to allow for inside/outside Pinelands, regional, and statewide analyses.

Summary of Previous Findings

The percentage increase in population was much higher in the Pinelands (30%) than outside (7%) from 1980 to 1990. Both areas surpassed the statewide increase in population of approximately 5% over the decade. A separate analysis of trends by county found that Atlantic County had the greatest differential between inside and outside growth rates from 1980-1990, which was most likely due to the start of casino gambling in Atlantic City and associated growth in nearby communities. The percentage increase in population was higher in the Pinelands than outside from 1990 to 2000 (although in absolute terms, population increased more outside the Pinelands over the same period); however, the disparity between inside and outside Pinelands annual growth rates decreased.

Population growth was higher in the Pinelands (12.1%) than all other regions of the state from 1990 to 2000. As figure P1 illustrates, population growth was highest in municipalities located along the edge of the Pinelands, especially those located in the northern and eastern regions. Stafford, Jackson, and Galloway grew the most in terms of percentages (see Table P1). However, a large portion of population growth in these towns occurred outside the Pinelands boundary (see next section on population by census block group).

An examination of group quarters population adds additional insight into population change within certain Pinelands municipalities. Persons living in group quarters (i.e. housing where unrelated persons live together) are classified as institutional (prisons and mental hospitals) and non-institutional (military bases, colleges and universities, nursing homes, and shelters). Several municipalities have been impacted by changes in group quarters population, which distorts the actual change in the number of residents. Practically all of Woodland's population decrease (826 persons out of 893) was due to a decrease in the institutional population. The population of Washington decreased while the number of persons in group quarters increased, masking the "actual" decrease in residents. Maurice River's increase can almost entirely be attributed to an increase in the institutional population, while Woodbine experienced a decrease in institutional population that masks a larger non-group quarters increase.

In New Hanover, the number of persons in non-institutions (military base) decreased by 5,035 people, while the number of people in institutions (prison) increased by 4,225 people. The number of persons not in group quarters increased by 1,008, but since the military population declined so steeply, the official population change was only 198. Wrightstown and Pemberton Township had large population decreases and have a significant military presence but experienced little change in group quarters population in spite of base reductions. Military personnel in these towns may have lived off the military base and were thus not considered to be in group quarters.

Figure P1 Municipal Population Change (1990-2000)

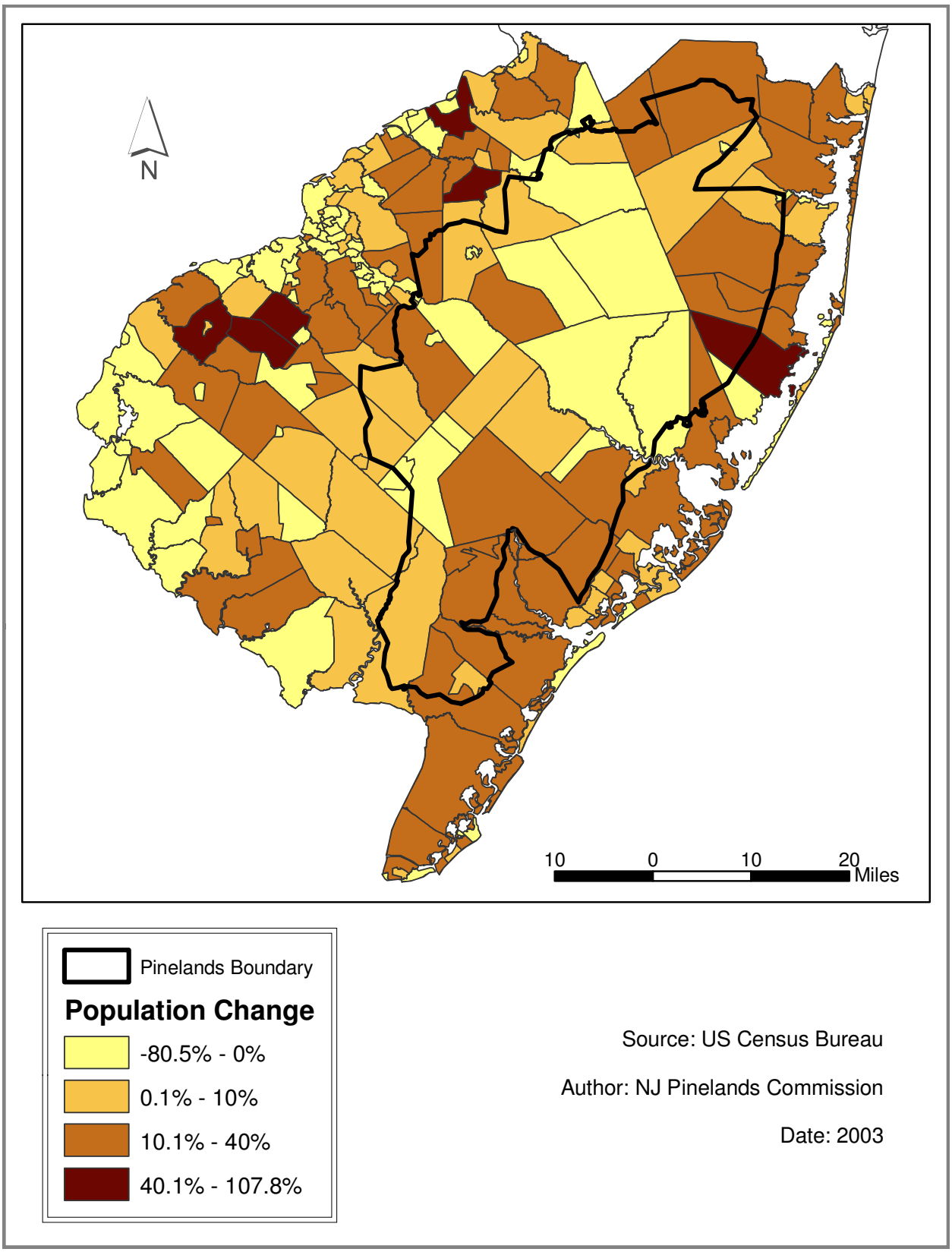


Table P1a Population by Pinelands Municipality

Municipality	County	2000	1990	1980	Change 1990-00	Change 1980-90
Stafford Twp.	Ocean	22,532	13,325	10,385	69%	28%
Galloway Twp.	Atlantic	31,209	23,330	12,176	34%	92%
Jackson Twp.	Ocean	42,816	33,233	25,644	29%	30%
Hamilton Twp.	Atlantic	20,499	16,012	9,499	28%	69%
Egg Harbor Twp.	Atlantic	30,726	24,544	19,381	25%	27%
Barnegat Twp.	Ocean	15,270	12,235	8,702	25%	41%
Plumsted Twp.	Ocean	7,275	6,005	4,674	21%	28%
Evesham Twp.	Burlington	42,275	35,309	21,508	20%	64%
Little Egg Harbor Twp.	Ocean	15,945	13,333	8,483	20%	57%
Ocean Twp.	Ocean	6,450	5,416	3,731	19%	45%
Dennis Twp.	Cape May	6,492	5,574	3,989	16%	40%
Weymouth Twp.	Atlantic	2,257	1,957	1,260	15%	55%
Winslow Twp.	Camden	34,611	30,087	20,034	15%	50%
Lacey Twp.	Ocean	25,346	22,141	14,161	14%	56%
Estell Manor City	Atlantic	1,585	1,404	848	13%	66%
Upper Twp.	Cape May	12,115	10,681	6,713	13%	59%
Shamong Twp.	Burlington	6,462	5,765	4,537	12%	27%
Beachwood Boro	Ocean	10,375	9,324	7,687	11%	21%
Medford Twp.	Burlington	22,253	20,526	17,622	8%	16%
Monroe Twp.	Gloucester	28,967	26,703	21,639	8%	23%
Manchester Twp.	Ocean	38,928	35,976	27,987	8%	29%
Franklin Twp.	Gloucester	15,466	14,482	12,396	7%	17%
Berkeley Twp.	Ocean	39,991	37,319	23,151	7%	61%
Port Republic City	Atlantic	1,037	992	837	5%	19%
Maurice River Twp.	Cumberland	6,928	6,648	4,577	4%	45%
Hammonton town	Atlantic	12,604	12,208	12,298	3%	-1%
New Hanover Twp.	Burlington	9,744	9,546	14,258	2%	-33%
Southampton Twp.	Burlington	10,388	10,202	8,808	2%	16%
Woodbine Boro	Cape May	2,716	2,678	2,809	1%	-5%
Mullica Twp.	Atlantic	5,912	5,896	5,243	0%	12%
Chesilhurst Boro	Camden	1,520	1,526	1,590	0%	-4%
Egg Harbor City	Atlantic	4,545	4,583	4,618	-1%	-1%
Eagleswood Twp.	Ocean	1,441	1,476	1,009	-2%	46%
Buena Vista Twp.	Atlantic	7,436	7,655	6,959	-3%	10%
Tabernacle Twp.	Burlington	7,170	7,360	6,236	-3%	18%
Berlin Twp.	Camden	5,290	5,466	5,348	-3%	2%
Bass River Twp.	Burlington	1,510	1,580	1,344	-4%	18%
Waterford Twp.	Camden	10,494	10,940	8,126	-4%	35%
Medford Lakes Boro	Burlington	4,173	4,462	4,958	-6%	-10%
South Toms River Boro	Ocean	3,634	3,869	3,954	-6%	-2%
Pemberton Twp.	Burlington	28,691	31,342	29,720	-8%	5%
Folsom Boro	Atlantic	1,972	2,181	1,892	-10%	15%
Buena Boro	Atlantic	3,873	4,441	3,642	-13%	22%
Lakehurst Boro	Ocean	2,522	3,078	2,908	-18%	6%
Washington Twp.	Burlington	621	805	808	-23%	0%
Woodland Twp.	Burlington	1,170	2,063	2,285	-43%	-10%
Wrightstown Boro	Burlington	748	3,843	3,031	-81%	27%
*"Outside" Municipalities**						
Corbin City	Atlantic	468	412	254	14%	62%
Berlin Boro	Camden	6,149	5,672	5,786	8%	-2%
Springfield Twp.	Burlington	3,227	3,028	2,691	7%	13%
Vineland City	Cumberland	56,271	54,780	53,753	3%	2%
North Hanover Twp.	Burlington	7,347	9,994	9,050	-26%	10%

*These five municipalities have land in the Pinelands but are counted as Non-Pinelands municipalities because less than ten percent of their land area is in the Pinelands. They are displayed for informational purposes in this and subsequent tables.

Table P1b 2000 Census Group Quarters Population

Municipality	County	Population	Group Quarters	GQ %	Institution	Inst %	Non Institution	Non Inst %
New Hanover	Burlington	9,834	6,124	62.3%	4,846	49.3%	1,278	13.0%
Maurice River	Cumberland	6,928	3,360	48.5%	3,360	48.5%	0	0.0%
Washington	Burlington	579	179	30.9%	109	18.8%	70	12.1%
Woodbine	Cape May	2,716	568	20.9%	568	20.9%	0	0.0%
Chesilhurst	Camden	1,520	138	9.1%	88	5.8%	50	3.3%
Galloway	Atlantic	31,159	2,080	6.7%	0	0.0%	2,080	6.7%
Hamilton	Atlantic	20,499	1,041	5.1%	1,028	5.0%	13	0.1%
Winslow	Camden	34,659	1,112	3.2%	1,061	3.1%	51	0.1%
Dennis	Cape May	6,503	208	3.2%	155	2.4%	53	0.8%
Hammonton	Atlantic	12,604	348	2.8%	205	1.6%	143	1.1%
Estell Manor	Atlantic	1,592	33	2.1%	33	2.1%	0	0.0%
Waterford	Camden	10,485	207	2.0%	0	0.0%	207	2.0%
Manchester	Ocean	38,960	728	1.9%	546	1.4%	182	0.5%
Pemberton	Burlington	28,650	516	1.8%	378	1.3%	138	0.5%
Berkeley	Ocean	39,988	591	1.5%	223	0.6%	368	0.9%
Egg Harbor City	Atlantic	4,545	70	1.5%	35	0.8%	35	0.8%
Stafford	Ocean	22,517	293	1.3%	223	1.0%	70	0.3%
Buena Vista	Atlantic	7,436	94	1.3%	0	0.0%	94	1.3%
Medford	Burlington	22,253	255	1.1%	201	0.9%	54	0.2%
Wrightstown	Burlington	747	8	1.1%	0	0.0%	8	1.1%
Little Egg Harbor	Ocean	16,019	166	1.0%	166	1.0%	0	0.0%
Tabernacle	Burlington	7,170	72	1.0%	67	0.9%	5	0.1%
Jackson	Ocean	42,810	374	0.9%	360	0.8%	14	0.0%
Buena	Atlantic	3,873	33	0.9%	0	0.0%	33	0.9%
Barnegat	Ocean	15,285	127	0.8%	125	0.8%	2	0.0%
Ocean	Ocean	6,450	54	0.8%	0	0.0%	54	0.8%
Mullica	Atlantic	5,912	47	0.8%	0	0.0%	47	0.8%
Monroe	Gloucester	28,967	212	0.7%	155	0.5%	57	0.2%
Franklin	Gloucester	15,466	90	0.6%	0	0.0%	90	0.6%
Southampton	Burlington	10,333	61	0.6%	61	0.6%	0	0.0%
Port Republic	Atlantic	1,032	6	0.6%	0	0.0%	6	0.6%
Evesham	Burlington	42,428	185	0.4%	100	0.2%	85	0.2%
Berlin Township	Camden	5,290	19	0.4%	0	0.0%	19	0.4%
Folsom	Atlantic	1,972	7	0.4%	0	0.0%	7	0.4%
Egg Harbor Twp	Atlantic	30,619	49	0.2%	0	0.0%	49	0.2%
Lacey	Ocean	25,346	39	0.2%	26	0.1%	13	0.1%
Upper	Cape May	12,115	8	0.1%	0	0.0%	8	0.1%
Plumsted	Ocean	7,275	8	0.1%	0	0.0%	8	0.1%
Beachwood	Ocean	10,316	6	0.1%	0	0.0%	6	0.1%
Shamong	Burlington	6,462	2	0.0%	0	0.0%	2	0.0%
Medford Lakes	Burlington	4,173	0	0.0%	0	0.0%	0	0.0%
So. Toms River	Ocean	3,608	0	0.0%	0	0.0%	0	0.0%
Lakehurst	Ocean	2,522	0	0.0%	0	0.0%	0	0.0%
Weymouth	Atlantic	2,250	0	0.0%	0	0.0%	0	0.0%
Bass River	Burlington	1,552	0	0.0%	0	0.0%	0	0.0%
Eagleswood	Ocean	1,441	0	0.0%	0	0.0%	0	0.0%
Woodland	Burlington	1,160	0	0.0%	0	0.0%	0	0.0%
"Outside" Munis								
Vineland	Cumberland	56,271	2,393	4.3%	1,031	1.8%	1,362	2.4%
Berlin Borough	Camden	6,149	72	1.2%	18	0.3%	54	0.9%
Springfield	Burlington	3,227	7	0.2%	0	0.0%	7	0.2%
North Hanover	Burlington	7,325	0	0.0%	0	0.0%	0	0.0%
Corbin City	Atlantic	468	0	0.0%	0	0.0%	0	0.0%

Table P1c Group Quarters Components of Population Change 1990-2000

Municipality	County	2000 Population	Pop Change 1990 – 2000	Institutional Change	Non-Institutional Change	Non-Group Quarters Change	Difference
New Hanover	Burlington	9,834	198	4,225	-5,035	1,008	810
Washington	Burlington	579	-184	86	70	-340	156
Woodbine	Cape May	2,716	38	-134	0	172	134
Pemberton Twp	Burlington	28,650	-2,651	6	103	-2,760	109
Lacey	Ocean	25,346	3,205	-121	13	3,313	108
Buena Vista	Atlantic	7,436	-219	0	85	-304	85
Winslow	Camden	34,659	4,524	-66	-14	4,604	80
Tabernacle	Burlington	7,170	-190	67	5	-262	72
Manchester	Ocean	38,960	2,952	180	-249	3,021	69
Shamong	Burlington	6,462	697	-70	2	765	68
Chesilhurst	Camden	1,520	-6	88	-22	-72	66
Medford	Burlington	22,253	1,727	-93	54	1,766	39
Waterford	Camden	10,485	-446	-152	186	-480	34
Franklin	Gloucester	15,466	984	0	-34	1,018	34
Buena	Atlantic	3,873	-568	0	16	-584	16
Mullica	Atlantic	5,912	16	-60	47	29	13
Monroe	Gloucester	28,967	2,264	-21	10	2,275	11
Estell Manor	Atlantic	1,592	181	-10	0	191	10
Folsom	Atlantic	1,972	-209	0	7	-216	7
Berlin	Camden	5,290	-176	0	6	-182	6
Weymouth	Atlantic	2,250	300	0	0	300	0
Bass River	Burlington	1,552	-70	0	0	-70	0
Medford Lakes	Burlington	4,173	-289	0	0	-289	0
Eagleswood	Ocean	1,441	-35	0	0	-35	0
Lakehurst	Ocean	2,522	-556	0	0	-556	0
South Toms River	Ocean	3,608	-235	0	0	-235	0
Ocean	Ocean	6,450	1,034	0	3	1,031	-3
Barnegat	Ocean	15,285	3,035	2	2	3,031	-4
Egg Harbor City	Atlantic	4,545	-38	-20	15	-33	-5
Port Republic	Atlantic	1,032	45	0	6	39	-6
Beachwood	Ocean	10,316	1,051	0	6	1,045	-6
Dennis	Cape May	6,503	918	-45	53	910	-8
Upper	Cape May	12,115	1,434	0	8	1,426	-8
Plumsted	Ocean	7,275	1,270	0	8	1,262	-8
Hammonton	Atlantic	12,604	396	-103	113	386	-10
Egg Harbor Twp	Atlantic	30,619	6,182	0	27	6,155	-27
Little Egg Harbor	Ocean	16,019	2,612	45	0	2,567	-45
Jackson	Ocean	42,810	9,583	63	-15	9,535	-48
Evesham	Burlington	42,428	6,966	-23	78	6,911	-55
Southampton	Burlington	10,333	186	61	-5	130	-56
Berkeley	Ocean	39,988	2,672	-296	361	2,607	-65
Wrightstown	Burlington	747	-3,095	0	-91	-3,004	-91
Galloway	Atlantic	31,159	7,879	-40	193	7,726	-153
Stafford	Ocean	22,517	9,207	118	70	9,019	-188
Maurice River	Cumberland	6,928	280	358	0	-78	-358
Hamilton	Atlantic	20,499	4,487	406	-37	4,118	-369
Woodland	Burlington	1,160	-893	-826	0	-67	-826
"Outside" Munis							
Springfield	Burlington	3,227	199	-40	-17	256	57
Corbin City	Atlantic	468	56	0	0	56	0
North Hanover	Burlington	7,325	-2,647	0	-25	-2,622	-25
Berlin Boro	Camden	6,149	477	18	54	405	-72
Vineland	Cumberland	56,271	1,491	-939	1,050	1,380	-111

Population 2

Population – Census Block

Updated

US Census Bureau 1990, 2000

- Most of the population growth in Pinelands municipalities between 1990 and 2000 occurred outside of the Pinelands boundary.

Census Block Population

	1990	2000	Change
In Boundary	262,507	276,889	5.5%
Out Boundary	361,009	412,557	14.3%

Municipal Population Change Categories

	# Munis	% Total
Gained Inside and Gained Outside	16	30.8%
Gained Inside and Lost Outside	7	13.4%
Gained Inside, No Area Outside	4	7.7%
Lost Inside, Gained Outside	9	17.3%
Lost Inside, Lost Outside	8	15.4%
Lost Inside, No Area Outside	8	15.4%

Description: Population data at the census block level is useful in overcoming the limitations of municipal level population data by identifying the actual number of residents who live within the state-designated Pinelands area.

Unit of Analysis: Sub-Municipal data is aggregated by counting the population of census blocks inside and outside the Pinelands boundary using GIS. The actual population of the state-designated Pinelands area is calculated, along with areas of Pinelands municipalities that are outside the boundary. Census blocks from 1990 were normalized to make them comparable to 2000 census blocks.

Summary of Previous Findings

While population in the Pinelands region has grown to 615,984, the population actually inside the Pinelands boundary was less than half that number in 2000. Pinelands population data analyzed at the census block level revealed that 276,889 people lived in the Pinelands in 2000, a 5.5% increase over the 1990 population of 262,507. The number of persons living in Pinelands municipalities outside of the Pinelands boundary increased from 361,009 in 1990 to 412,557 in 2000, an increase of 14.3%.

The top three municipalities with the largest populations inside the Pinelands boundary are Pemberton Township, Hamilton Township, and Medford Township (Table P2a). Of the fifty-two municipalities with land in the Pinelands, the top 10 municipalities in population account for 58% of the Pinelands total population, while the top 20 municipalities account for 85% of the population. The municipalities in the top bracket contain at least one of the Pinelands development areas: Regional Growth Areas, Pinelands Towns, and Pinelands Villages. Conversely, the 10 municipalities with the least population in the Pinelands do not even comprise ½% of the total Pinelands population. Five of these 10 are defined as “Non-Pinelands” municipalities for the purposes of this study, as less than 10% of their land is within the Pinelands. Some municipalities have more than 10% of their land in the Pinelands, but have extremely few people. For example, Eagleswood has 20% of its land in the Pinelands, but has no residents in the Pinelands, while Beachwood has 28% of its land in the Pinelands and has only four residents. In most instances, these areas fall within Preservation or Forest management areas.

The largest absolute changes in population inside the Pinelands boundary between 1990 and 2000 occurred in municipalities that have Regional Growth Areas (Table P2b). Stafford, Egg Harbor Township, and Hamilton were the top three municipalities in terms of absolute growth, while Berkeley was the fastest growing in terms of percent change. Wrightstown, Pemberton Township, and North Hanover had the largest absolute decreases in population, due to military base reductions.

The 53 municipalities with some or all of their land inside the Pinelands were classified according to where their population gain occurred. Municipalities that gained population both inside and outside the boundary accounted for 30.8% of the total municipalities, the largest category by far. Municipalities completely located inside the Pinelands that experienced population gain made up the smallest percentage of the total, with 7.7%. Percentages in the other categories were relatively equal, with between seven and nine towns in each category.

Table P2a 2000 Population Inside and Outside the Pinelands Boundary by Pinelands Municipality

Municipality	% Land in Pinelands	Total Population Inside 2000	% Population Inside	% Population Outside	Total Population Outside 2000
Pemberton Twp	90%	28,127	98%	2%	564
Hamilton	97%	19,136	93%	7%	1,363
Medford Twp	75%	18,239	82%	18%	4,014
Egg Harbor Twp	38%	16,209	53%	47%	14,517
Winslow	81%	15,599	45%	55%	19,012
Monroe	69%	14,406	50%	50%	14,561
Stafford	39%	13,390	59%	41%	9,142
Hammonton	100%	12,604	100%	0%	
Manchester	72%	12,185	31%	69%	26,743
Evesham	55%	11,553	27%	73%	30,722
Galloway	38%	10,658	34%	66%	20,551
Waterford	100%	10,494	100%	0%	
New Hanover	91%	9,109	93%	7%	635
Southampton	73%	7,193	69%	31%	3,195
Tabernacle	100%	7,170	100%	0%	
Shamong	100%	6,462	100%	0%	
Buena Vista	90%	6,248	84%	16%	1,188
Mullica	100%	5,912	100%	0%	
Maurice River	69%	4,819	70%	30%	2,109
Egg Harbor City	100%	4,545	100%	0%	
Medford Lakes	100%	4,173	100%	0%	
Jackson	47%	4,106	10%	90%	38,710
Barnegat	56%	3,226	21%	79%	12,044
North Hanover	4%	3,090	42%	58%	4,257
Woodbine	95%	2,716	100%	0%	
Franklin	36%	2,664	17%	83%	12,802
South Toms River	48%	2,495	69%	31%	1,139
Berkeley	30%	2,467	6%	94%	37,524
Lakehurst	87%	2,393	95%	5%	129
Folsom	100%	1,972	100%	0%	
Weymouth	82%	1,668	74%	26%	600
Dennis	38%	1,623	25%	75%	4,869
Chesilhurst	100%	1,520	100%	0%	
Estell Manor	72%	1,502	95%	5%	72
Bass River	87%	1,234	82%	18%	276
Upper	33%	1,175	10%	90%	10,940
Woodland	100%	1,170	100%	0%	
Buena	47%	865	22%	78%	3,008
Washington	100%	621	100%	0%	
Lacey	67%	521	2%	98%	24,825
Plumsted	53%	412	6%	94%	6,863
Berlin Twp	16%	403	8%	92%	4,887
Vineland	7%	186	0%	100%	56,085
Ocean	41%	145	2%	98%	6,305
Berlin Boro	10%	141	2%	98%	6,008
Wrightstown	73%	123	16%	84%	625
Little Egg Harbor	23%	107	1%	99%	15,838
Port Republic	35%	102	10%	90%	935
Corbin City	1%	7	1%	99%	461
Beachwood	28%	4	0%	100%	10,371
Eagleswood	20%	0	0%	100%	1,441
Springfield	2%	0	0%	100%	3,227

Table P2b Population Change Inside and Outside the Pinelands Boundary by Pinelands Municipality (1990 – 2000)

Municipality	% Land in Pinelands	Total Population Inside 1990	Change in Pop In Pines 1990-2000	Percent Change 1990-2000	Total Population Outside 1990	Change in Pop Out Pines 1990-2000	Percent Change 1990-2000
Stafford	39%	5739	7651	133%	7568	1574	21%
Egg Harbor Twp	38%	11687	4522	39%	12905	1612	12%
Hamilton	97%	14988	4148	28%	1024	339	33%
Galloway	38%	8497	2161	25%	14824	5727	39%
Berkeley	30%	865	1602	185%	36424	1100	3%
Manchester	72%	10589	1596	15%	25387	1356	5%
Evesham	55%	10121	1432	14%	25188	5534	22%
Shamong	100%	5765	697	12%			
Barnegat	56%	2701	525	19%	9552	2492	26%
Maurice River	69%	4392	427	10%	2256	-147	-7%
Southampton	73%	6792	401	6%	3410	-215	-6%
Hammonton	100%	12208	396	3%			
Weymouth	82%	1340	328	24%	630	-30	-5%
Estell Manor	72%	1268	234	18%	123	-51	-41%
Winslow	81%	15426	173	1%	14661	4351	30%
New Hanover	91%	8962	147	2%	584	51	9%
Franklin	36%	2531	133	5%	11951	851	7%
Dennis	38%	1536	87	6%	4038	831	21%
Berlin Twp	16%	344	59	17%	5122	-235	-5%
Ocean	41%	91	54	59%	5325	980	18%
Upper	33%	1133	42	4%	9548	1392	15%
Woodbine	95%	2678	38	1%			
Medford Twp	75%	18206	33	0%	2320	1694	73%
Vineland	7%	166	20	12%	54614	1471	3%
Mullica	100%	5896	16	0%			
Berlin Boro	10%	133	8	6%	5539	469	8%
Corbin City	1%	3	4	133%	409	52	13%
Eagleswood	20%	0	0	0%	1476	-35	-2%
Chesilhurst	100%	1526	-6	0%			
Jackson	47%	4124	-18	0%	29108	9602	33%
Port Republic	35%	124	-22	-18%	877	58	7%
Plumsted	53%	436	-24	-6%	5569	1294	23%
Bass River	87%	1269	-35	-3%	311	-35	-11%
Egg Harbor City	100%	4583	-38	-1%			
Lacey	67%	563	-42	-7%	21578	3247	15%
Beachwood	28%	65	-61	-94%	9259	1112	12%
Little Egg Harbor	23%	172	-65	-38%	13158	2680	20%
Springfield	2%	123	-123	-100%	2911	316	11%
Washington	100%	805	-184	-23%			
Tabernacle	100%	7360	-190	-3%			
South Toms River	48%	2689	-194	-7%	1210	-71	-6%
Folsom	100%	2181	-209	-10%			
Buena	47%	1077	-212	-20%	3364	-356	-11%
Buena Vista	90%	6512	-264	-4%	1143	45	4%
Medford Lakes	100%	4462	-289	-6%			
Waterford	100%	10940	-446	-4%			
Lakehurst	87%	2939	-546	-19%	139	-10	-7%
Monroe	69%	15122	-716	-5%	11581	2980	26%
Woodland	100%	2063	-893	-43%			
North Hanover	4%	5493	-2403	-44%	4560	-303	-7%
Pemberton Twp	90%	30740	-2613	-9%	602	-38	-6%
Wrightstown	73%	3082	-2959	-96%	761	-136	-18%

Population 3

Age Demographics

Updated

US Census Bureau, 1980, 1990, 2000

- The average age of the population in Southern New Jersey is increasing.

Population Under 18 (Municipal Level)

	< 18 Years		
	1980	**1990**	**2000**
Pinelands	29.1%	24.7%	24.4%
Non-Pinelands	28.1%	24.8%	25.4%
New Jersey	27.0%	23.3%	24.8%

Population 65 and over (Municipal Level)

	> 65 Years		
	1980	**1990**	**2000**
Pinelands	13.5%	16.4%	16.8%
Non-Pinelands	12.5%	14.2%	14.6%
New Jersey	11.7%	13.4%	13.2%

Description: The age distribution of the population within each municipality provides some determination of the demand for services and the ability of the population to withstand changes in tax rates.

Unit of Analysis: Demographic data are compiled at the municipal level and aggregated to allow for inside/outside Pinelands, regional, and statewide analyses.

Summary of Previous Findings

Examination of demographic data indicated that the population throughout Southern New Jersey is aging. The proportion of the population under 18 declined 3.3 percentage points outside of the Pinelands between 1980 and 1990, and declined 4.4 percentage points inside of the Pinelands over the same period. During the same decade, the proportion of the population over 65 increased 1.7 percentage points outside of the Pinelands and rose 2.9 percentage points inside of the Pinelands. Statewide trends were similar to those found in Southern New Jersey. Table P3 shows the prevalence of different age classes in Pinelands and Non-Pinelands municipalities. An examination of the geographic distribution of the 20 municipalities in the eight southern counties with the lowest and highest median ages in 1980 and 1990 found that both age extremes (youngest and oldest) are found at the edges of the region, predominantly outside of the Pinelands. The concentration of older populations along the southern and eastern borders reflects the popularity of resort and beach communities among retirees, while the concentration of younger populations in the north and west most likely reflects the presence of large military installations, a college campus, and more urban areas in Camden County.

Average age in the Pinelands continued to increase gradually during the 1990s, while the proportion of the population under 18 and over 65 changed very little from 1990-2000. However, Table P3a provides evidence of an aging working population (18-65 years old) both inside and outside of the Pinelands. The majority of Pinelands municipalities fell within median age 30-34 in 1990; however, by 2000, that majority moved to median age 35-39. Similarly the largest number of Non-Pinelands municipalities moved up to the 35-39 median age group over the same period.

Update

Census Block Groups are small enough to distinguish population inside and outside the Pinelands boundary, thus overcoming the limitations of municipal level data. Data at the Census Block Group level was used to calculate age groups inside and outside the Pinelands boundary for the year 2000. Based on the block group data, the actual population inside the boundary was approximately 283,600.[8] Of these residents, 24.7% are under 18 years of age and 13.6% are over 64 years of age. Compared to the municipal Pinelands aggregate, the number of younger residents is approximately the same but the number of senior residents inside the Pinelands boundary is 3% lower. The population of the portion of Pinelands municipalities that lie outside the boundary was 405,000 residents. Of this number, 24.6% are under 18 and 18.4% are over 64. So, the number of juveniles in Pinelands municipalities is evenly spread inside and outside the boundary, but there are a greater number of seniors in Pinelands municipalities who live outside the boundary compared to inside the boundary. The Pinelands portion of Berkeley, Manchester, Southampton, and Barnegat stand out as areas that have a large percentage of senior residents (over 40%). These areas are home to several retirement communities (Table P3c).

8 This figure differs from the block level count, which was approximately 277,000. Block level data is more precise than Block Group level data, but less information is available at the block level.

Table P3a Median Age, 1980, 1990 and 2000 (Municipal Level)

1980									
Age Class	**18 - 22**	**23 - 29**	**30 - 34**	**35 - 39**	**40 - 49**	**50 - 59**	**60 - 64**	**65 - 69**	**Total[9]**
# of Non-Pinelands Municipalities	0	32	78	20	17	7	0	0	154
% Non-Pinelands	0.0%	20.8%	50.6%	13.0%	11.0%	4.5%	0.0%	0.0%	100.0%
# of Pinelands Municipalities	1	26	13	3	2	1	0	1	47
% Pinelands	2.1%	55.3%	27.7%	6.4%	4.3%	2.1%	0.0%	2.1%	100.0%
1990									
Age Class	**18 - 22**	**23 - 29**	**30 - 34**	**35 - 39**	**40 - 49**	**50 - 59**	**60 - 64**	**65 - 69**	**Total**
# of Non-Pinelands Municipalities	0	10	69	51	15	7	3	0	155
% Non-Pinelands	0.0%	6.5%	44.5%	32.9%	9.7%	4.5%	1.9%	0.0%	100.0%
# of Pinelands Municipalities	0	6	27	11	1	0	0	2	47
% Pinelands	0.0%	12.8%	57.4%	23.4%	2.1%	0.0%	0.0%	4.3%	100.0%
2000									
Age Class	**18 - 22**	**23 - 29**	**30 - 34**	**35 - 39**	**40 - 49**	**50 - 59**	**60 - 64**	**65 - 69**	**Total**
# of Non-Pinelands Municipalities	0	4	19	78	40	13	1	0	155
% Non-Pinelands	0.0%	2.6%	12.3%	50.3%	25.8%	8.4%	0.6%	0.0%	100.0%
# of Pinelands Municipalities	0	0	9	29	7	0	0	2	47
% Pinelands	0.0%	0.0%	19.1%	61.7%	14.9%	0.0%	0.0%	4.3%	100.0%

[9] Municipalities in 1980 totaled 201 due to lack of data for Tavistock Boro (population=9).

Table P3b Population Under 18 Years of Age Inside and Outside the Pinelands Boundary (Census Block Group Level)

County	Municipality	Population Inside 2000	Population Under 18 Inside	% Under 18 Inside	% Under 18 Outside	Population Under 18 Outside	Population Outside 2000
Ocean	South Toms River	2,877	909	31.6%	34.1%	258	757
Cape May	Upper	2,816	864	30.7%	28.0%	2,603	9,299
Ocean	Lakehurst	2,522	771	30.6%	0.0%	0	0
Burlington	Shamong	6,462	1,898	29.4%	0.0%	0	0
Burlington	Washington	621	182	29.3%	0.0%	0	0
Atlantic	Egg Harbor Twp	16,209	4,663	28.8%	27.5%	3,800	13,841
Atlantic	Egg Harbor City	4,545	1,284	28.3%	0.0%	0	0
Ocean	Little Egg Harbor	989	280	28.3%	23.9%	3,574	14,956
Ocean	Beachwood	1,331	375	28.2%	28.6%	2,585	9,044
Burlington	Pemberton Twp	27,243	7,658	28.1%	18.2%	263	1,448
Burlington	Tabernacle	7,170	2,004	27.9%	0.0%	0	0
Burlington	Medford Twp	18,919	5,245	27.7%	21.9%	729	3,334
Gloucester	Franklin	2,664	735	27.6%	27.7%	3,546	12,802
Atlantic	Buena	865	237	27.4%	25.3%	760	3,008
Ocean	Jackson*	5,627	1,523	27.1%	30.1%	11,178	37,183
Atlantic	Hamilton	19,287	5,199	27.0%	29.2%	354	1,212
Ocean	Stafford	13,390	3,612	27.0%	19.0%	1,740	9,142
Atlantic	Mullica	5,912	1,594	27.0%	0.0%	0	0
Burlington	Bass River	1,510	405	26.8%	0.0%	0	0
Atlantic	Buena Vista	6,248	1,659	26.6%	15.1%	179	1,188
Atlantic	Estell Manor / Weymouth/ Corbin City*	3,177	841	26.5%	30.0%	340	1,133
Gloucester	Monroe	14,813	3,905	26.4%	24.9%	3,522	14,154
Cape May	Dennis	2,135	562	26.3%	29.2%	1,274	4,357
Ocean	Ocean	825	216	26.2%	25.4%	1,427	5,625
Burlington	Evesham	12,827	3,338	26.0%	27.7%	8,147	29,448
Burlington	Woodland	1,170	302	25.8%	0.0%	0	0
Camden	Waterford	10,494	2,701	25.7%	0.0%	0	0
Burlington	Medford Lakes	4,173	1,067	25.6%	0.0%	0	0
Burlington	Wrightstown	39	10	25.6%	29.9%	212	709
Ocean	Lacey	521	130	25.0%	25.6%	6,353	24,825
Atlantic	Folsom	1,972	491	24.9%	0.0%	0	0
Ocean	Jackson / Manchester / Plumsted*	446	108	24.2%	0.0%	0	0
Cape May	Woodbine	2,716	723	23.6%	0.0%	0	0
Camden	Winslow	15,710	3,687	23.5%	33.2%	6,278	18,901
Camden	Chesilhurst	1,520	348	22.9%	0.0%	0	0
Atlantic	Hammonton	12,604	2,874	22.8%	0.0%	0	0
Atlantic	Galloway*	10,658	2,418	22.7%	28.9%	4,470	15,465
Ocean	Barnegat	3,226	467	14.5%	30.4%	3,666	12,044
Burlington	Southampton	6,445	907	14.1%	24.0%	947	3,943
Burlington	New Hanover +	9,109	1,224	13.4%	29.8%	189	635
Cumberland	Maurice River +	5,152	424	8.2%	26.4%	468	1,776
Ocean	Manchester*	10,995	871	7.9%	11.7%	3,206	27,493
Ocean	Berkeley	2,391	7	0.3%	12.1%	4,521	37,434
Atlantic	Galloway / Port Republic*	0	0	0.0%	23.2%	1,423	6,123
Camden	Berlin Twp	0	0	0.0%	25.8%	1,364	5,290
Ocean	Eagleswood	0	0	0.0%	24.7%	356	1,441
Ocean	Plumsted*	0	0	0.0%	28.5%	2,071	7,275
"Outside" Municipalities							
Burlington	North Hanover +	3,090	1,383	44.8%	25.5%	1,085	4,257
Cumberland	Vineland	186	58	31.2%	25.7%	14,405	56,085
Burlington	Springfield	0	0	0.0%	25.8%	833	3,227
Camden	Berlin Boro	0	0	0.0%	24.6%	1,513	6,149

* Some municipalities cannot be isolated because census block groups cut across municipal boundaries. Block groups that are shared by more than one municipality are listed separately.

+ Influenced by group quarters population.

Table P3c Population Over 64 Years of Age Inside and Outside the Pinelands Boundary (Census Block Group Level)

County	Municipality	Population Inside 2000	Population Over 64 Inside	% Over 64 Inside	% Over 64 Outside	Population Over 64 Outside	Population Outside 2000
Ocean	Berkeley	2,391	2,076	86.8%	50.0%	18,701	37,434
Ocean	Manchester*	10,995	6,816	62.0%	52.4%	14,394	27,493
Burlington	Southampton	6,445	2,830	43.9%	11.8%	465	3,943
Ocean	Barnegat	3,226	1,315	40.8%	11.8%	1,424	12,044
Burlington	Washington	621	151	24.3%	0.0%	0	0
Atlantic	Hammonton	12,604	2,265	18.0%	0.0%	0	0
Ocean	Stafford	13,390	2,281	17.0%	21.5%	1,963	9,142
Burlington	Wrightstown	39	6	15.4%	8.2%	58	709
Atlantic	Estell Manor / Weymouth/ Corbin City*	3,177	479	15.1%	9.7%	110	1,133
Camden	Chesilhurst	1,520	229	15.1%	0.0%	0	0
Ocean	Jackson*	5,627	811	14.4%	8.6%	3,198	37,183
Atlantic	Egg Harbor City	4,545	633	13.9%	0.0%	0	0
Atlantic	Buena	865	111	12.8%	16.7%	502	3,008
Burlington	Medford Lakes	4,173	516	12.4%	0.0%	0	0
Ocean	Ocean	825	98	11.9%	14.0%	790	5,625
Camden	Winslow	15,710	1,853	11.8%	5.7%	1,086	18,901
Atlantic	Buena Vista	6,248	692	11.1%	37.5%	446	1,188
Gloucester	Monroe	14,813	1,595	10.8%	15.1%	2,142	14,154
Atlantic	Mullica	5,912	630	10.7%	0.0%	0	0
Burlington	Bass River	1,510	161	10.7%	0.0%	0	0
Cape May	Woodbine	2,716	283	10.4%	0.0%	0	0
Atlantic	Galloway*	10,658	1,078	10.1%	6.9%	1,073	15,465
Ocean	Little Egg Harbor	989	98	9.9%	18.2%	2,723	14,956
Atlantic	Folsom	1,972	193	9.8%	0.0%	0	0
Cape May	Dennis	2,135	203	9.5%	13.7%	595	4,357
Ocean	Beachwood	1,331	125	9.4%	8.5%	771	9,044
Burlington	Pemberton Twp	27,243	2,501	9.2%	20.2%	292	1,448
Atlantic	Egg Harbor Twp	16,209	1,477	9.1%	8.7%	1,198	13,841
Gloucester	Franklin	2,664	238	8.9%	9.7%	1,242	12,802
Burlington	Medford Twp	18,919	1,658	8.8%	21.9%	729	3,334
Ocean	South Toms River	2,877	250	8.7%	10.3%	78	757
Ocean	Lacey	521	45	8.6%	15.3%	3,809	24,825
Atlantic	Hamilton	19,287	1,599	8.3%	6.9%	84	1,212
Camden	Waterford	10,494	854	8.1%	0.0%	0	0
Ocean	Lakehurst	2,522	201	8.0%	0.0%	0	0
Burlington	Woodland	1,170	90	7.7%	0.0%	0	0
Cape May	Upper	2,816	203	7.2%	13.6%	1,269	9,299
Burlington	Tabernacle	7,170	502	7.0%	0.0%	0	0
Burlington	Shamong	6,462	386	6.0%	0.0%	0	0
Burlington	Evesham	12,827	732	5.7%	10.2%	3,018	29,448
Cumberland	Maurice River +	5,152	214	4.2%	12.9%	229	1,776
Burlington	New Hanover +	9,109	75	0.8%	7.9%	50	635
Ocean	Jackson / Manchester / Plumsted*	446	0	0.0%	0.0%	0	0
Atlantic	Galloway / Port Republic*	0	0	0.0%	13.1%	803	6,123
Camden	Berlin Twp	0	0	0.0%	12.5%	663	5,290
Ocean	Eagleswood	0	0	0.0%	14.4%	207	1,441
Ocean	Plumsted*	0	0	0.0%	8.5%	621	7,275
"Outside" Municipalities							
Cumberland	Vineland	186	19	10.2%	14.2%	7,957	56,085
Burlington	North Hanover +	3,090	4	0.1%	10.5%	448	4,257
Burlington	Springfield	0	0	0.0%	10.7%	346	3,227
Camden	Berlin Boro	0	0	0.0%	13.6%	837	6,149

* Some municipalities cannot be isolated because census block groups cut across municipal boundaries. Block groups that are shared by more than one municipality are listed separately.

+ Influenced by group quarters population.

Population 4

Population Estimates

X Updated

US Census Bureau / NJ Dept of Labor 2001 – 2007

- Population growth has been very sluggish across all regions of New Jersey for the past few years. However, the population of Pinelands communities has increased at a faster rate of growth than the Non-Pinelands in every year since the 2000 census.

Population Estimates

	2006 Estimate	2007 Estimate	Change	% Change
New Jersey	8,666,075	8,685,920	19,845	0.2%
South Jersey	2,391,435	2,400,458	9,023	0.4%
Pinelands	680,151	683,374	3,223	0.5%
Non-Pinelands	1,711,284	1,717,084	5,800	0.3%
100% Land in Pines (11 municipalities)	58,650	58,366	-284	-0.5%
55-99% Land in Pines (19 municipalities)	329,170	330,011	841	0.3%
10-54% Land in Pines (17 municipalities)	292,331	294,997	2,666	0.9%

Description: Population estimates are useful for measuring population during, and calculating per capita values for, intercensal years. Population estimates are particularly important in the later half of the decade as the census year becomes more distant and ceases to be a good measure of current population. Unfortunately, estimates further from the census year have a greater margin of error. Estimates are calculated using birth and death rates and a factor for migration. Estimates for 2006 and 2007 will be updated when 2008 estimates are released, and once the next census is taken (2010), estimates for this decade will be re-adjusted for the final time to reflect the new census.

Unit of Analysis: Population data are compiled at the municipal level and aggregated to allow for inside/outside Pinelands, regional, and statewide analyses.

Summary of Previous Findings:

The population of New Jersey grew by 2.8% between 2000 and 2006, adding just over 234,000 residents. New Jersey's growth was driven by natural increase and international migration. Although internal migration to the state was negative (more US residents moved out than in), the Southern New Jersey region had a positive internal migration (more US residents moved in than out).

The Pinelands municipalities grew more quickly than the Non-Pinelands municipalities and the state from 2000 to 2006, increasing by 9.9% (compared to 2.8% statewide growth and 5.4% growth in South Jersey). Components of population growth (natural increase and migration) cannot be calculated for the Pinelands and Non-Pinelands as this information is not available below the county level.

Update:

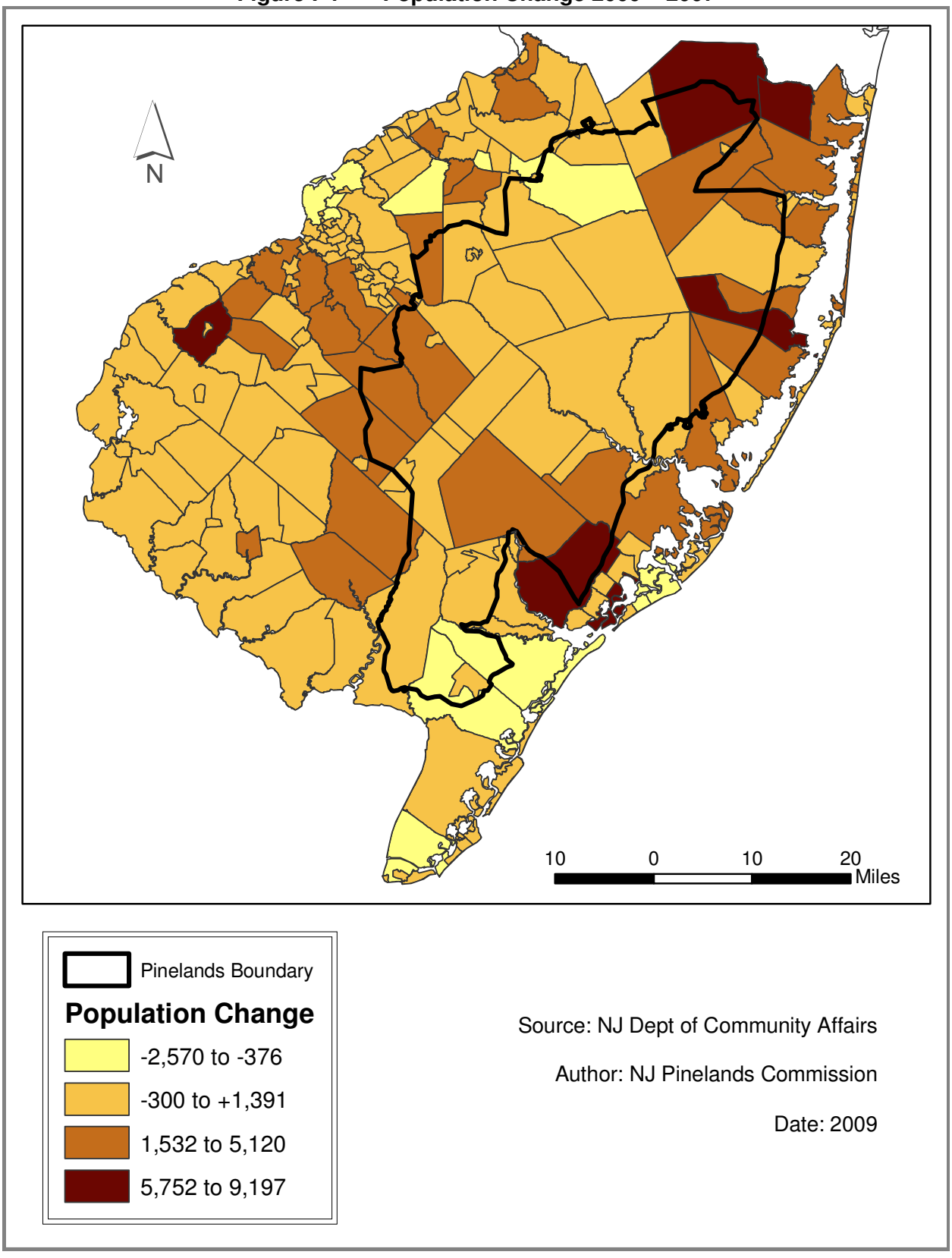
Population growth in New Jersey remained sluggish in 2007, posting just a 0.2% increase statewide. After experiencing a slight population decline in 2006, North Jersey added almost 20,000 new residents in 2007 (+0.1%). The Pinelands communities grew at 2½ times the rate of the state as a whole and slightly more than the rate of the rest of South Jersey for the year (Pines +0.5%, Non-Pines South Jersey +0.4%, and Statewide +0.2%). However, upon closer examination, it appears that past inside/outside growth trends uncovered by the census block analysis appear to be continuing. The 11 communities with their land area entirely within the Pinelands boundary showed a 0.5% decrease in population in 2007. Those communities that straddle the Pinelands boundary showed an increase in growth of 0.6% for the year (see table above). This suggests that much of the growth may in fact be occurring just outside of the Pinelands boundary.

The following six Pinelands communities ranked in the top 10% of South Jersey municipalities in both absolute population growth and percentage population growth: Egg Harbor Township, Winslow, Monroe, Barnegat, Ocean Township, and Franklin (see Table P4). In comparison, five South Jersey communities outside the Pines achieved such growth: Willingboro (+4,051, +12.3%), East Greenwich (+492, +7.3%), Chesterfield (+490, +7.6%), Harrison (+434, +3.7%), and Woolwich (+349, +4.1%).

Table P4 Population Estimates

Municipality	County	2006	2007	Change	South Jersey Rank : Change	% Change	South Jersey Rank : % Change
Egg Harbor Township	Atlantic	38,545	39,493	948	2	2.5%	14
Winslow	Camden	38,362	39,173	811	3	2.1%	16
Monroe	Gloucester	31,819	32,607	788	4	2.5%	13
Barnegat	Ocean	21,146	21,867	721	5	3.4%	11
Ocean	Ocean	8,223	8,643	420	12	5.1%	6
Jackson	Ocean	52,192	52,577	385	15	0.7%	47
Franklin	Gloucester	16,793	17,143	350	17	2.1%	17
Hamilton	Atlantic	24,274	24,553	279	20	1.1%	33
Little Egg Harbor	Ocean	20,239	20,517	278	21	1.4%	30
Stafford	Ocean	26,092	26,282	190	25	0.7%	49
Berkeley	Ocean	42,486	42,664	178	28	0.4%	69
Galloway	Atlantic	35,986	36,105	119	31	0.3%	76
Lacey	Ocean	26,243	26,322	79	36	0.3%	80
Plumsted	Ocean	8,104	8,177	73	38	0.9%	41
Beachwood	Ocean	10,728	10,789	61	40	0.6%	63
Lakehurst	Ocean	2,670	2,708	38	51	1.4%	26
Eagleswood	Ocean	1,610	1,645	35	54	2.2%	15
Hammonton	Atlantic	13,488	13,500	12	73	0.1%	90
Berlin Township	Camden	5,369	5,381	12	73	0.2%	85
Chesilhurst	Camden	1,867	1,874	7	80	0.4%	73
Estell Manor	Atlantic	1,709	1,714	5	85	0.3%	81
South Toms River	Ocean	3,710	3,713	3	87	0.1%	91
Waterford	Camden	10,637	10,636	-1	98	0.0%	98
Wrightstown	Burlington	735	733	-2	99	-0.3%	119
Washington	Burlington	647	643	-4	105	-0.6%	148
Port Republic	Atlantic	1,226	1,220	-6	110	-0.5%	140
Mullica	Atlantic	6,042	6,034	-8	113	-0.1%	106
Manchester	Ocean	41,724	41,713	-11	121	0.0%	101
Bass River	Burlington	1,559	1,547	-12	122	-0.8%	153
Maurice River	Cumberland	8,049	8,034	-15	128	-0.2%	112
New Hanover	Burlington	9,456	9,439	-17	131	-0.2%	110
Folsom	Atlantic	1,936	1,918	-18	135	-0.9%	162
Woodbine	Cape May	2,505	2,485	-20	141	-0.8%	155
Woodland	Burlington	1,366	1,344	-22	142	-1.6%	181
Weymouth	Atlantic	2,281	2,257	-24	143	-1.1%	164
Egg Harbor City	Atlantic	4,426	4,398	-28	146	-0.6%	149
Buena	Atlantic	3,779	3,747	-32	151	-0.8%	158
Medford Lakes	Burlington	4,132	4,099	-33	152	-0.8%	156
Southampton	Burlington	10,950	10,885	-65	166	-0.6%	146
Buena Vista	Atlantic	7,439	7,359	-80	170	-1.1%	166
Shamong	Burlington	6,824	6,738	-86	172	-1.3%	172
Tabernacle	Burlington	7,285	7,182	-103	176	-1.4%	177
Dennis	Cape May	5,900	5,791	-109	179	-1.8%	195
Upper	Cape May	11,349	11,110	-239	195	-2.1%	202
Medford	Burlington	23,235	22,838	-397	198	-1.7%	190
Pemberton Township	Burlington	28,631	28,158	-473	200	-1.7%	185
Evesham	Burlington	46,383	45,619	-764	202	-1.6%	184
"Outside" Munis							
Vineland	Cumberland	57,998	58,505	507	6	0.9%	42
Berlin Borough	Camden	7,858	7,870	12	73	0.2%	87
Corbin City	Atlantic	527	520	-7	112	-1.3%	174
Springfield	Burlington	3,545	3,492	-53	163	-1.5%	179
North Hanover	Burlington	7,523	7,415	-108	178	-1.4%	178

Figure P4 Population Change 2000 – 2007



Real Estate 1

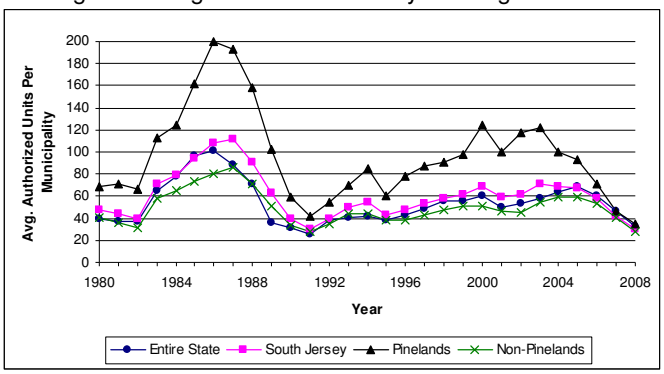
Building Permits for Dwelling Units

New Jersey Department of Labor 1980 – 2008

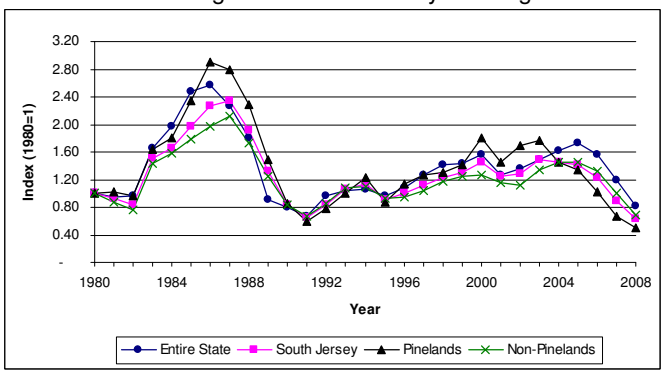
X Updated

- Building permits in the Pinelands dropped for the fifth consecutive year in 2008. The 71% drop in activity in the past five years is the longest extended decline in building permits in the Pinelands since 1986 – 1991, when permits declined by 79% over five years.

Avg # Dwelling Units Authorized by Building Permits



Index of Dwelling Units Authorized by Building Permits



Description: Building permit activity measures the number of dwelling units authorized for construction as reported by municipal building inspectors in New Jersey.

Unit of Analysis: Municipal level data are aggregated to allow for inside/outside Pinelands, regional, and statewide analyses. The aggregation method calculates the average units authorized per municipality.

Summary of Previous Findings

The overall trend in permits for dwelling units followed the broad cycle of economic activity, from a building boom in the mid-1980s to recession at the turn of the decade and subsequent recovery. The average number of permits issued by Pinelands municipalities was consistently higher and experienced somewhat higher volatility than other areas throughout the monitoring period. This finding is not surprising because the Pinelands region is less developed than the other regions. Another factor involved is the residential build-up that followed the beginning of casino gambling in Atlantic City in the early 1980s.

Building permit activity has gradually increased in all regions of the state from 1995 to 2003, except for a dip in activity during 2001 due to the onset of economic recession. Pinelands municipalities that ranked highest in building permits during the 1990s tended to be suburban municipalities in the northern and/or eastern Pinelands region. However, much of this building activity actually occurred outside Pinelands boundaries with few exceptions. An analysis conducted in 2001 suggested that as little as 18% of all Pinelands municipalities' building permits were actually directed within the Pinelands boundary. The Pinelands average is traditionally high because it is influenced by a few towns which are experiencing rapid growth – some in regional growth areas inside the Pinelands boundary, others in areas outside the Pinelands boundary. The Non-Pinelands average is affected by a larger number of municipalities that are smaller in land area and / or have little or no remaining developable land. These municipalities drive the Non-Pinelands' average downward.

A dramatic shift in building permit activity in the Pinelands began in 2004 and continued through 2007. During those three years, the average number of permits issued in the Pinelands decreased from 122 to 46, a decline of 62.4%. In contrast, the state as a whole saw permit activity fall by 19.3% (from 58 to 47), and the Non-Pinelands South Jersey municipalities experienced a decrease in permits of 25.3% (from 55 to 41). In fact, the 2004/2007 period marked the first time since 1987/1988 that building permit activity decreased in the Pinelands in consecutive years.

Update:

The downward shift in building permit activity in the Pinelands that started in 2004 continued again in 2008. The average number of permits (by municipality) issued in the Pinelands decreased from 46 to 35, a decline of 23.9%. This marked a slight improvement over 2007, when buildings permits dropped by over 35% in the Pinelands. All of the other regions of the state also experienced a steep decline in permit activity in 2008, with the Pinelands faring comparatively well with the smallest decline among all groups. The state as a whole saw a decrease in permit activity of 31.9% for the year (from 47 to 32) while the Non-Pinelands South Jersey municipality's permits dropped by 31.7% (from 41 to 28).

As was the case in 2007, the drop in permits in the Pinelands was fairly uniform in 2008. Table R1 illustrates the broad drop overall in the region – only four of the 47 Pinelands municipalities issued more permits in 2008 than in 2007, with three of those four issuing less than 10 permits more than the previous year. Only Jackson showed an appreciable increase in activity in 2008, adding 96 permits issued for a three and a half-fold increase for the year.

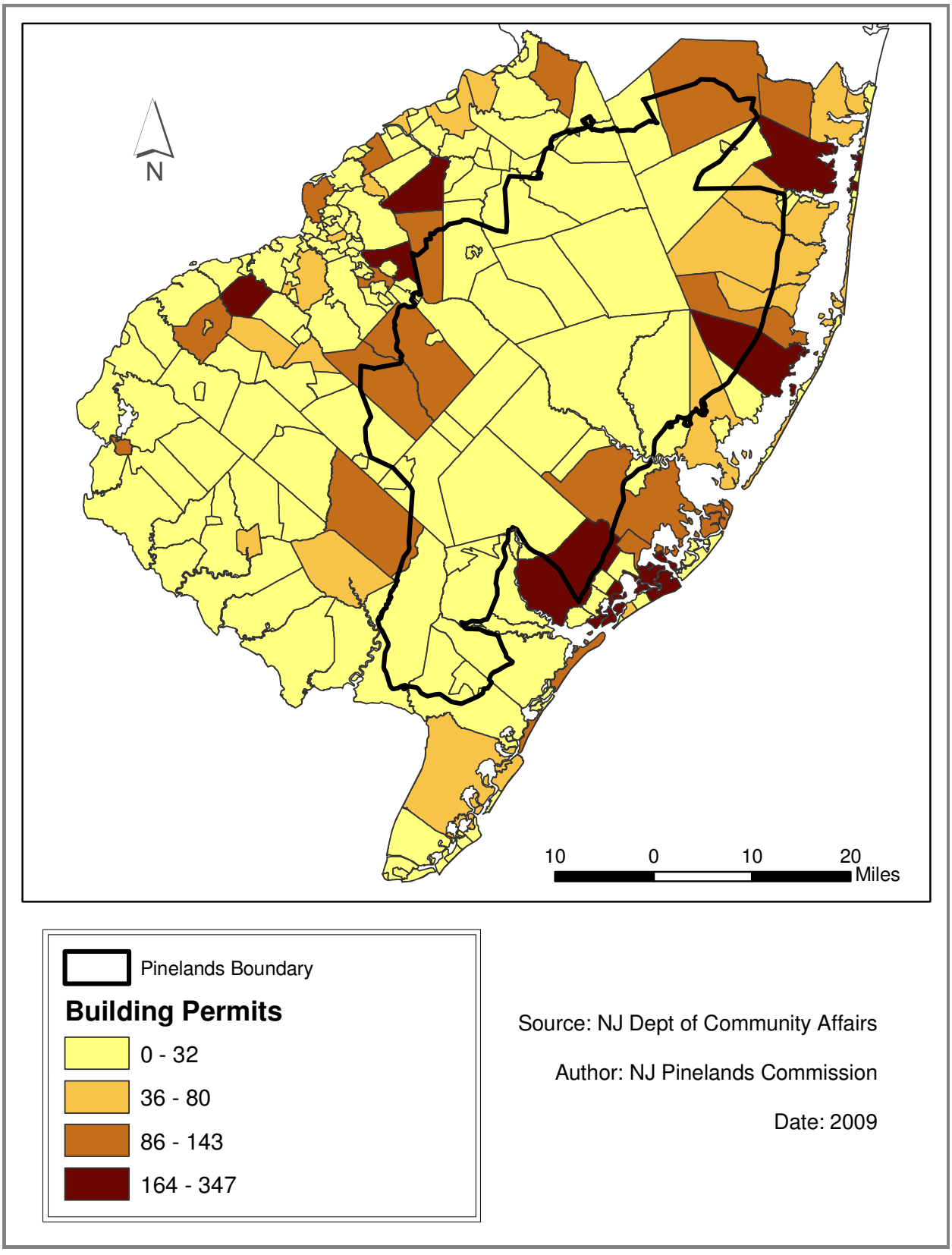
This year's significant drop in permit activity marks the fifth consecutive year of decline in permits in the Pinelands. During that time, building activity has fallen by 71% in the Pinelands (versus a drop of 45% statewide and a drop of 49% in the Non-Pinelands). The only other comparable period of slowdown in the Pinelands during the monitoring period covered in this report was from 1986 – 1991. During those years, building permits decreased by 79% in the Pinelands from a high of 200 in 1986 to a low of 41 in 1991. It is quite clear from the data that the slowdown of the national housing market has had a significant impact on the region. Another plausible explanation for the disparity in permit activity is that the Pinelands region has consistently shown more building permit activity over recent years than the Non-Pinelands. One would thus expect that a slowdown in the housing market is likely to have a greater effect on those municipalities that are experiencing more building activity.

Table R1 Residential Building Permits[10]

		Permits Issued					
Municipality	**County**	**2008**	**2007**	**Absolute Change**	**% Change**	**5 Year Avg**	**Permits 2004-2008**
Jackson	Ocean	133	37	96	259%	144	719
Woodbine	Cape May	19	10	9	90%	13	65
Lacey	Ocean	47	39	8	21%	51	255
Buena	Atlantic	8	1	7	700%	6	32
Weymouth	Atlantic	3	3	0	0%	4	19
Manchester	Ocean	2	2	0	0%	5	27
Upper	Cape May	14	14	0	0%	31	153
Folsom	Atlantic	2	3	-1	-33%	3	14
Washington	Burlington	2	3	-1	-33%	3	14
Port Republic	Atlantic	2	3	-1	-33%	11	57
New Hanover	Burlington	3	5	-2	-40%	7	33
Lakehurst	Ocean	0	2	-2	-100%	4	22
Estell Manor	Atlantic	5	7	-2	-29%	8	41
Maurice River	Cumberland	9	11	-2	-18%	11	54
South Toms River	Ocean	0	2	-2	-100%	4	22
Berlin Township	Camden	21	23	-2	-9%	19	97
Woodland	Burlington	5	8	-3	-38%	6	30
Evesham	Burlington	23	26	-3	-12%	52	260
Egg Harbor City	Atlantic	8	12	-4	-33%	12	62
Mullica	Atlantic	15	19	-4	-21%	24	122
Shamong	Burlington	9	13	-4	-31%	17	84
Tabernacle	Burlington	10	14	-4	-29%	13	65
Chesilhurst	Camden	10	14	-4	-29%	11	56
Bass River	Burlington	0	4	-4	-100%	5	24
Wrightstown	Burlington	1	5	-4	-80%	3	13
Plumsted	Ocean	15	19	-4	-21%	24	120
Dennis	Cape May	9	13	-4	-31%	15	76
Medford	Burlington	2	7	-5	-71%	15	75
Eagleswood	Ocean	11	17	-6	-35%	19	93
Medford Lakes	Burlington	10	17	-7	-41%	10	52
Waterford	Camden	17	24	-7	-29%	23	113
Hammonton	Atlantic	19	27	-8	-30%	76	381
Buena Vista	Atlantic	9	19	-10	-53%	15	77
Southampton	Burlington	19	29	-10	-34%	44	222
Pemberton Township	Burlington	19	31	-12	-39%	35	174
Beachwood	Ocean	6	19	-13	-68%	16	81
Berkeley	Ocean	57	78	-21	-27%	94	470
Winslow	Camden	115	148	-33	-22%	352	1758
Barnegat	Ocean	143	176	-33	-19%	302	1512
Franklin	Gloucester	25	59	-34	-58%	80	399
Galloway	Atlantic	74	116	-42	-36%	237	1187
Little Egg Harbor	Ocean	53	100	-47	-47%	174	870
Monroe	Gloucester	74	131	-57	-44%	186	932
Stafford	Ocean	78	141	-63	-45%	177	883
Hamilton	Atlantic	10	98	-88	-90%	134	668
Ocean	Ocean	68	173	-105	-61%	166	832
Egg Harbor Township	Atlantic	186	335	-149	-44%	446	2232
"Outside" Munis							
Corbin City	Atlantic	6	3	3	100%	4	19
North Hanover	Burlington	12	11	1	9%	15	76
Springfield	Burlington	0	2	-2	-100%	7	35
Berlin Borough	Camden	13	17	-4	-24%	33	166
Vineland	Cumberland	142	208	-66	-32%	157	784

10 Municipalities with small populations tend to experience greater volatility from one year to the next. This applies to all variables in this report, not just with building permits.

Figure R1 Residential Building Permits Issued 2008



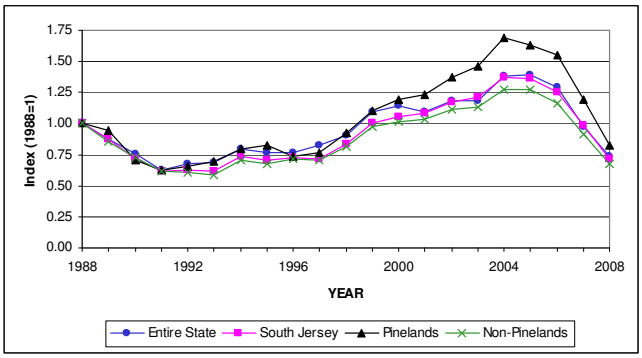
Real Estate 2

Residential Real Estate Transactions

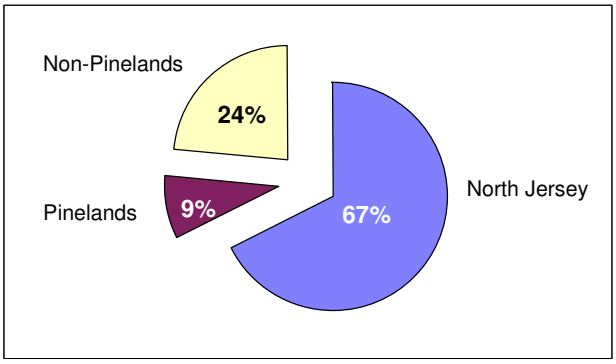
NJ Dept of Treasury, Div of Taxation 1988 – 2008 X Updated

- Residential real estate transactions in the Pinelands decreased for the fourth consecutive year in 2008. Activity in the Pinelands fell by 31%, marking the largest one-year decline in the monitoring period.

Index of Residential Property Transactions



Percentage of Total Housing Transactions by Region



Description: The number of homes sold in each municipality is derived from useable sales data compiled by the New Jersey Department of Treasury.

Unit of Analysis: Real estate transaction data are compiled at the municipal level and aggregated to allow for inside/outside Pinelands analysis.

Summary of Previous Findings

The proportion of residential real estate transactions in the Pinelands (relative to the number of state transactions) remained relatively steady over the course of the monitoring period from 1988 to 1999. The Pinelands' share of total transactions has been increasing since 1999. The actual number of transactions in all regions of the state declined substantially from the beginning of monitoring in 1988 through 1991. Residential real estate transactions increased statewide between 1991and 1996 followed by more substantial increases through 2004. Transactions held relatively steady in 2005. In 2006, activity showed a uniform decline of 7%, marking the first time since 1991 that transactions in all regions of the State decreased simultaneously. By 2007, the trend in the markets had become clear with uniform decreases in activity of between 20 – 25% across all regions of the state.

Update:

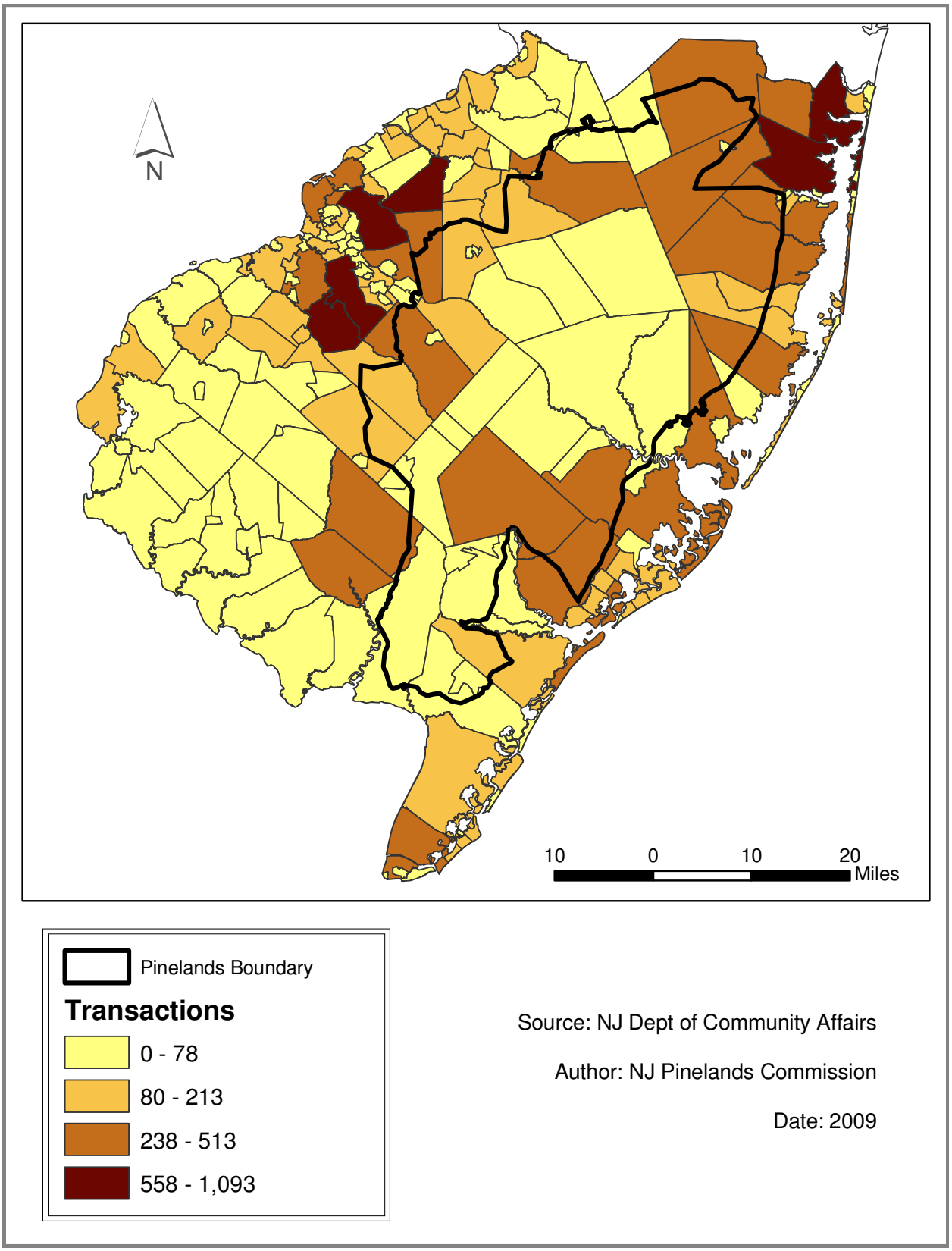
The pace of residential transactions that began a steep decline in 2007 continued to drop precipitously in 2008. For the second consecutive year, all regions of the state experienced a decline in the total number of transactions of greater than 20%. Transactions decreased statewide by 24.2% in 2008. In South Jersey, the Pinelands (-31.0%) decreased at a slightly higher rate than the Non-Pinelands (-26.0%). This marked the second consecutive year that the Pinelands' percentage change in transactions was smaller than the Non-Pinelands region. In the period covering 2000-2006, the Pinelands outperformed the Non-Pinelands in six out of seven years in the percentage increase in transactions.

The geographic pattern of transaction activity in the Pinelands remained relatively the same, with Jackson, Berkeley, Winslow, Galloway, and Evesham again holding the top five spots for number of transactions. As is the case with building permits, much of the activity in real estate transactions is occurring on the fringes of the Pinelands (Figure R2). The rate of transactions in Ocean County slowed considerably in 2008. Five of the top ten largest absolute decreases for Pinelands municipalities in 2008 were in Ocean County – Berkeley, Manchester, Jackson, Lacey, and Little Egg Harbor together decreased their real estate transaction volume by over 700 (Table R2). This marks quite a reversal, as Berkeley and Jackson ranked 1st and 2nd as recently as 2004 for the total increase in all Pinelands municipalities.

Table R2 Residential Housing Transactions

Municipality	County	2008	2007	Change	% Change	5 Year Avg
Barnegat	Ocean	133	83	50	60%	280
Plumsted	Ocean	54	25	29	116%	72
Beachwood	Ocean	80	55	25	45%	140
Buena	Atlantic	33	20	13	65%	42
Woodbine	Cape May	11	2	9	450%	8
Estell Manor	Atlantic	13	6	7	117%	15
Upper	Cape May	119	113	6	5%	139
Weymouth	Atlantic	7	3	4	133%	4
Eagleswood	Ocean	12	8	4	50%	15
New Hanover	Burlington	6	4	2	50%	6
Wrightstown	Burlington	1	0	1	n/a	1
Woodland	Burlington	11	11	0	0%	15
Port Republic	Atlantic	9	9	0	0%	12
Folsom	Atlantic	18	19	-1	-5%	23
Washington	Burlington	1	2	-1	-50%	4
Dennis	Cape May	38	41	-3	-7%	51
Berlin Township	Camden	48	53	-5	-9%	56
Tabernacle	Burlington	47	54	-7	-13%	62
Maurice River	Cumberland	20	28	-8	-29%	26
Bass River	Burlington	3	12	-9	-75%	13
Medford Lakes	Burlington	51	64	-13	-20%	67
South Toms River	Ocean	27	41	-14	-34%	44
Buena Vista	Atlantic	4	19	-15	-79%	15
Lakehurst	Ocean	20	35	-15	-43%	40
Egg Harbor City	Atlantic	33	49	-16	-33%	46
Chesilhurst	Camden	0	16	-16	-100%	13
Waterford	Camden	110	127	-17	-13%	154
Mullica	Atlantic	42	62	-20	-32%	62
Shamong	Burlington	46	72	-26	-36%	68
Stafford	Ocean	331	357	-26	-7%	438
Franklin	Gloucester	121	153	-32	-21%	155
Hammonton	Atlantic	78	117	-39	-33%	121
Southampton	Burlington	148	189	-41	-22%	205
Ocean	Ocean	89	134	-45	-34%	127
Medford	Burlington	209	272	-63	-23%	311
Little Egg Harbor	Ocean	269	370	-101	-27%	421
Pemberton Township	Burlington	277	392	-115	-29%	407
Lacey	Ocean	301	422	-121	-29%	523
Jackson	Ocean	513	636	-123	-19%	731
Manchester	Ocean	318	454	-136	-30%	528
Egg Harbor Township	Atlantic	383	548	-165	-30%	630
Hamilton	Atlantic	286	514	-228	-44%	523
Galloway	Atlantic	416	657	-241	-37%	758
Berkeley	Ocean	464	721	-257	-36%	922
Winslow	Camden	444	704	-260	-37%	739
Monroe	Gloucester	89	423	-334	-79%	384
Evesham	Burlington	399	795	-396	-50%	861
"Outside" Municipalities						
North Hanover	Burlington	22	18	4	22%	17
Springfield	Burlington	19	16	3	19%	19
Corbin City	Atlantic	1	1	0	0%	2
Berlin Borough	Camden	63	83	-20	-24%	94
Vineland	Cumberland	342	527	-185	-35%	543

Figure R2 Residential Housing Transactions 2008



Real Estate 3

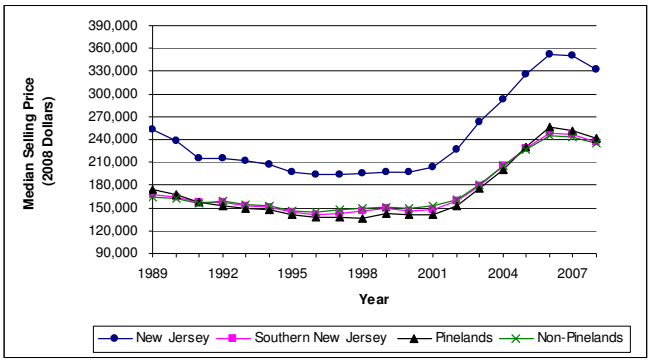
Median Selling Price of Homes

X Updated

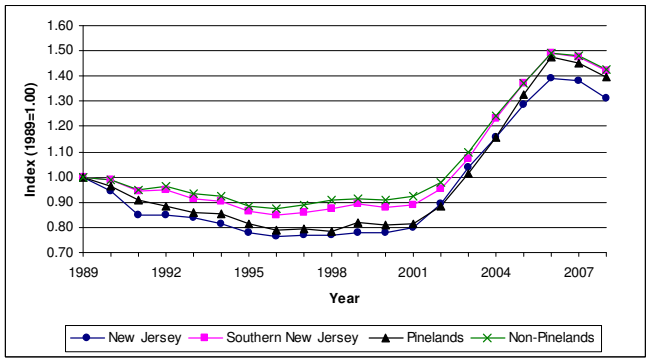
NJ Dept of Treasury, Division of Taxation 1989 – 2008

- In 2008, home prices dropped across all regions as real estate activity began to feel the effects of the recession. Home prices in South Jersey dropped by 3.7% for the year (in both the Pinelands & Non-Pinelands) while home prices fell by 5% statewide.

Median Sale Price of Homes



Index of Median Sale Price of Homes



Description: The median selling price for homes sold in each municipality in a given year is derived from sales data compiled by the New Jersey Department of Treasury. Selling prices are shown in 2007 dollars.

Unit of Analysis: Data on median selling prices are compiled at the municipal level and are derived from the middle value from the total number of sales for each region for inside/outside Pinelands, regional, and statewide analyses.

Summary of Previous Findings

Median selling prices of homes inside and outside of the Pinelands declined from the beginning of the monitoring period (1989) into the early 1990s, and increased slightly in subsequent years through 2001. This period encompassed the end of a real estate boom, recession, and subsequent recovery. Prices began to escalate for all regions in 2002, in spite of a recession in 2001 and weak job market thereafter. Prices continued their steady climb across all regions through 2006, but began to level off somewhat in 2007 as the volume of transactions began to decline. Overall, median selling prices were slightly higher in the Non-Pinelands than in the Pinelands, which is consistent with data from the years prior to implementation of the CMP and shortly thereafter (see, for example, *Economic & Fiscal Impacts of the Comprehensive Management Plan*, New Jersey Pinelands Commission, 1983). Historically, median selling prices at the state level have been substantially higher than those for Southern New Jersey.

Update:

In 2008, the median sales price of homes across all regions continued to decline as activity in the real estate market slowed considerably for the second straight year. The median, inflation-adjusted sales price of a home fell by 3.7% in both the Pinelands and the Non-Pinelands, while home prices fell statewide by 5.0% for the year. The median sales price for a home in the Pinelands was $242,000 in 2008, compared to $235,000 for the Non-Pinelands.

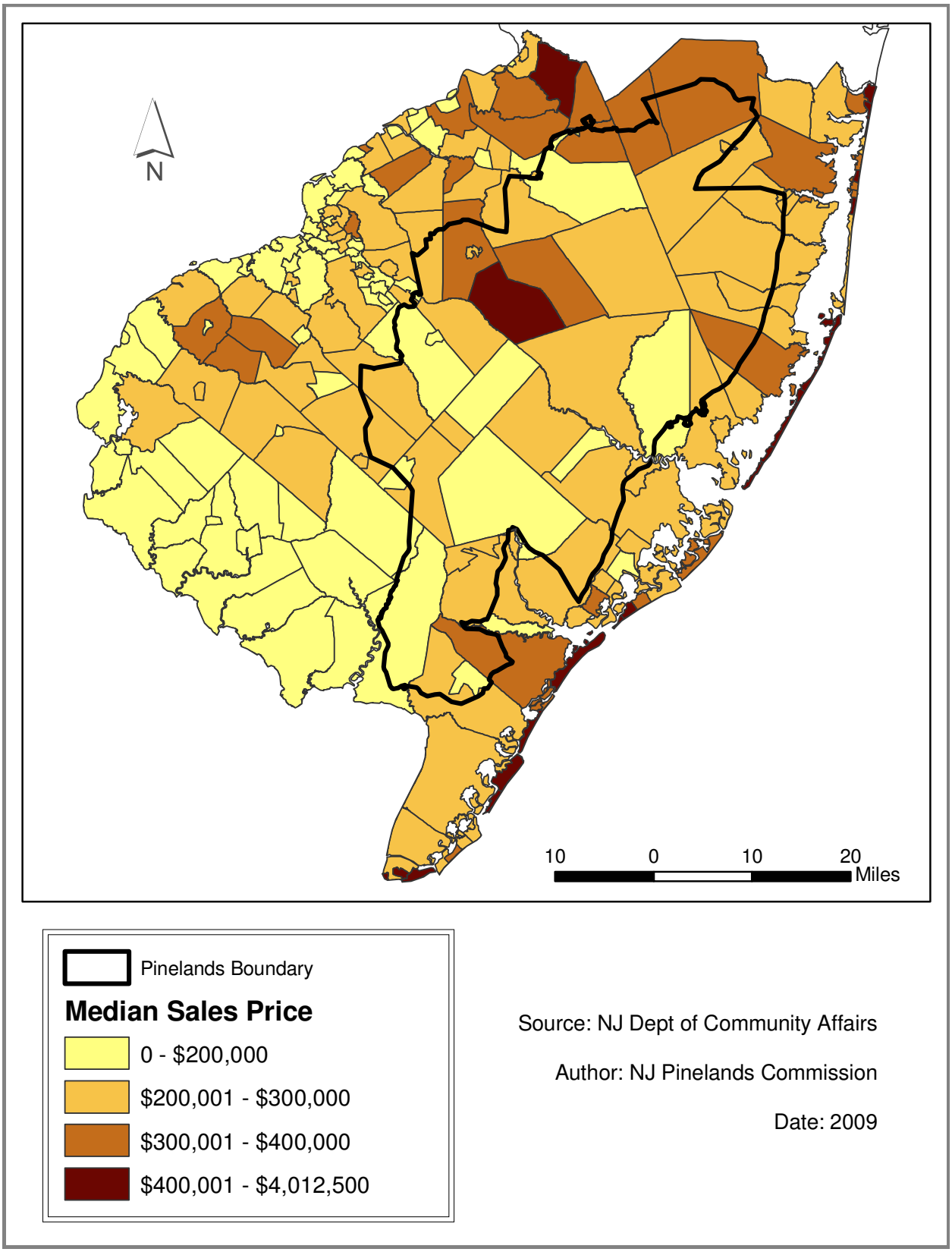
This marks the fourth consecutive year that the median sales price for homes in the Pinelands was higher than for homes in the Non-Pinelands. As recently as 1998, the median sales price in the Pinelands was 6.8% lower than the Non-Pinelands. The median sales price for a Pinelands home in 2008 was 3.0% higher than the Non-Pinelands.

Among Pinelands municipalities, four of the top eight municipalities were located in Burlington County (Shamong, Medford, New Hanover, and Tabernacle) and had median sales prices in excess of $300,000. Shamong was the lone Pinelands municipality with a median home sale price in excess of $400,000.

Table R3 Median Home Values - 2008

Municipality	County	Median Sales Price	South Jersey Rank
Shamong	Burlington	$406,000	22
Medford	Burlington	$360,000	31
Plumsted	Ocean	$350,000	32
Jackson	Ocean	$327,000	38
New Hanover	Burlington	$323,500	41
Tabernacle	Burlington	$320,000	42
Stafford	Ocean	$315,000	44
Upper	Cape May	$307,500	47
Dennis	Cape May	$295,750	50
Medford Lakes	Burlington	$290,000	52
Woodland	Burlington	$282,500	55
Port Republic	Atlantic	$275,000	62
Barnegat	Ocean	$272,500	64
Lacey	Ocean	$272,000	66
Weymouth	Atlantic	$271,500	67
Ocean	Ocean	$262,500	73
Beachwood	Ocean	$262,000	74
Egg Harbor Township	Atlantic	$257,500	76
Evesham	Burlington	$249,000	82
Eagleswood	Ocean	$248,000	84
Little Egg Harbor	Ocean	$240,000	87
Mullica	Atlantic	$235,950	91
Manchester	Ocean	$229,000	96
South Toms River	Ocean	$225,000	102
Estell Manor	Atlantic	$220,000	104
Washington	Burlington	$220,000	104
Franklin	Gloucester	$220,000	104
Monroe	Gloucester	$220,000	104
Berkeley	Ocean	$218,000	109
Lakehurst	Ocean	$215,000	110
Waterford	Camden	$214,450	113
Southampton	Burlington	$208,500	117
Galloway	Atlantic	$203,550	122
Folsom	Atlantic	$202,500	123
Buena Vista	Atlantic	$202,450	124
Winslow	Camden	$200,000	126
Hamilton	Atlantic	$199,950	128
Hammonton	Atlantic	$195,975	135
Egg Harbor City	Atlantic	$195,000	136
Berlin Township	Camden	$194,500	138
Pemberton Township	Burlington	$190,000	140
Woodbine	Cape May	$184,000	146
Bass River	Burlington	$170,000	157
Wrightstown	Burlington	$170,000	157
Maurice River	Cumberland	$170,000	157
Buena	Atlantic	$167,500	164
Chesilhurst	Camden	No transactions	n/a
"Outside" Municipalities			
Springfield	Burlington	$390,000	25
North Hanover	Burlington	$327,900	37
Berlin Borough	Camden	$258,000	75
Vineland	Cumberland	$176,000	151
Corbin City	Atlantic	$45,000	196

Figure R3 Median Home Sales Prices 2008



Economy

1

Per Capita Income

US Census Bureau 1979, 1989, 1999

☐ Updated

- Per Capita Income is lower in the Pinelands than in the Non-Pinelands, but is growing at a faster rate.

Per Capita Income

Location	1979 PCI (2004 $)	1989 PCI (2004 $)	1999 PCI (2004 $)	Change 1979-89	Change 1989-99	Change 1979-99
Pinelands	$16,641	$22,065	$23,806	33%	11%	47%
Non-Pinelands	$19,494	$27,104	$27,896	39%	3%	43%
Statewide	$21,214	$28,600	$30,719	35%	7%	45%

Description: Per capita income is an important indicator of regional economic health because it provides information regarding the ability of a region's residents to make purchases and pay taxes, and provides a measure of the economic well being of individuals. Values are adjusted for inflation and shown in 2004 dollars (not 2003 dollars).

Unit of Analysis: Per capita income data are compiled at the municipal level and aggregated to allow for inside/outside Pinelands and statewide analyses.

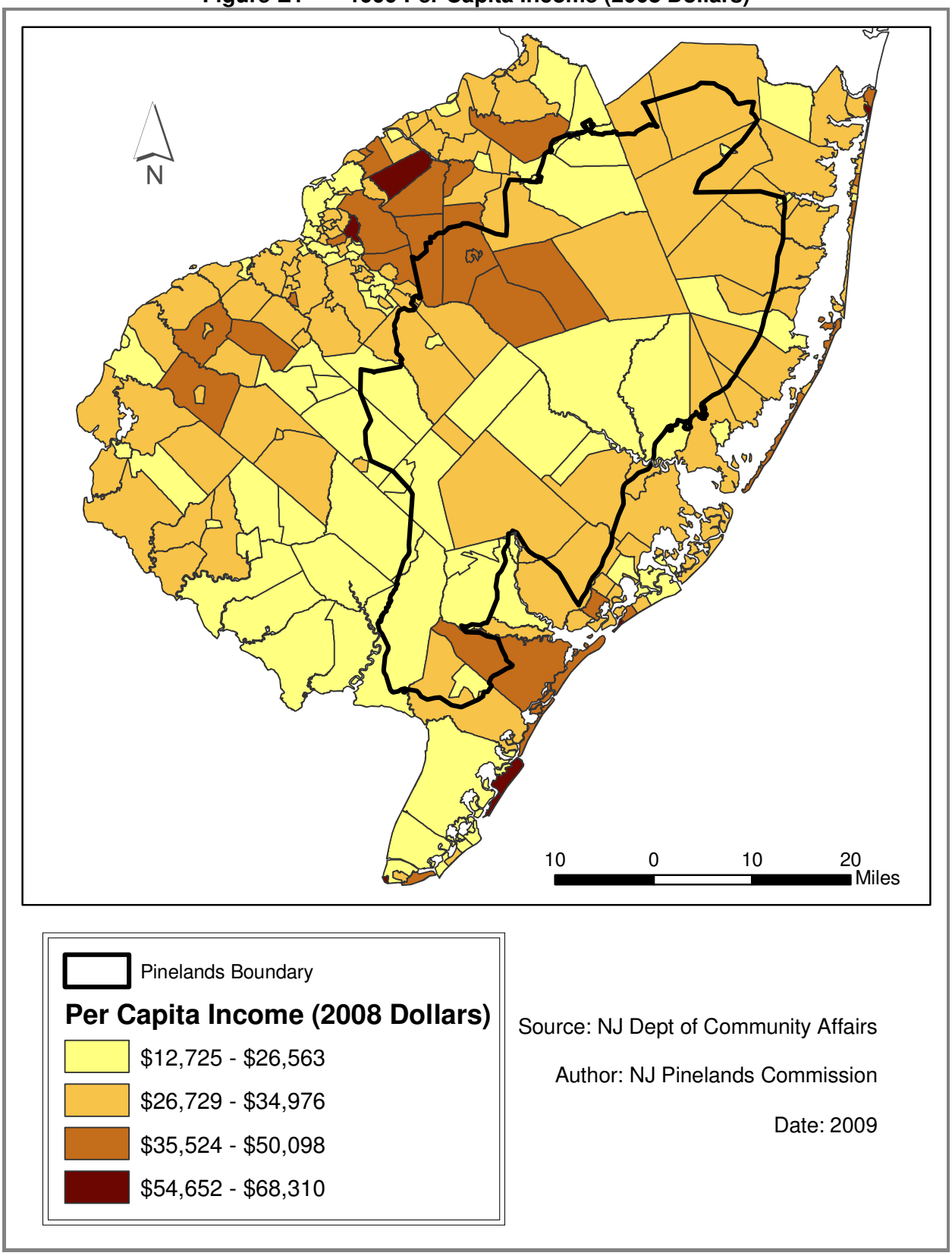
Summary of Previous Findings

Real per capita income increased significantly inside and outside of the Pinelands during the 1980s, unlike many areas of the country. Per capita income growth in the Pinelands more than kept pace and finished slightly behind the surrounding region in terms of percentage change between 1980 and 1990. The level of per capita income remained higher in absolute terms in the Non-Pinelands region compared to the Pinelands region.

Per capita income continued to increase during the 1990s, but the rate of growth was much lower than in the 1980s. The Pinelands region experienced an 11% increase in income levels between 1989 and 1999, compared to an increase of 7% for the state and 3% for the Non-Pinelands region. While the Pinelands region is catching up to the rest of the state, its income levels are still significantly lower than the rest of the state. Medford Township, Medford Lakes, and Shamong had the highest incomes in the Pinelands, while New Hanover, Washington, and Woodbine had the lowest income levels. Woodland experienced the largest increase in income between 1990 and 2000 (74%), while Washington had the largest decrease (40%). The changes in both towns are anomalies related to shifts in institutional group quarters population and volatility due to small population size. A positive sign is that many towns with the lowest per capita incomes experienced the largest increases in income (i.e. Woodbine, Wrightstown, South Toms River, Maurice River, and Lakehurst).

Geographically, income levels appear as a series of bands that run across Southern New Jersey. A band of higher income surrounds the Philadelphia metropolitan area and stretches into the upper-middle portion of the Pinelands. This band represents suburbanizing communities outside of the city. The band is actually split in two by older, working class suburbs and rural communities that have only begun to suburbanize. Another thin band of high income stretches along the shore. A band of more moderate income stretches across the south-central half of the state, and a smaller, moderate income area is located in the northeastern part of Southern New Jersey. These communities tend to be rural communities, with some experiencing recent suburbanization. A region of poverty exists in the extreme southern portion of the state, along with a small pocket of lower income in the heart of the Pinelands. These areas are predominantly rural, and are the least impacted by development. Smaller pockets of poverty persist in the military towns of Burlington County, and in the older urban areas such as Camden and Atlantic City, which have suffered economic hardship. It is interesting to note that while the Pinelands does have a lower Per Capita income than the Non-Pinelands region, these bands of different income stretch across Southern New Jersey regardless of the Pinelands boundary.

Figure E1 1999 Per Capita Income (2008 Dollars)



* This range excludes Mantoloking Borough, Ocean County, because it is an extreme outlier.

Table E1 1999 Per Capita Income by Pinelands Municipality (2008 Dollars)

Municipality	County	1999	1989	1979	Change 1989-1999	Change 1979-1989
Medford Twp.	Burlington	$50,098	$42,822	$28,435	17%	51%
Medford Lakes Boro	Burlington	$40,686	$38,615	$28,294	5%	36%
Shamong Twp.	Burlington	$40,106	$32,766	$21,782	22%	50%
Evesham Twp.	Burlington	$38,239	$34,815	$25,671	10%	36%
Tabernacle Twp.	Burlington	$36,138	$35,395	$20,723	2%	71%
Upper Twp.	Cape May	$35,651	$30,687	$21,431	16%	43%
Southampton Twp.	Burlington	$34,976	$29,066	$22,853	20%	27%
Woodland Twp. *	Burlington	$33,873	$19,451	$12,148	74%	60%
Stafford Twp.	Ocean	$32,927	$25,481	$19,886	29%	28%
Port Republic City	Atlantic	$31,594	$30,662	$24,002	3%	28%
Jackson Twp.	Ocean	$31,091	$28,056	$19,863	11%	41%
Lacey Twp.	Ocean	$29,996	$25,917	$19,675	16%	32%
Ocean Twp.	Ocean	$29,599	$23,454	$20,895	26%	12%
Plumsted Twp.	Ocean	$29,084	$26,183	$18,947	11%	38%
Manchester Twp.	Ocean	$29,054	$25,966	$21,591	12%	20%
Egg Harbor Twp.	Atlantic	$28,948	$27,632	$20,420	5%	35%
Berkeley Twp.	Ocean	$28,780	$24,133	$18,908	19%	28%
Berlin Twp.	Camden	$28,753	$23,523	$18,557	22%	27%
Waterford Twp.	Camden	$28,103	$25,441	$18,607	10%	37%
Dennis Twp.	Cape May	$27,816	$26,654	$18,563	4%	44%
Hamilton Twp.	Atlantic	$27,626	$27,780	$20,143	-1%	38%
Winslow Twp.	Camden	$27,556	$24,416	$18,886	13%	29%
Beachwood Boro	Ocean	$27,547	$25,276	$18,369	9%	38%
Galloway Twp.	Atlantic	$27,289	$28,397	$19,670	-4%	44%
Little Egg Harbor Twp.	Ocean	$26,733	$24,809	$19,054	8%	30%
Eagleswood Twp.	Ocean	$26,729	$22,872	$15,947	17%	43%
Folsom Boro	Atlantic	$26,729	$23,091	$19,021	16%	21%
Monroe Twp.	Gloucester	$26,563	$23,939	$18,842	11%	27%
Bass River Twp.	Burlington	$26,425	$22,642	$19,197	17%	18%
Franklin Twp.	Gloucester	$26,289	$23,533	$18,286	12%	29%
Hammonton town	Atlantic	$25,786	$27,245	$21,151	-5%	29%
Mullica Twp.	Atlantic	$25,624	$24,142	$19,146	6%	26%
Estell Manor City	Atlantic	$25,241	$27,279	$19,223	-7%	42%
Barnegat Twp.	Ocean	$25,031	$22,846	$17,092	10%	34%
Pemberton Twp.	Burlington	$24,942	$21,966	$16,828	14%	31%
Weymouth Twp.	Atlantic	$24,616	$23,602	$17,955	4%	31%
Lakehurst Boro	Ocean	$23,842	$18,282	$15,588	30%	17%
Buena Vista Twp.	Atlantic	$23,832	$21,973	$16,813	8%	31%
Maurice River Twp.	Cumberland	$22,223	$17,749	$14,428	25%	23%
Buena Boro	Atlantic	$21,673	$20,769	$19,268	4%	8%
South Toms River Boro	Ocean	$21,123	$17,472	$14,579	21%	20%
Chesilhurst Boro	Camden	$19,774	$19,503	$15,564	1%	25%
Egg Harbor City	Atlantic	$19,643	$21,759	$20,627	-10%	5%
Wrightstown Boro	Burlington	$18,785	$14,930	$11,496	26%	30%
Washington Twp. +	Burlington	$18,121	$30,042	$16,545	-40%	82%
Woodbine Boro	Cape May	$17,288	$13,113	$10,984	32%	19%
New Hanover Twp.	Burlington	$15,739	$15,804	$15,492	0%	2%
"Outside" Municipalities						
Springfield Twp.	Burlington	$38,016	$32,326	$22,032	18%	47%
Dover Twp.	Ocean	$32,425	$30,144	$21,711	8%	39%
Berlin Boro	Camden	$31,991	$27,483	$23,424	16%	17%
Corbin City	Atlantic	$27,642	$26,326	$20,678	5%	27%
Vineland City	Cumberland	$24,370	$22,581	$18,306	8%	23%

* Large change is partially the result of a large decrease in institutional population

\+ Erratic change caused by small population size and presence of large institutional population

Economy

2

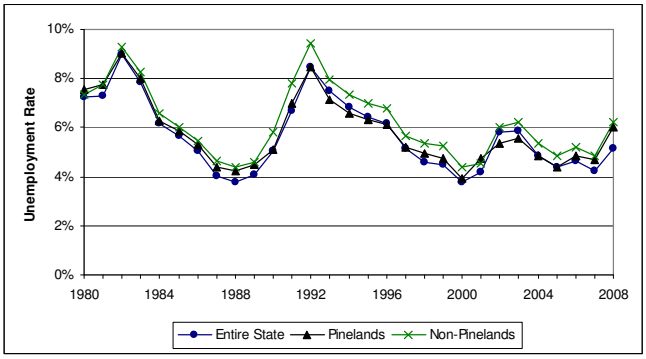
Unemployment

X Updated

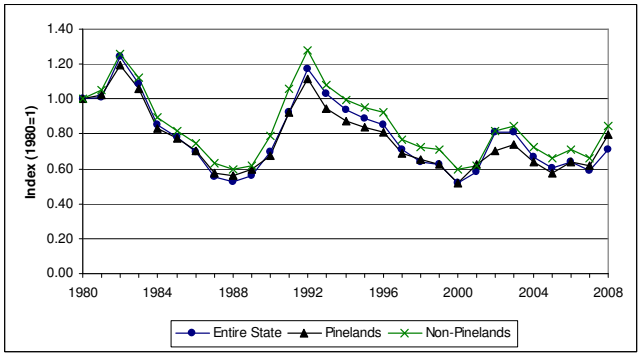
New Jersey Department of Labor 1980 – 2008

- Unemployment rates rose dramatically in 2008 in response to the national recession. South Jersey was particularly hard hit in 2008. The unemployment rate increased by 1.3% in the Pinelands (to 6.0%) and by 1.4% in the Non-Pinelands (to 6.2%).

Unemployment Rate



Index of Unemployment Rate



Description: The unemployment rate is the proportion of the labor force (defined as the number of people available to be, and desiring to be, working for pay) residing in an area which is unemployed (not working for pay) at a given point in time.

Unit of Analysis: Municipal level data are aggregated to allow for inside/outside Pinelands and statewide analyses. Values are based on sums for each region and not averages.

Summary of Previous Findings

Trends in unemployment in the Pinelands and Non-Pinelands regions have tracked closely together, with levels in the Pinelands consistently lower than the levels in the Non-Pinelands from 1990-2000. Unemployment in New Jersey appeared to follow general economic conditions, declining in the mid-1980s before increasing at the turn of the decade during the recession. Following a peak in 1992, unemployment levels declined steadily by roughly four percentage points by 2000, coinciding with a period of economic growth. Unemployment rose in 2001 with the onset of recession, and job recovery following the end of the recession in 2002 was sluggish, with modest increases in unemployment in 2002 and 2003. In 2004, unemployment decreased in all regions of the state for the first time in four years, and was followed in 2005 by another ½ % point decrease. From 2006-2007, rates remained relatively steady and close to historical lows for all areas of the state.

Update

The national job market responded as expected to the widening recession in 2008. According to the US Bureau of Labor statistics, approximately 8.9 million Americans were unemployed in 2008, compared to 7.1 million in 2007. The national unemployment rate posted its largest one-year increase since 1991, increasing from 4.6% in 2007 to 5.8% in 2008. The trend for the year was not promising for a quick recovery, as the unemployment numbers were far worse in the second half of the year than they were in the first half of the year.

Job growth in New Jersey fared well statewide in comparison to the national average, with the statewide unemployment rate increasing 0.9% from 4.2% in 2007 to 5.1% in 2007. Unfortunately, the South Jersey job market seemed to be hit much harder than North Jersey job market in 2008. In the Pinelands, the unemployment rate increased 1.3% for the year, going from 4.7% in 2007 to 6.0% in 2008. The Non-Pinelands experienced a slightly larger increase in unemployment during the year (+1.4%), finishing with an average rate of 6.2% for the year. In the 28 years of data that is covered in the monitoring period (1980 - 2008), the Pinelands has now recorded a lower unemployment rate than the Non-Pinelands in every year with the exception of two: 1980 and 2001.

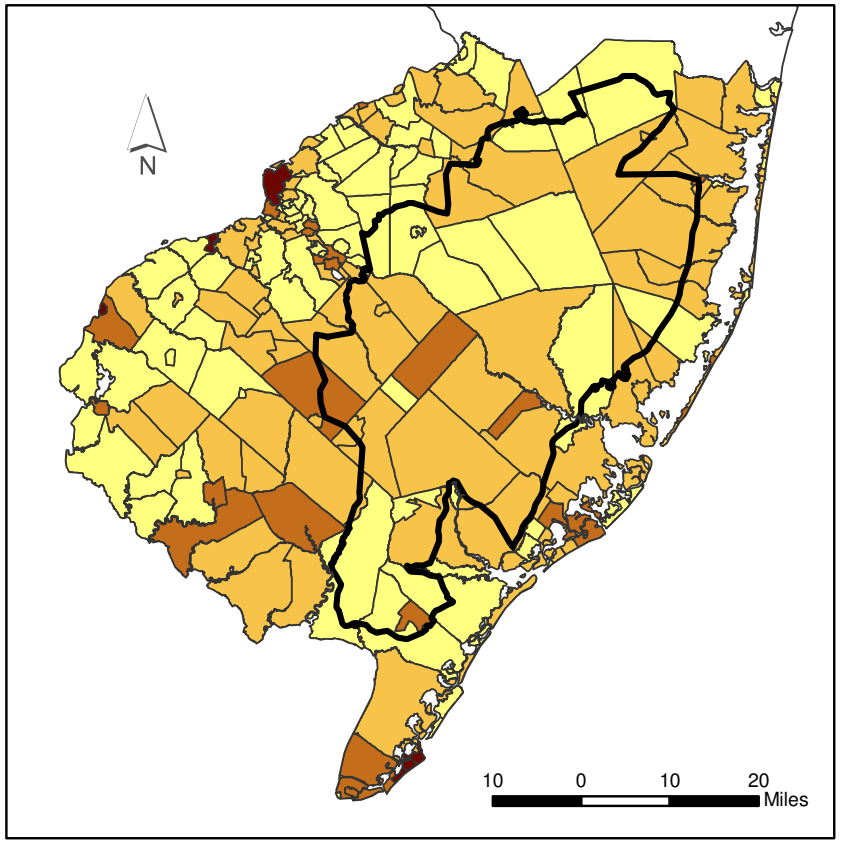
Unemployment rates in Southern New Jersey are generally the lowest in the easternmost suburbs of Trenton and Philadelphia. The highest rates in South Jersey are found in Cumberland and Cape May counties. Although the

Pinelands communities generally exhibit lower unemployment rates than the rest of South Jersey, some of the central and southern municipalities in the Pinelands have been more negatively effected over the past three years with rates increasing by more than 2% in the period between 2005-2008 (Figure E2). Of the ten Pinelands municipalities with unemployment increases of 2% or greater over that time, seven are located in Atlantic and Burlington counties (Estell Manor, Woodland, Egg Harbor City, Hammonton, Galloway, Egg Harbor Township, and Washington Township).

Table E2 Unemployment 2005 – 2008

Municipality	County	2008	2007	2006	2005	Three Year Change 2005 - 2008
Chesilhurst	Camden	9.9%	7.5%	8.2%	6.2%	3.7%
Estell Manor	Atlantic	7.8%	6.3%	6.3%	4.6%	3.2%
Woodland	Burlington	6.0%	4.4%	4.9%	3.0%	3.0%
Egg Harbor City	Atlantic	10.7%	8.7%	8.7%	8.2%	2.5%
Lakehurst	Ocean	8.2%	6.4%	7.2%	5.7%	2.5%
Hammonton	Atlantic	8.9%	7.2%	7.2%	6.5%	2.4%
Galloway	Atlantic	6.6%	5.4%	5.2%	4.5%	2.1%
South Toms River	Ocean	9.5%	7.4%	8.4%	7.5%	2.0%
Egg Harbor Township	Atlantic	6.2%	5.1%	4.8%	4.2%	2.0%
Washington	Burlington	7.9%	5.8%	6.4%	5.9%	2.0%
Wrightstown	Burlington	7.4%	5.5%	6.0%	5.5%	1.9%
Ocean	Ocean	7.3%	5.6%	6.4%	5.5%	1.8%
Hamilton	Atlantic	6.0%	4.8%	4.8%	4.3%	1.7%
Lacey	Ocean	6.3%	4.5%	4.9%	4.6%	1.7%
Buena	Atlantic	7.9%	6.4%	6.4%	6.2%	1.7%
Mullica	Atlantic	7.1%	5.7%	5.7%	5.4%	1.7%
Franklin	Gloucester	8.2%	6.4%	7.0%	6.5%	1.7%
Manchester	Ocean	7.1%	5.9%	6.5%	5.5%	1.6%
Waterford	Camden	6.2%	4.7%	5.1%	4.7%	1.5%
Jackson	Ocean	5.4%	4.0%	4.4%	3.9%	1.5%
Buena Vista	Atlantic	5.7%	4.6%	4.6%	4.2%	1.5%
Southampton	Burlington	6.5%	4.8%	5.3%	5.0%	1.5%
Stafford	Ocean	5.3%	3.9%	4.3%	3.8%	1.5%
Little Egg Harbor	Ocean	6.5%	5.0%	5.7%	5.0%	1.5%
Pemberton Township	Burlington	6.9%	5.5%	5.8%	5.5%	1.4%
Beachwood	Ocean	5.9%	4.6%	5.2%	4.5%	1.4%
Monroe	Gloucester	6.4%	5.4%	5.4%	5.0%	1.4%
Bass River	Burlington	5.1%	3.7%	4.1%	3.7%	1.4%
Berkeley	Ocean	6.8%	5.3%	6.0%	5.5%	1.3%
Evesham	Burlington	4.0%	2.9%	3.0%	2.7%	1.3%
New Hanover	Burlington	4.4%	3.2%	3.6%	3.2%	1.2%
Weymouth	Atlantic	4.2%	3.4%	3.4%	3.0%	1.2%
Port Republic	Atlantic	4.1%	3.3%	3.3%	2.9%	1.2%
Winslow	Camden	7.1%	5.8%	6.3%	5.9%	1.2%
Eagleswood	Ocean	5.1%	3.9%	4.4%	4.0%	1.1%
Shamong	Burlington	3.8%	2.7%	3.0%	2.8%	1.0%
Barnegat	Ocean	5.2%	4.0%	4.5%	4.2%	1.0%
Dennis	Cape May	4.8%	3.8%	4.0%	3.8%	1.0%
Plumsted	Ocean	3.8%	2.9%	3.3%	2.9%	0.9%
Berlin Township	Camden	3.8%	2.8%	3.1%	2.9%	0.9%
Maurice River	Cumberland	4.6%	3.8%	4.2%	3.7%	0.9%
Woodbine	Cape May	8.3%	6.8%	7.1%	7.5%	0.8%
Medford	Burlington	3.0%	1.7%	2.4%	2.2%	0.8%
Tabernacle	Burlington	2.7%	2.0%	2.2%	2.0%	0.7%
Medford Lakes	Burlington	2.3%	2.2%	1.9%	1.7%	0.6%
Upper	Cape May	2.4%	1.9%	2.0%	1.9%	0.5%
Folsom	Atlantic	3.2%	2.6%	2.6%	3.1%	0.1%
"Outside Municipalities"						
Vineland	Cumberland	8.0%	6.2%	6.5%	5.8%	2.2%
North Hanover	Burlington	6.3%	4.6%	5.1%	4.7%	1.6%
Corbin City	Atlantic	5.0%	4.0%	4.0%	3.6%	1.4%
Berlin Borough	Camden	5.3%	4.0%	4.3%	4.3%	1.0%
Springfield	Burlington	4.8%	3.5%	3.9%	4.1%	0.7%

Figure E2 Unemployment Rate 2008 and Change in Unemployment Rate 2005- 2008



Pinelands Boundary

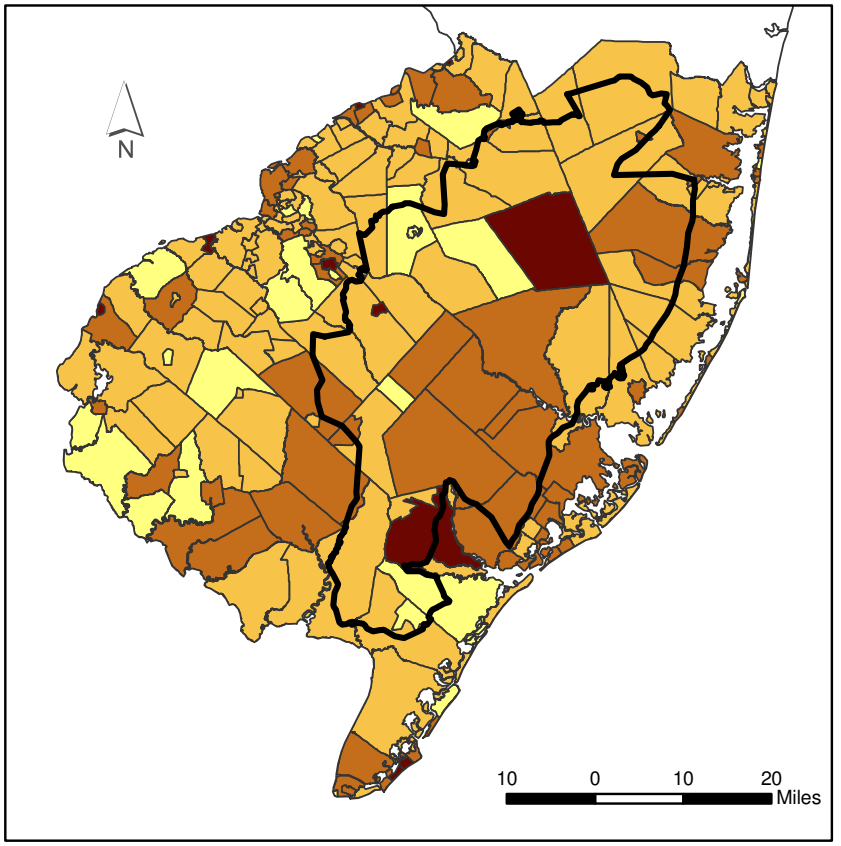
Unemployment Rate

- 0 to 3.9%
- 4.0% to 6.2%
- 6.5% to 8.7%
- 10.0% to 16.4%

Source: NJ Dept of Labor

Author: NJ Pinelands Commission

Date: 2008



Pinelands Boundary

Unemployment Change*

- -1.0% to +0.8%
- 0.9% to 1.6%
- 1.7% to 2.7%
- 2.9% to 5.3%

Source: NJ Dept of Labor

Author: NJ Pinelands Commission

Date: 2008

* Represents the change in percentage points, not the percent change.

Economy 3

Employment, Establishments, Wages

New Jersey Department of Labor 1991 – 2003

☐ Updated

- In the past 10 years, growth in employment and the number of establishments has increased at three times the rate in the Pinelands than in the Non-Pinelands and the state as a whole.

2003 NAICS	Largest Employment Sector	2nd Largest Sector	3rd Largest Sector
Atlantic	Accommodation & Food (42%)	Retail (12%)	Health Care (12%)
Burlington	Retail (17%)	Health Care (12%)	Manufacturing (11%)
Camden	Health Care (18%)	Retail (14%)	Manufacturing (10%)
Cape May	Accommodation & Food (26%)	Retail (21%)	Health Care (12%)
Cumberland	Manufacturing (22%)	Health Care (16%)	Retail (16%)
Gloucester	Retail (21%)	Health Care (13%)	Manufacturing (11%)
Ocean	Retail (23%)	Health Care (22%)	Accommodation & Food (10%)
Salem	Health Care (15%)	Retail (13%)	Manufacturing (13%)
Pinelands	Retail (21%)	Health Care (13%)	Construction (10%)
Non-Pinelands	Retail (16%)	Health Care (15%)	Accommodation & Food (15%)
New Jersey	Retail (14%)	Health Care (13%)	Manufacturing (11%)

Description: These three variables collectively describe the composition, size, strength, and location of the job market. The first variable, *employment*, is a basic measure of economic health. Employment data count the number of jobs tracked by unemployment insurance coverage.[11] The data are broken down to the first Standard Industrial Classification (SIC) code level (major industry division) to track the shifting of activity between major economic components. The second variable, *number of establishments*, refers to the number of businesses that have employees and is presented at the single-digit SIC code level. The third variable, *wages*, is a measure of economic activity that complements employment and number of establishments. In 2001 the state began using the new North American Industrial Classification System (NAICS) and discontinued the use of SIC codes. NAICS data is broken down to the two-digit level for post 2000 data.

Unit of Analysis: Municipal level data is available for all three variables from the period 1993 to 1999. No municipal data is available for the years 2000-2002, but the NJ Department of Labor once again began collecting that data for 2003. The municipal level data previously collected is presented here along with the new data for 2003. It must be emphasized that there are limitations to municipal data due to disclosure regulations.[12] Therefore, Pinelands and Non-Pinelands aggregates are approximations, not exact counts. The NJ Department of Labor is under contract to produce county level data each year, so county level data is included as well. County level data is subjected to the same limitations, but to a lesser degree. Municipal data is not comparable to the county data due to the effects of data suppression (i.e. the sum of the municipal parts does not equal the county whole).

Summary of Previous Findings

Employment

The Pinelands region outpaced the Non-Pinelands region and the state for growth in employment from 1993 to 1998. Employment in the Pinelands grew by 16.2% during that period, compared to 10% for the state and 9.2% for the Non-Pinelands region. The largest sectors of employment in the Pinelands are retail, health care, and construction,

[11] Because government employment is not included in all data sets, any such data have been omitted to facilitate comparisons over the entire monitoring period. Federal, state, local, and postal service jobs are therefore not represented in the data shown. This exclusion is in addition to the types of employment not tracked by the New Jersey Department of Labor, which includes "self-employed and unpaid family workers or certain agricultural and in-home domestic workers." As used in this report, the term "employment" refers to the modified private employment figures.

[12] The information derived in this analysis was obtained from the records of the Covered Employment system, which does not release data in cases where it has the possibility of providing information about a single employer or employment location. Data are "suppressed" when the system contains information on three or fewer employers, or when one employer represents 80% or more of the market. While it is unlikely that data suppression has had a large effect at the county level, it is likely to affect data at the municipal level, especially when the data are further broken down by industrial sector.

whereas the largest sectors for the state and Non-Pinelands region are services, retail, and manufacturing. While service employment is greater than retail employment in the Pinelands, employment in the Pinelands is weighted more toward the retail sector and less toward the service sector compared to the state and Non-Pinelands region. Employment shifts between different sectors was minimal in the Pinelands over the course of the monitoring period.

Establishments

The Pinelands region outpaced both the state and Non-Pinelands region for growth in new establishments from 1993 to 1998 by about a two-to-one margin. The Pinelands economy created 21.1% more establishments during the period, while the state grew 10.5% and the Non-Pinelands added 12.6% new businesses over the same time frame.

The sectors with the largest number of establishments are synonymous with the sectors of largest employment. Construction establishments comprise a larger percentage of total establishments in the Pinelands compared to the other regions. The percentage of total establishments in the agricultural sector is also larger in the Pinelands, while the percentage of service and retail sectors is fairly close between all three regions.

Wages

Average annual wages declined statewide by 2.7% from 1993 to 1998. Southern New Jersey fared better in respect to wages over this time period, with wages in the Pinelands rising 2.9% and wages in the Non-Pinelands increasing 3.3%. Average annual wages in the Pinelands still lagged $2,000 behind the Non-Pinelands by 1998, and trailed the state as a whole by almost $13,000 annually. The highest paying sectors in the Pinelands in 1998 were wholesale, finance-insurance-real estate, and construction. The highest paying sectors in the state were finance-insurance-real estate, transportation-communications-utilities, and wholesale, and the highest paying sectors in the Non-Pinelands were manufacturing, wholesale, and construction. Agricultural wages are much higher in the Pinelands compared to the Non-Pinelands region, while manufacturing wages are much lower in the Pinelands compared to the Non-Pinelands.

Employment	**1993**	**1998**	**2003**	**% Change 93-98**	**% Change 98-03**	**Ten Year Change**
State	2,872,496	3,160,385	3,264,274	10.0%	3.3%	13.6%
Pinelands	102,031	118,607	136,741	16.2%	15.3%	34.0%
Non Pinelands	550,063	600,769	610,972	9.2%	1.7%	11.1%
Establishments						
State	218,159	241,165	256,253	10.5%	6.3%	17.5%
Pinelands	9,346	11,320	12,363	21.1%	9.2%	32.3%
Non Pinelands	38,149	42,952	42,632	12.6%	-0.7%	11.8%
Wages						
State	$46,610	$45,355	$47,202	-2.7%	4.1%	1.3%
Pinelands	$31,535	$32,437	$33,860	2.9%	4.4%	7.4%
Non Pinelands	$33,438	$34,538	$36,634	3.3%	6.1%	9.6%

Update

In the 2004 Annual Report, updates were provided only at the county level since new municipal data had not been available since 1999. Though data has not been provided for the missing years of 2000 to 2002, the new municipal data released for 2003 allows an analysis once again at the regional Pinelands versus Non-Pinelands level. The charts provided for the counties presented last year have been retained and updated because they capture more data at the individual industrial classification level and they are less subject to data suppression issues.

Employment

While employment was generally flat in the state as a whole and in the Non-Pinelands region from 1998-2003, the Pinelands region continued to post impressive job numbers. For the five-year period, employment increased 15.3% in the Pinelands; in contrast, the Non-Pinelands job market increased only 1.7% and the state increased only 3.3% over the same time frame. Since 1993, job growth in the Pinelands has grown at three times the rate of the Non-Pinelands and the rest of the state, adding almost 35,000 new jobs over that time (+34%).

Establishments

Growth in establishments slowed in all regions from 1998-2003 in comparison to 1993-1998. The Pinelands again fared better in this respect, however. From 1998-2003, the Pinelands added 1,000 new establishments, a gain of 9.2% since 1998. The Non-Pinelands region actually posted a slight decrease (-0.7%) in establishments, dropping from 42,952 in 1998 to 42,632 in 2003. As a whole, the state posted a 6.3% increase in new businesses from 1998-2003. Over the past ten years, the Pinelands have added more than 3,000 new establishments, which represents a gain of 32.3% over the 1993 level. That is twice the rate of growth of the state as a whole (+17.5%) and almost three times the rate of growth of the Non-Pinelands region (+11.8%).

Wages

Annual average wages climbed considerably in all three regions in the period between 1998 and 2003. After posting a real decrease in wages from 1993-1998 of 2.7%, the state as a whole increased average annual wages 4.1% from 1998-2003. Southern New Jersey fared even better over the past five years, with the Pinelands region wages rising 4.4% and the Non-Pinelands posting a strong 6.1% increase in average annual wages. During the ten-year period of 1993-2003, Southern New Jersey has fared very well in comparison to North Jersey in respect to wage growth. During that time, wages in the state as a whole grew very slightly by 1.3%. In contrast, Non-Pinelands wages increased by 9.6%, and the Pinelands region increased by 7.4% over the same time frame.

With the exception of Linwood, Folsom, Medford Lakes, and Evesham, all of the municipal economies at the highest end of the average annual wages scale are located to the west of the Pinelands (Figure E3). A number of these municipalities actually straddle the western border of South Jersey and are logical extensions of the Philadelphia metropolitan economy. Within the Pinelands, four municipalities are of particular note. Jackson, Plumsted, Manchester, and Hamilton, while all posting large increases in population over the past ten years, have relatively low annual wages for their local economies. Of those four, the Ocean County communities have served largely as residential communities. Hamilton, however, has had the largest increase in retail space in all of South Jersey in the past 10 years, but its average annual wages nonetheless have lagged behind the rest of the region.

Figure E3
2003 Average Annual Private Sector Wages for Municipal Economies (in 2008 dollars)

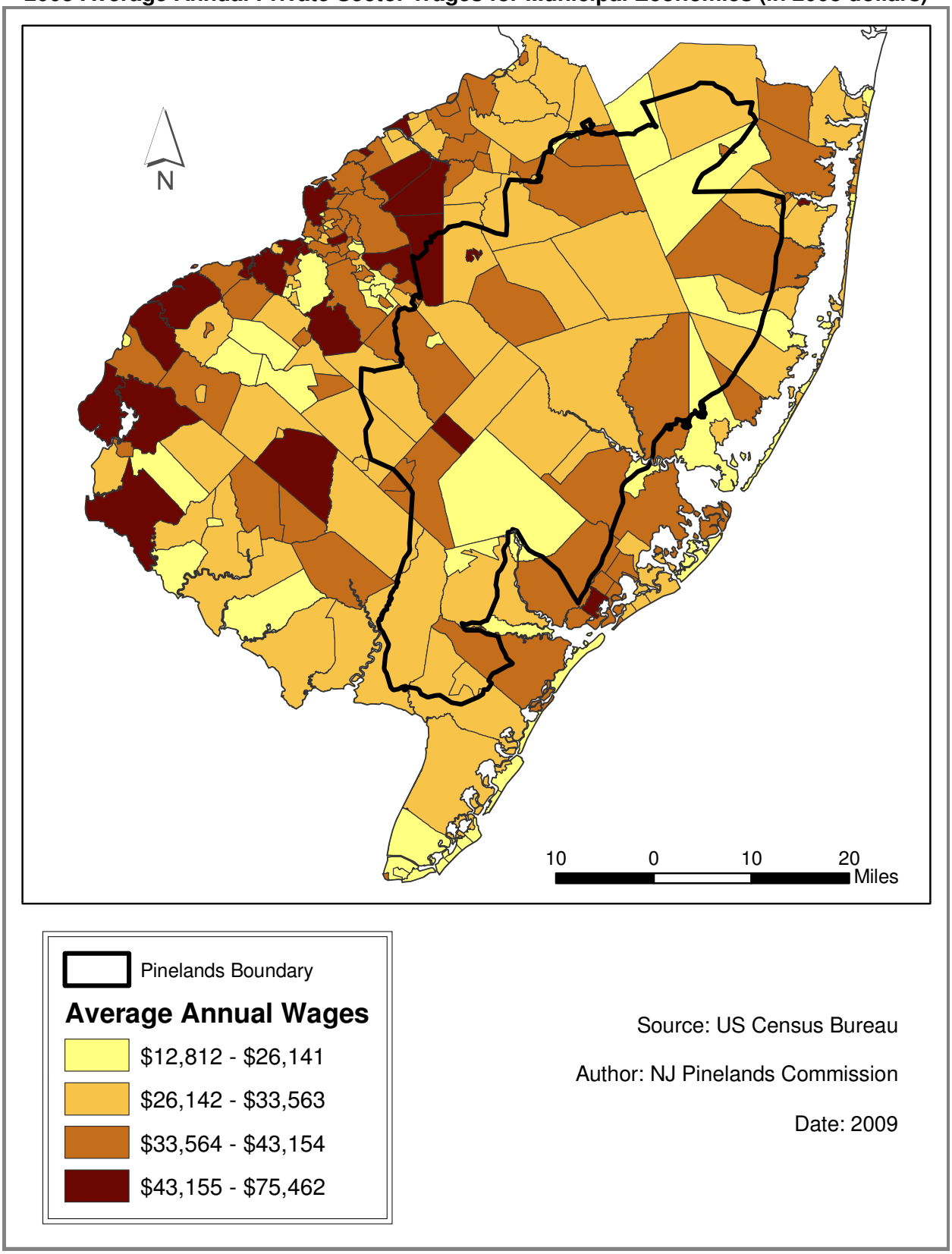


Table E3a County Private Sector Employment

County	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Ten Year Change
Atlantic	113,476	116,307	116,500	117,772	119,816	121,158	121,707	121,119	121,152	120,733	122,184	7.7%
Burlington	121,807	125,979	131,266	135,619	141,175	147,181	151,691	152,700	159,309	162,231	164,589	35.1%
Camden	151,416	156,719	162,748	162,964	165,755	169,553	169,511	166,157	166,567	167,576	169,238	11.8%
Cape May	26,990	27,463	27,226	27,697	28,635	29,149	29,579	29,270	30,985	31,667	32,163	19.2%
Cumberland	42,501	43,525	44,180	44,051	44,842	44,548	44,360	43,819	44,335	44,700	45,348	6.7%
Gloucester	58,462	60,910	65,966	66,581	67,923	69,730	71,711	72,329	74,182	75,464	79,463	35.9%
Ocean	91,843	96,057	98,607	100,073	101,951	102,875	103,708	106,008	110,190	114,037	116,338	26.7%
Salem	23,239	22,454	18,666	18,677	17,727	17,192	17,759	14,918	17,434	17,774	18,390	-20.9%
SJ Total	629,734	649,414	665,159	673,434	687,824	701,386	710,026	706,320	724,154	734,182	747,713	18.7%

Table E3b County Private Sector Establishments

County	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Ten Year Change
Atlantic	5,721	5,753	5,878	5,988	6,146	6,322	6,551	5,757	6,031	6,118	6,208	8.5%
Burlington	8,407	8,578	9,326	9,532	9,849	10,216	10,548	9,366	10,126	10,403	10,574	25.8%
Camden	10,908	11,034	12,089	12,282	12,666	12,957	13,235	11,601	12,303	12,452	12,720	16.6%
Cape May	3,765	3,812	3,784	3,851	3,982	4,073	4,232	3,668	3,965	3,982	4,098	8.8%
Cumberland	2,921	2,925	2,973	3,011	3,092	3,166	3,238	2,879	2,948	3,098	3,288	12.6%
Gloucester	4,661	4,730	5,076	5,184	5,339	5,523	5,707	5,052	5,243	5,463	5,717	22.7%
Ocean	8,807	9,011	9,467	9,787	10,164	10,537	10,996	9,627	10,372	10,701	11,008	25.0%
Salem	1,241	1,254	1,223	1,226	1,274	1,284	1,318	1,121	1,224	1,282	1,382	11.4%
SJ Total	46,431	47,097	49,816	50,861	52,512	54,078	55,825	49,071	52,212	53,499	54,995	18.4%

Table E3c County Private Sector Average Annual Wages

County	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Ten Year Change
Atlantic	$33,418	$33,114	$32,641	$32,889	$32,494	$32,596	$32,184	$32,123	$32,750	$33,028	$33,092	-1.0%
Burlington	$36,984	$36,837	$37,057	$37,650	$38,207	$39,808	$40,496	$41,090	$41,167	$41,572	$41,173	11.3%
Camden	$36,084	$35,841	$35,628	$35,896	$36,327	$36,718	$37,278	$37,277	$37,594	$38,288	$39,285	8.9%
Cape May	$25,047	$25,334	$24,887	$24,893	$24,918	$25,299	$25,648	$25,754	$25,734	$26,438	$26,736	6.7%
Cumberland	$31,852	$31,651	$31,363	$31,466	$31,724	$32,645	$32,302	$32,382	$32,188	$32,902	$32,687	2.6%
Gloucester	$33,091	$32,915	$32,507	$32,851	$33,521	$34,101	$34,301	$34,033	$34,292	$34,517	$34,216	3.4%
Ocean	$29,335	$28,924	$28,621	$28,784	$29,009	$30,330	$30,515	$31,119	$30,876	$31,331	$31,566	7.6%
Salem	$45,272	$45,548	$45,993	$47,091	$45,932	$44,585	$43,653	$44,252	$43,447	$44,655	$44,075	-2.6%
SJ Average	$33,885	$33,771	$33,587	$33,940	$34,016	$34,510	$34,547	$34,753	$34,756	$35,342	$35,354	4.3%

Table E3d 2003 County Private Sector Employment by NAICS Sector

Sector	NAICS	Atlantic	Burlington	Camden	Cape May	Cumberland	Gloucester	Ocean	Salem	South Jersey
11	Agriculture/Forestry/Fishing/Hunting	1,349	532	127	172	1,347	737	58	473	4,795
21	Mining	.	.	.	.	.	.	.	.	0
22	Utilities	192	.	81	.	.	.	260	.	533
23	Construction	6,272	7,185	9,482	2,434	2,475	5,796	8,318	929	42,891
31-33	Manufacturing	3,689	17,967	16,187	873	9,761	8,935	5,864	2,343	65,619
42	Wholesale Trade	2,123	10,048	10,993	458	2,011	7,711	3,290	198	36,832
44-45	Retail Trade	15,208	28,227	24,013	6,617	7,209	16,465	26,630	2,356	126,725
48-49	Transportation and Warehousing	2,075	3,709	4,260	282	1,620	1,519	1,912	637	16,014
51	Information	621	2,777	3,304	167	863	575	1,252	21	9,580
52	Finance and Insurance	2,322	16,322	7,246	1,038	1,151	1,783	4,281	493	34,636
53	Real Estate and Rental and Leasing	1,497	3,271	2,710	895	581	927	2,154	118	12,153
54	Professional and Technical Services	4,412	9,671	14,001	1,098	1,107	2,894	5,576	313	39,072
55	Management of Co. and Enterprises	.	329	42	.	.	.	112	.	483
56	Administrative and Waste Services	4,047	10,957	11,552	931	1,192	4,987	4,071	664	38,401
61	Educational Services	622	704	1,214	180	313	266	2,139	.	5,438
62	Health Care and Social Assistance	14,362	19,354	29,823	3,836	7,326	9,962	25,156	2,666	112,485
71	Arts, Entertainment, and Recreation	1,527	1,506	1,793	1,059	447	900	3,434	.	10,666
72	Accommodation and Food Services	51,346	11,664	12,087	8,376	2,808	7,056	11,213	1,412	105,962
81	Other Services, Except Public Admin	3,109	6,007	6,953	1,316	1,313	2,898	4,756	362	26,714
99	Unclassified Entities	17	111	1,018	101	110	71	466	63	1,957
	PRIVATE SECTOR TOTAL	122,184	164,589	169,238	32,163	45,348	79,463	116,338	18,390	747,713

Table E3e 2003 County Private Sector Employment by NAICS Sector as a % of Total Employment

Sector	NAICS DESCRIPTION	Atlantic	Burlington	Camden	Cape May	Cumberland	Gloucester	Ocean	Salem	South Jersey
11	Agriculture/Forestry/Fishing/Hunting	1.1%	0.3%	0.1%	0.5%	3.0%	0.9%	0.0%	2.6%	0.6%
21	Mining	.	.	.	.	.	.	.	.	0.0%
22	Utilities	0.2%	.	0.0%	.	.	.	0.2%	.	0.1%
23	Construction	5.1%	4.4%	5.6%	7.6%	5.5%	7.3%	7.1%	5.1%	5.7%
31-33	Manufacturing	3.0%	10.9%	9.6%	2.7%	21.5%	11.2%	5.0%	12.7%	8.8%
42	Wholesale Trade	1.7%	6.1%	6.5%	1.4%	4.4%	9.7%	2.8%	1.1%	4.9%
44-45	Retail Trade	12.4%	17.1%	14.2%	20.6%	15.9%	20.7%	22.9%	12.8%	16.9%
48-49	Transportation and Warehousing	1.7%	2.3%	2.5%	0.9%	3.6%	1.9%	1.6%	3.5%	2.1%
51	Information	0.5%	1.7%	2.0%	0.5%	1.9%	0.7%	1.1%	0.1%	1.3%
52	Finance and Insurance	1.9%	9.9%	4.3%	3.2%	2.5%	2.2%	3.7%	2.7%	4.6%
53	Real Estate and Rental and Leasing	1.2%	2.0%	1.6%	2.8%	1.3%	1.2%	1.9%	0.6%	1.6%
54	Professional and Technical Services	3.6%	5.9%	8.3%	3.4%	2.4%	3.6%	4.8%	1.7%	5.2%
55	Management of Co. and Enterprises	.	0.2%	0.0%	.	.	.	0.1%	.	0.1%
56	Administrative and Waste Services	3.3%	6.7%	6.8%	2.9%	2.6%	6.3%	3.5%	3.6%	5.1%
61	Educational Services	0.5%	0.4%	0.7%	0.6%	0.7%	0.3%	1.8%	.	0.7%
62	Health Care and Social Assistance	11.8%	11.8%	17.6%	11.9%	16.2%	12.5%	21.6%	14.5%	15.0%
71	Arts, Entertainment, and Recreation	1.2%	0.9%	1.1%	3.3%	1.0%	1.1%	3.0%	.	1.4%
72	Accommodation and Food Services	42.0%	7.1%	7.1%	26.0%	6.2%	8.9%	9.6%	7.7%	14.2%
81	Other Services, Except Public Admin	2.5%	3.6%	4.1%	4.1%	2.9%	3.6%	4.1%	2.0%	3.6%
99	Unclassified Entities	0.0%	0.1%	0.6%	0.3%	0.2%	0.1%	0.4%	0.3%	0.3%

Economy 4

Retail Sales / Establishments

Census of Retail Trade 1992, 1997, 2002

☐ Updated

- Per capita retail sales growth was much stronger in the Pinelands than in all other regions of the state from 1997 – 2002.

Per Capita Retail Sales

COUNTY	1992 Per Capita Sales	1997 Per Capita Sales	2002 Per Capita Sales	5 Year Change 1997 - 2002	10 Year Change 1992 - 2002
Atlantic	$10,537	$12,556	$13,422	6.9%	27.4%
Burlington	$10,312	$12,446	$18,160	45.9%	76.1%
Camden	$8,525	$10,788	$9,845	-8.7%	15.5%
Cape May	$11,262	$11,584	$14,272	23.2%	26.7%
Cumberland	$8,495	$10,272	$10,785	5.0%	27.0%
Gloucester	$10,388	$11,722	$13,256	13.1%	27.6%
Ocean	$9,415	$11,573	$11,297	-2.4%	20.0%
Salem	$6,565	$7,262	$8,809	21.3%	34.2%
South Jersey	$9,538	$11,474	$12,758	11.2%	33.8%
State	$9,997	$11,706	$12,508	6.8%	25.1%
Pinelands[13]	$7,795	$9,588	$11,577	20.7%	48.5%
Non-Pinelands	$12,607	$14,385	$14,407	0.2%	14.3%

Description: The Census of Retail Trade is conducted every 5 years as part of the Economic Census. The Census Bureau began using a different industrial classification system in 1997, with the largest change being the removal of the eating and drinking establishments classification from the 1997 data. To adjust for this, sales for eating and drinking establishments were removed from the 1992 data. The resulting numbers are suitable for a rough comparison.[14] Values are adjusted for inflation and shown in 2004 dollars, and sales are presented per capita, based on 1992, 1997, and 2002 population estimates.

Unit of Analysis: Retail sales data are obtained at the county level and aggregated to yield totals for the southern eight-county region and the entire State (see Appendix for Pinelands acreage by county). Partial data for the Pinelands and Non-Pinelands region are available as the Census also collects data at the "place" level, which includes the most populous municipalities (109 out of 202 municipalities are available, 28 in the Pinelands and 81 outside the Pinelands).

Summary of Previous Findings

Per capita retail sales rose in Southern New Jersey between 1992 and 1997, with an increase of 20.3%. The change in sales was generally more significant in the more densely populated counties, while the southern counties experienced smaller increases. Per capita sales are higher for the state as a whole compared to Southern New Jersey, but South Jersey sales have increased at a faster rate. Per capita retail sales for the 28 Pinelands municipalities increased by 23%, while sales for the 81 Non-Pinelands municipalities rose by 14.1%.

Another useful indicator of retail health is the number of retail establishments per resident. This indicates the presence of commercial ratables as well as relative shopping convenience. According to the New Jersey Department of Labor Employer Listing Database, the concentration of retail establishments per resident in the Non-Pinelands was 50% higher than in the Pinelands for 2001.

[13] The categories for Pinelands and Non-Pinelands represent the number of municipalities for which the data is available. Data is available for 28 of the 47 Pinelands municipalities, and 81 of the 155 Non-Pinelands municipalities.

[14] Other noteworthy changes include the reclassification of pawn shops to the Finance and Insurance sector, and of bakeries to the Manufacturing sector, and the addition of Wholesale Trade establishments that have facilities which cater to the general public. The numbers in this report have not been adjusted to reflect these changes.

Update

Released in May 2006, the 2002 Census of Retail Trade shows the Pinelands continuing to gain ground on all other regions of the state in regards to per capita retail sales. Statewide growth in per capita retail sales increased 6.8% from 1997-2002, which marked a slowdown from the 17.1% growth statewide for the period 1992-1997. Per capita retail sales in the Non-Pinelands portion of South Jersey were essentially unchanged from 1997-2002, rising only 0.2%. In contrast, the Pinelands communities followed their 23% gain in per capita retail sales from 1992-1997, with a 20.7% increase in the period from 1997-2002. A large portion of this sustained growth in per capita sales for the Pinelands occurred in Ocean County. Of the seven Pinelands municipalities that experienced growth in sales greater than 40 percent from 1997 - 2002, six were in Ocean County: Ocean Township (+119%), Berkeley (+77%), Jackson (+55%), Lakehurst (+53%), Little Egg Harbor (+49%), and Barnegat (+41%). In Atlantic County, Egg Harbor Township increased per capita sales by 42% over the same period.

The concentration of retail establishments per resident continued to be about 50% higher in the Non-Pinelands than in the Pinelands in 2002. According to the New Jersey Department of Labor, there were 1,598 retail establishments in the Pinelands in 2002 (1 store for every 403 residents). In the Non-Pinelands there were 6,273 retail establishments (1 store for every 268 residents). The pattern again appears to show higher concentrations of establishments in municipalities in the Pinelands that contain regional growth areas.

Economy 5

Assessed Farmland Acreage

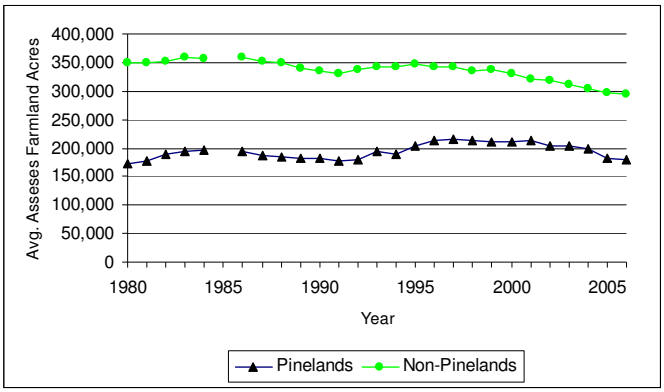
X Updated

New Jersey Agricultural Statistics Service 1980 – 2006*

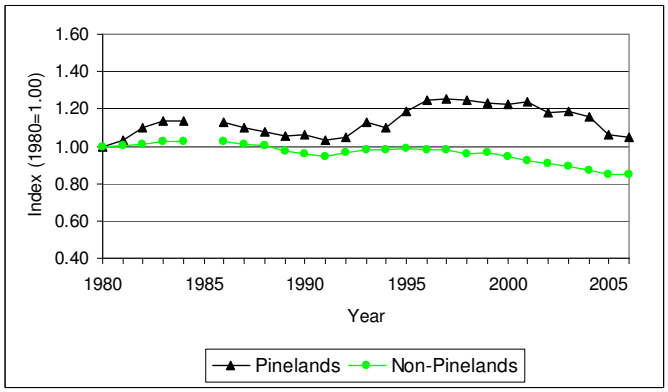
* Data from 1985 is not available.

- Assessed acres in farmland dropped 1.3% in the Pinelands in 2006, marking the third consecutive year acreage in the Pinelands had decreased.

Average Assessed Acres of Farmland



Index of Average Assessed Acres of Farmland



Description: Agriculture is recognized in federal and state Pinelands legislation as an industry of special significance, and therefore receives a more detailed examination using three variables. The first variable, farmland assessed acreage, is compiled from FA-1 forms, which are completed by landowners and indicate acreage devoted to various crops and pasture as well as livestock. To qualify for farmland assessment, a landowner must have a minimum of five contiguous acres devoted to agricultural or horticultural use, and generate a minimum of $500 in sales (plus an additional $5 per acre for every acre of agricultural land beyond the first five acres or $0.50 per acre for every acre of woodland land beyond the first five acres).

Unit of Analysis: Farmland assessment data is compiled at the municipal level and aggregated to examine Pinelands and county totals.

Summary of Previous Findings

Assessed farmland acres were fairly stable in the Non-Pinelands portion of South Jersey from 1980-1995. Since 1995, development pressures have slowly eroded the farm base outside the Pinelands, and assessed acres in that region have decreased in nine of the ten years from 1995-2005. In contrast, the Pinelands has shown a substantial increase in acreage devoted to agriculture since 1980. This growth was fueled by two periods that contributed significantly to farmland acres in the Pinelands: from 1980-1983, farm acreage increased 13.8% in the Pinelands, and from 1992-1996 acreage increased by 19.2%. Over the entire period monitored, the Pinelands' percentage of South Jersey farm acreage has increased from 33% in 1980 to 38% in 2005.

Burlington County has the largest amount of farm acreage in the Pinelands, while the overwhelming majority of Atlantic, Camden, and Ocean Counties' assessed farmland falls inside the Pinelands. Much of the decrease in farm acres in the Non-Pinelands has been concentrated in Burlington, Camden, Cape May, and Gloucester counties.

Update

After an 8.4% decrease in acres farmed in 2005, the Pinelands region experienced a much smaller 1.3% decrease in acres farmed in 2006. For the year, there were 179,789 acres in farmland in the Pinelands. The Non-Pinelands farmland acreage decreased for the seventh consecutive year in 2006, falling 0.4% to a total of 295,483 acres. Since one-year changes in acreage can be affected by seasonal factors such as weather and economic conditions, averages over five-year periods are also tracked to reveal longer-term trends (Table E5).

Figure E5 depicts the current assessed acreage in farmland for South Jersey (as of 2006). It is clear that New Jersey's "farm belt" covers most of Salem and Cumberland counties and then extends northeasterly through the heart of the Pinelands. A good portion of Camden County and the shore communities of Ocean, Atlantic, and Cape May counties have very little, if any, active acreage in farming.

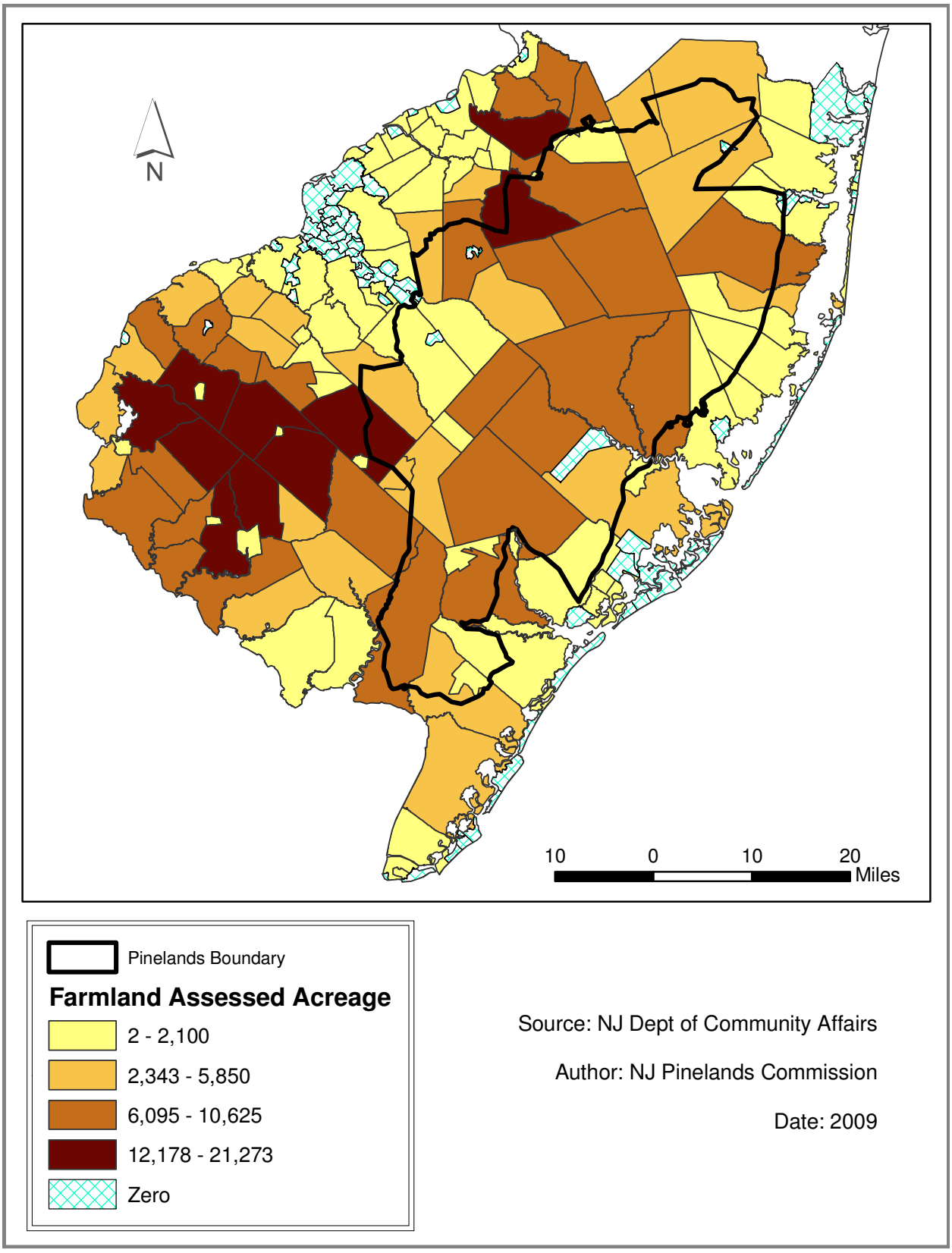
Table E5 Farmland Assessed Acreage

Average Farmland Assessed Acreage in the Pinelands Municipalities					
County	1987-1991 Average	1992-1996 Average	1997-2001 Average	2002-2006 Average	Change between 87-91 and 02-06
Atlantic	40,139	41,443	42,153	41,608	4%
Burlington	86,123	90,728	91,446	80,003	-7%
Camden	10,058	10,372	11,002	8,721	-13%
Cape May	7,563	7,171	7,048	6,168	-18%
Cumberland	7,520	5,724	11,405	10,108	34%
Gloucester	18,971	22,364	22,338	19,796	4%
Ocean	12,243	18,169	27,219	25,295	107%
Average Farmland Assessed Acreage in the Non-Pinelands Municipalities					
County	1987-1991 Average	1992-1996 Average	1997-2001 Average	2002-2006 Average	Change between 87-91 and 02-06
Atlantic	246	291	277	365	49%
Burlington	67,184	64,762	60,669	52,441	-22%
Camden	3,340	2,779	2,318	1,378	-59%
Cape May	6,640	5,468	5,348	4,809	-28%
Cumberland	77,517	83,651	84,352	77,625	0%
Gloucester	62,950	60,071	56,139	47,054	-25%
Ocean	774	724	696	506	-35%
Salem	122,952	124,230	123,236	120,758	-2%
Percentage of Total Average Farmland Assessed Acreage that is within Pinelands Municipalities					
County	1987-1991 Average	1992-1996 Average	1997-2001 Average	2002-2006 Average	Change between 87-91 and 02-06
Atlantic	99%	99%	99%	99%	0%
Burlington	56%	58%	60%	60%	4%
Camden	75%	79%	83%	86%	11%
Cape May	53%	57%	57%	56%	3%
Cumberland	9%	6%	12%	12%	3%
Gloucester	23%	27%	28%	30%	7%
Ocean	94%	96%	98%	98%	4%

Table E6 Assessed Acres 2006 : TOTAL LAND IN AG USES

Municipality	County	Acres	South Jersey Rank
Franklin	Gloucester	13,911	4
Southampton	Burlington	12,239	9
Pemberton Township	Burlington	10,353	12
Maurice River	Cumberland	10,110	13
Estell Manor	Atlantic	9,596	14
Tabernacle	Burlington	9,139	17
Washington	Burlington	8,521	19
Woodland	Burlington	8,142	20
Hammonton	Atlantic	6,856	26
Winslow	Camden	6,742	27
Bass River	Burlington	6,588	30
Medford	Burlington	6,425	32
Mullica	Atlantic	6,365	33
Lacey	Ocean	6,256	34
Hamilton	Atlantic	6,195	35
Monroe	Gloucester	5,620	38
Plumsted	Ocean	5,421	39
Jackson	Ocean	4,406	43
Shamong	Burlington	4,287	45
Dennis	Cape May	4,033	48
Buena Vista	Atlantic	3,747	49
Manchester	Ocean	3,729	50
Galloway	Atlantic	3,133	54
Ocean	Ocean	2,948	56
Evesham	Burlington	2,651	58
Waterford	Camden	2,354	59
Buena	Atlantic	2,343	60
Upper	Cape May	1,832	63
Egg Harbor Township	Atlantic	1,729	64
New Hanover	Burlington	930	74
Folsom	Atlantic	808	77
Little Egg Harbor	Ocean	511	82
Stafford	Ocean	435	83
Woodbine	Cape May	404	84
Berlin Township	Camden	273	90
Eagleswood	Ocean	270	91
Port Republic	Atlantic	202	99
Barnegat	Ocean	137	103
Berkeley	Ocean	88	107
Weymouth	Atlantic	36	111
Wrightstown	Burlington	24	115
Total Acres in Pinelands		**179,789**	
Total Acres Statewide		**1,001,337**	
% of State Acres in Pinelands		**18.0%**	

Figure E5 Assessed Acres 2006 : TOTAL LAND IN AG USES



In the past, this report has focused on the two most abundant crops produced in the Pinelands (cranberries and blueberries). For the first time, this year's report also includes a more detailed breakdown of assessed acres by crop. The farmland assessment data compiled by the New Jersey Agricultural Statistics Service covers 117 different categories of agricultural commodities, ranging from individual field crops to individual nursery crops to livestock and woodlands.

In the following pages, an attempt has been made to identify other crops of importance to the Pinelands' economy. For each crop, there is a table listing those municipalities that have assessed acreage for that crop in the Pinelands as well as a map of South Jersey depicting crop coverage for the particular crop in 2006. To be included in this analysis, a crop had to satisfy two criteria: (1) The acreage grown in the Pinelands had to represent at least 25% of the total acreage grown statewide, and (2) At least 500 acres of the crop must have been grown in the Pinelands. The crops are presented in order of their importance to the overall statewide acreage (i.e. by a descending percentage of the total state crop grown in the Pinelands).

Table E5a Assessed Acres 2006 : CRANBERRIES

Municipality	County	Acres	South Jersey Rank
Washington	Burlington	1,292	1
Pemberton Township	Burlington	576	2
Shamong	Burlington	477	3
Southampton	Burlington	361	4
Tabernacle	Burlington	333	5
Bass River	Burlington	107	6
Hammonton	Atlantic	101	7
Medford	Burlington	86	8
Woodland	Burlington	50	9
Manchester	Ocean	49	10
Mullica	Atlantic	28	11
Eagleswood	Ocean	5	13
Jackson	Ocean	4	14
Woodbine	Cape May	1	15
Total Acres in Pinelands		**3,470**	
Total Acres Statewide		**3,508**	
% of State Crop in Pinelands		**98.9%**	

Figure E5a Assessed Acres 2006 : CRANBERRIES

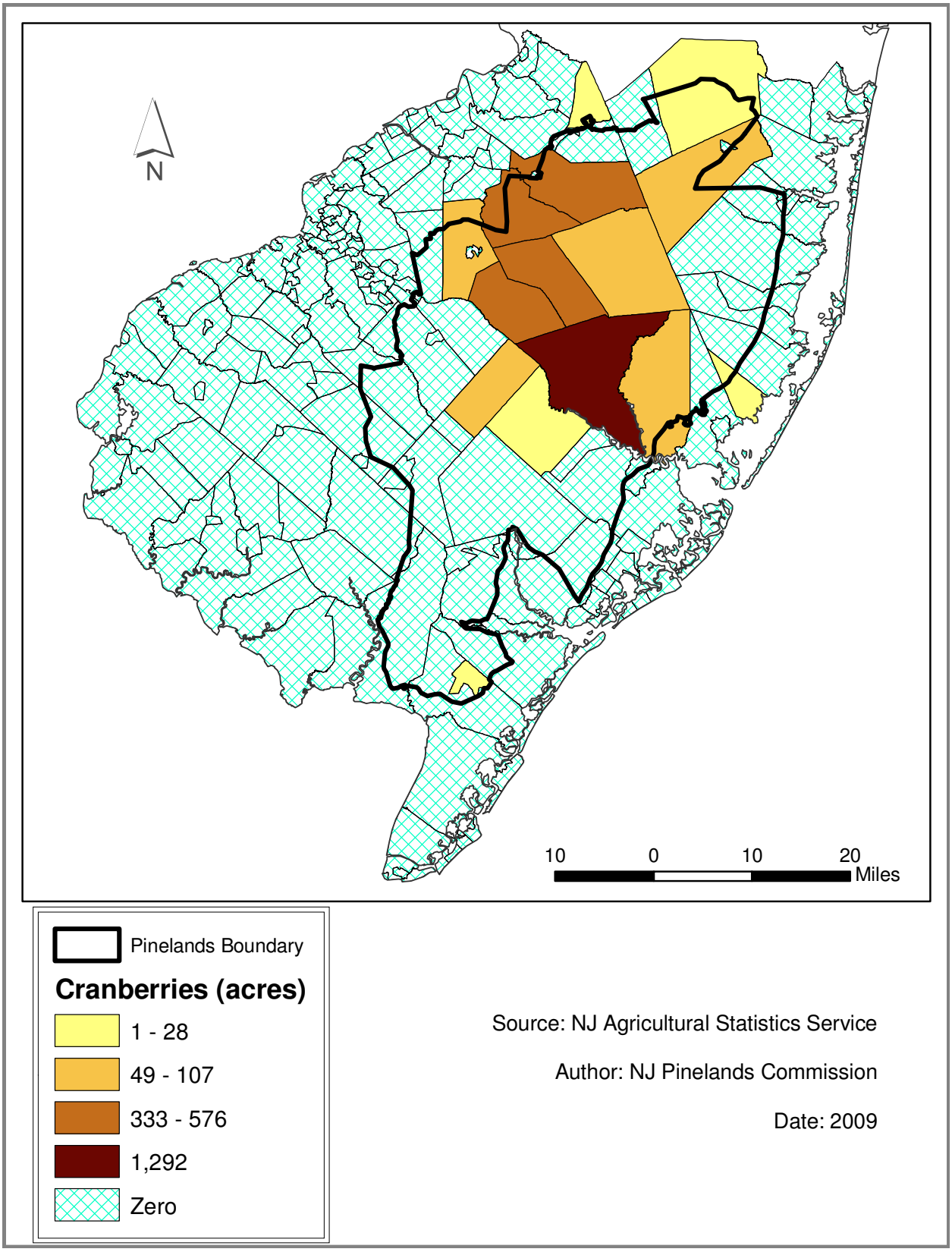


Table E5b Assessed Acres 2006 : BLUEBERRIES

Municipality	County	Acres	South Jersey Rank
Hammonton	Atlantic	3,653	1
Mullica	Atlantic	1,330	2
Hamilton	Atlantic	1,272	3
Pemberton Township	Burlington	1,124	4
Waterford	Camden	474	5
Galloway	Atlantic	426	6
Winslow	Camden	342	7
Woodland	Burlington	338	8
Shamong	Burlington	210	9
Southampton	Burlington	170	10
Tabernacle	Burlington	152	11
Folsom	Atlantic	78	12
Washington	Burlington	76	13
Monroe	Gloucester	35	15
Plumsted	Ocean	30	16
Medford	Burlington	21	17
Manchester	Ocean	18	18
Buena	Atlantic	12	20
Bass River	Burlington	8	22
New Hanover	Burlington	5	24
Dennis	Cape May	4	25
Jackson	Ocean	2	27
Evesham	Burlington	1	29
Maurice River	Cumberland	1	29
Lacey	Ocean	1	29
Total Acres in Pinelands		**9,783**	
Total Acres Statewide		**10,138**	
% of State Crop in Pinelands		**96.5%**	

Figure E5b Assessed Acres 2006 : BLUEBERRIES

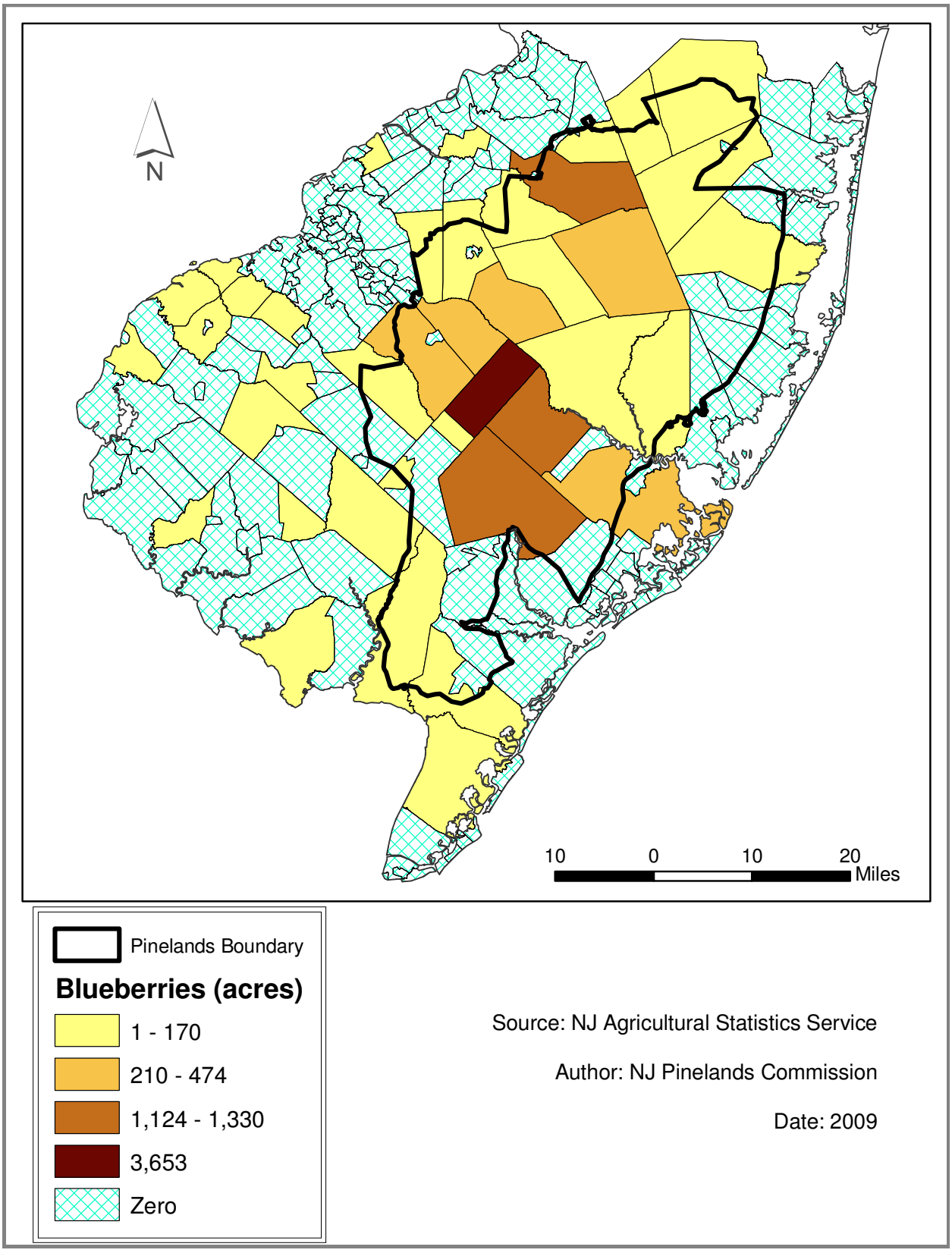


Table E5c Assessed Acres 2006 : SWEET POTATOES

Municipality	County	Acres	South Jersey Rank
Hammonton	Atlantic	300	1
Winslow	Camden	272	2
Monroe	Gloucester	42	5
Buena Vista	Atlantic	38	6
Franklin	Gloucester	24	9
Plumsted	Ocean	6	16
Tabernacle	Burlington	3	20
Maurice River	Cumberland	3	20
Pemberton Township	Burlington	1	30
Dennis	Cape May	1	30
Total Acres in Pinelands		**690**	
Total Acres Statewide		**1,181**	
% of State Crop in Pinelands		**58.4%**	

Figure E5c Assessed Acres 2006 : SWEET POTATOES

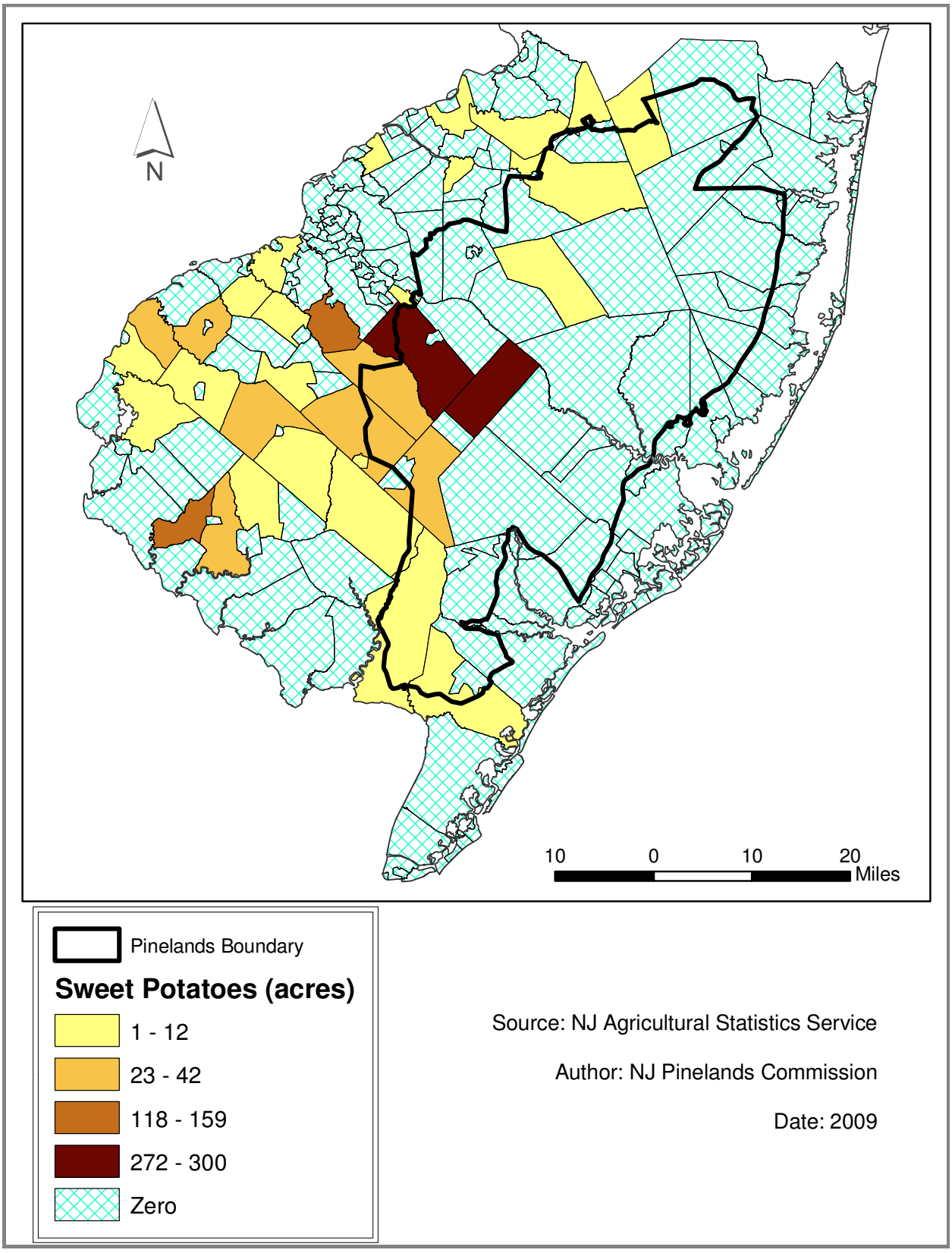


Table E5d Assessed Acres 2006 : SNAP BEANS

Municipality	County	Acres	South Jersey Rank
Franklin	Gloucester	366	1
Shamong	Burlington	210	3
Monroe	Gloucester	209	4
Tabernacle	Burlington	146	7
Buena Vista	Atlantic	134	9
Winslow	Camden	65	12
Hammonton	Atlantic	22	18
Plumsted	Ocean	16	21
New Hanover	Burlington	6	26
Maurice River	Atlantic	5	27
Buena	Cumberland	5	27
Galloway	Atlantic	3	31
Jackson	Ocean	3	31
Egg Harbor Township	Atlantic	2	34
Pemberton Township	Atlantic	1	36
Mullica	Atlantic	1	36
Hamilton	Atlantic	1	36
Port Republic	Burlington	1	36
Upper	Cape May	1	36
Ocean	Ocean	1	36
Total Acres in Pinelands		**1,198**	
Total Acres Statewide		**2,678**	
% of State Crop in Pinelands		**44.7%**	

Figure E5d Assessed Acres 2006 : SNAP BEANS

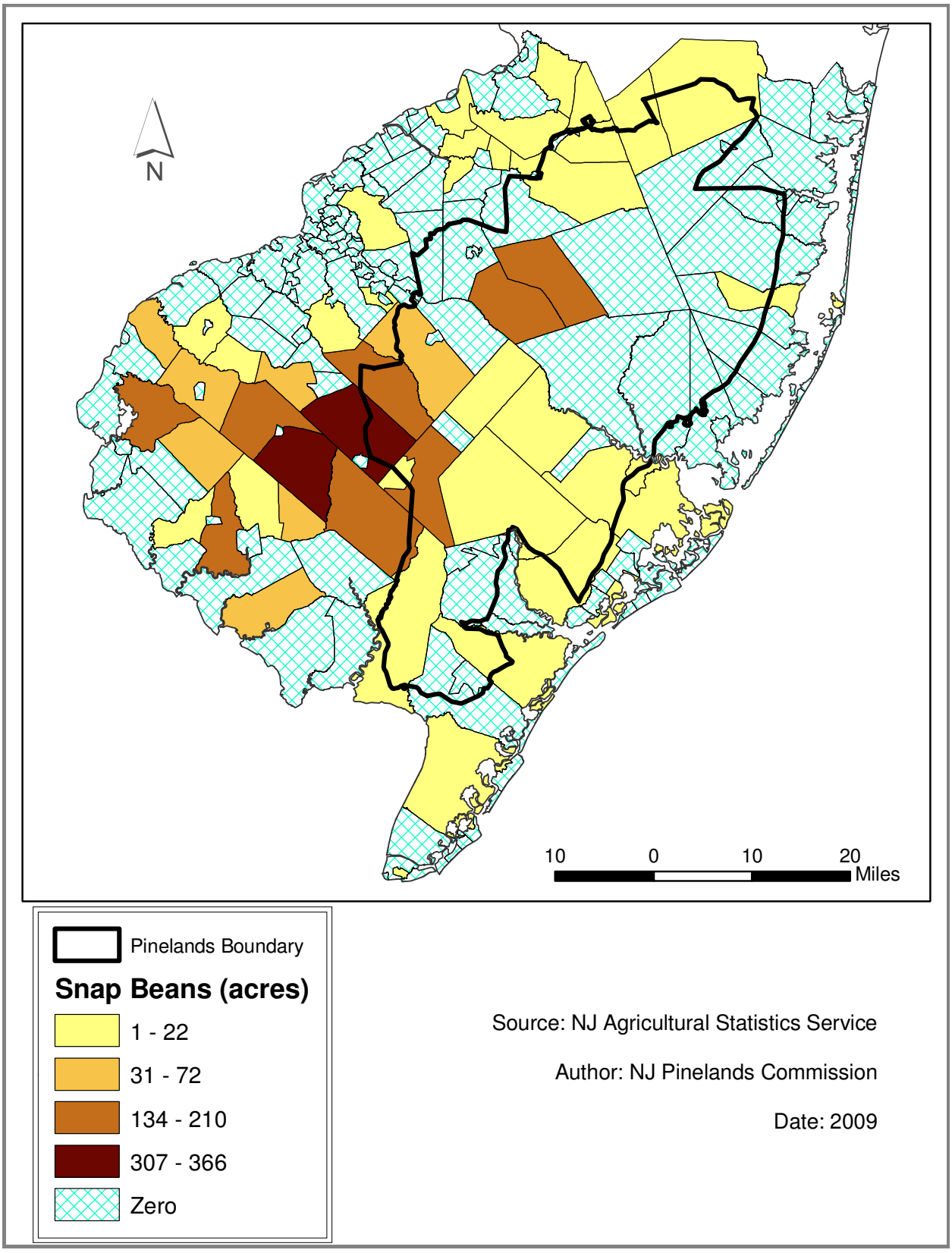


Table E5e Assessed Acres 2006 : CABBAGE

Municipality	County	Acres	South Jersey Rank
Buena Vista	Atlantic	248	2
Franklin	Gloucester	171	4
Buena	Atlantic	125	5
Tabernacle	Burlington	119	6
Pemberton Township	Burlington	38	10
Shamong	Burlington	10	16
Monroe	Gloucester	8	18
Winslow	Camden	3	20
New Hanover	Burlington	3	20
Egg Harbor Township	Atlantic	2	23
Hamilton	Atlantic	2	23
Plumsted	Ocean	1	29
Total Acres in Pinelands		**730**	
Total Acres Statewide		**1,667**	
% of State Crop in Pinelands		**43.8%**	

Figure E5e Assessed Acres 2006 : CABBAGE

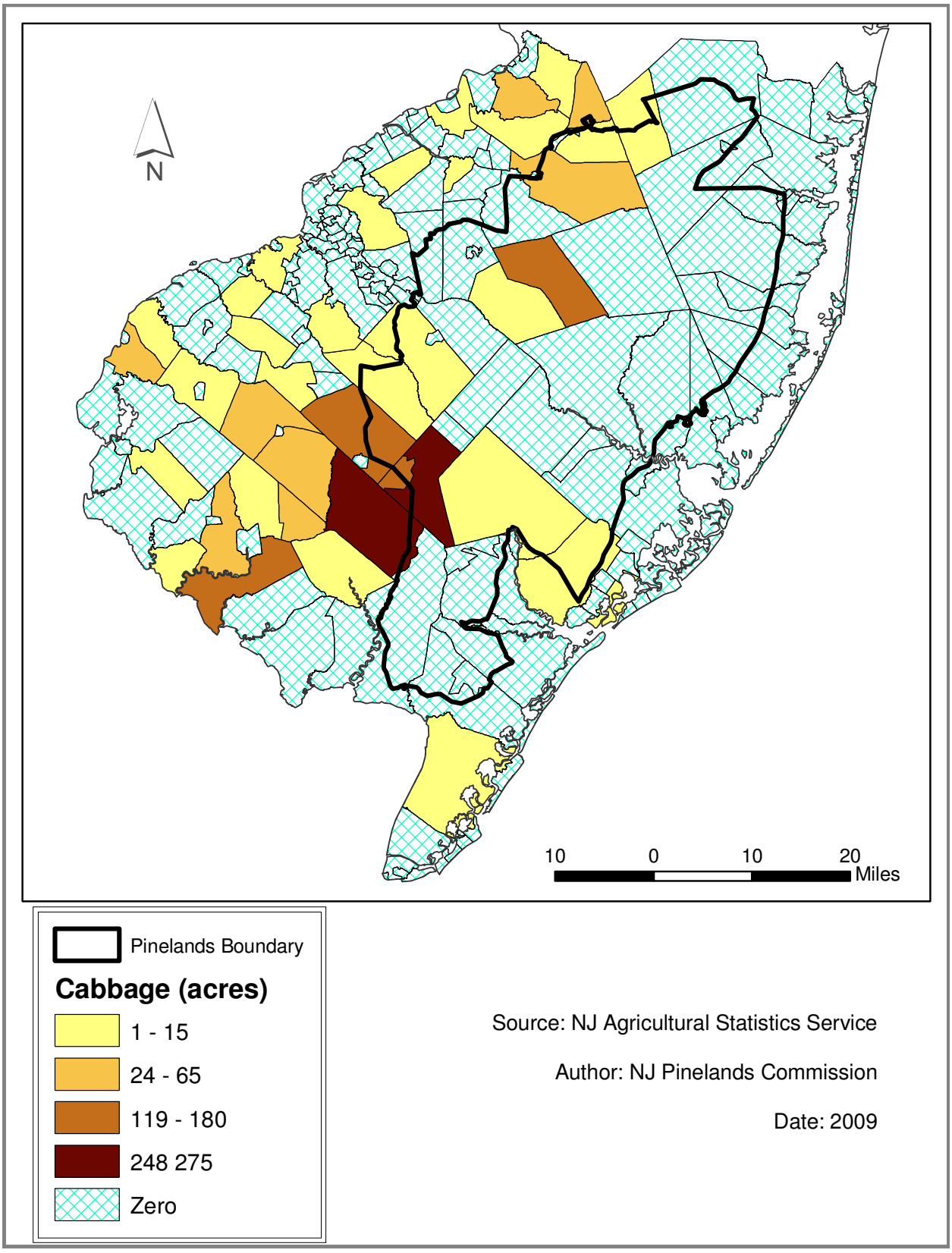


Table E5f Assessed Acres 2006 : SOD

Municipality	County	Acres	South Jersey Rank
Southampton	Burlington	1,320	1
Dennis	Cape May	582	4
Tabernacle	Burlington	561	5
Pemberton Township	Burlington	357	8
Waterford	Camden	355	9
Hammonton	Atlantic	295	12
Shamong	Burlington	279	13
Estell Manor	Atlantic	272	14
Plumsted	Ocean	100	20
Winslow	Camden	38	21
Total Acres in Pinelands		**4,159**	
Total Acres Statewide		**11,939**	
% of State Crop in Pinelands		**34.8%**	

Figure E5f Assessed Acres 2006 : SOD

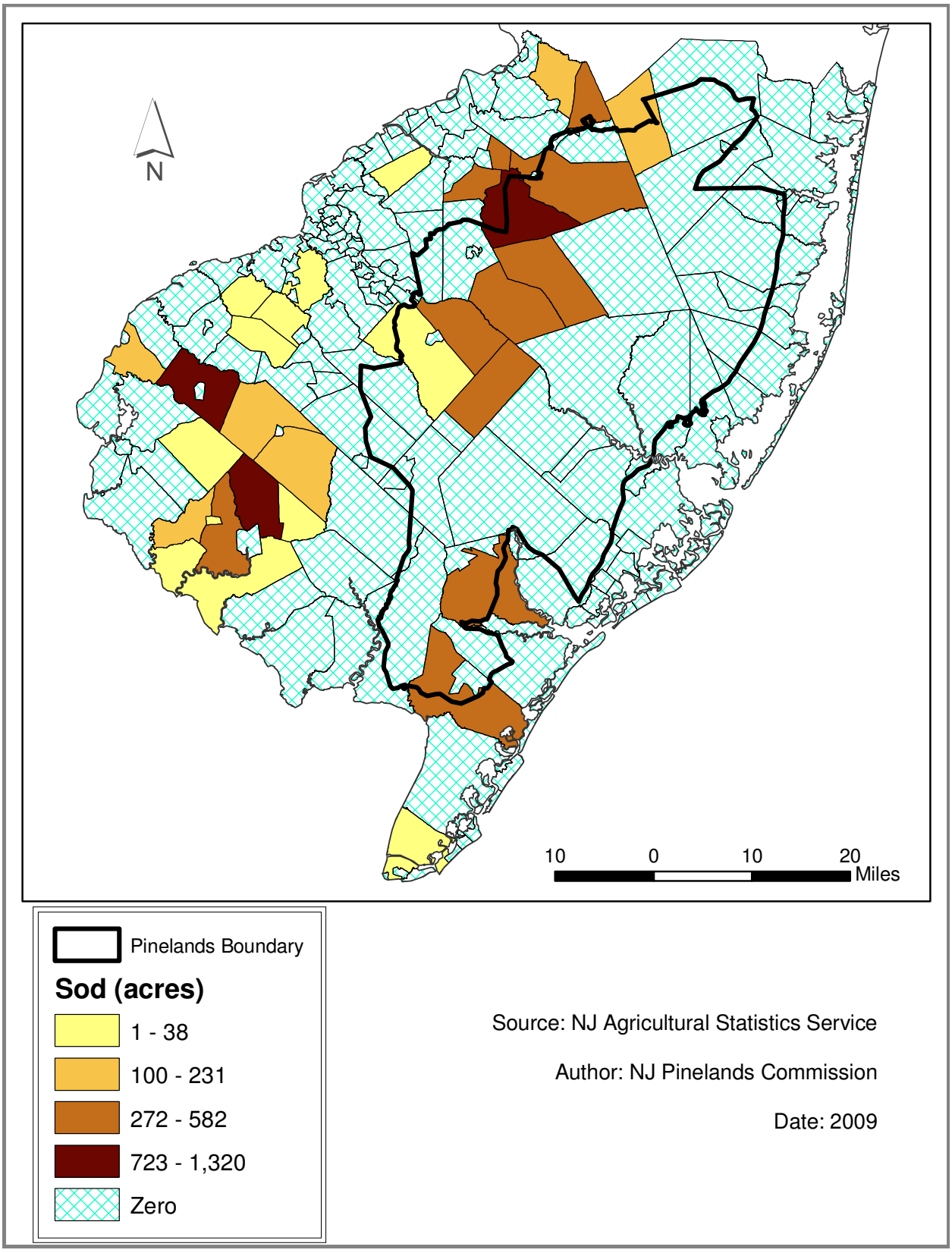


Table E5g Assessed Acres 2006 : UNATTACHED WOODLAND*

Municipality	County	Median Sales Price	South Jersey Rank
Estell Manor	Burlington	8,574	1
Maurice River	Burlington	6,871	2
Lacey	Ocean	6,043	3
Woodland	Ocean	5,750	4
Franklin	Burlington	4,749	5
Washington	Burlington	3,426	6
Jackson	Ocean	3,288	7
Bass River	Cape May	3,255	8
Manchester	Cape May	3,220	9
Ocean	Burlington	2,898	10
Mullica	Burlington	2,723	12
Pemberton Township	Atlantic	2,313	13
Monroe	Ocean	1,977	14
Tabernacle	Ocean	1,963	15
Evesham	Atlantic	1,284	20
Southampton	Ocean	1,145	21
Hamilton	Ocean	1,004	23
Upper	Atlantic	958	24
Egg Harbor Township	Burlington	943	25
Dennis	Ocean	783	27
Galloway	Ocean	766	28
Plumsted	Atlantic	594	30
Medford	Ocean	559	31
Little Egg Harbor	Ocean	461	34
Stafford	Atlantic	410	37
Shamong	Burlington	379	40
Folsom	Gloucester	325	44
Buena Vista	Gloucester	276	50
Berlin Township	Ocean	232	56
Eagleswood	Ocean	214	59
Woodbine	Camden	130	61
Winslow	Burlington	122	64
Hammonton	Atlantic	81	75
Berkeley	Atlantic	72	77
Waterford	Atlantic	70	78
Port Republic	Camden	62	81
Barnegat	Atlantic	38	86
New Hanover	Atlantic	35	88
Weymouth	Atlantic	10	97
Buena	Camden	1	105
Total Acres in Pinelands		**68,004**	
Total Acres Statewide		**222,073**	
% of State Crop in Pinelands		**30.6%**	

* - Unattached woodland (also called *appurtenant woodland*) is woodland acreage which is part of a crop or livestock farm, and which may or may not contribute income to the farm. Typically, this land does contribute benefits to the farm, such as lumber or fencing for on-farm use, protection from wind, erosion, water conservation, or buffer areas for the farm from neighbors. A wooded piece of property is presumed to be supportive and subordinate woodland when the area is less than the area of cropland and pastureland qualifying for Farmland Assessment.

Figure E5g Assessed Acres 2006 : UNATTACHED WOODLAND

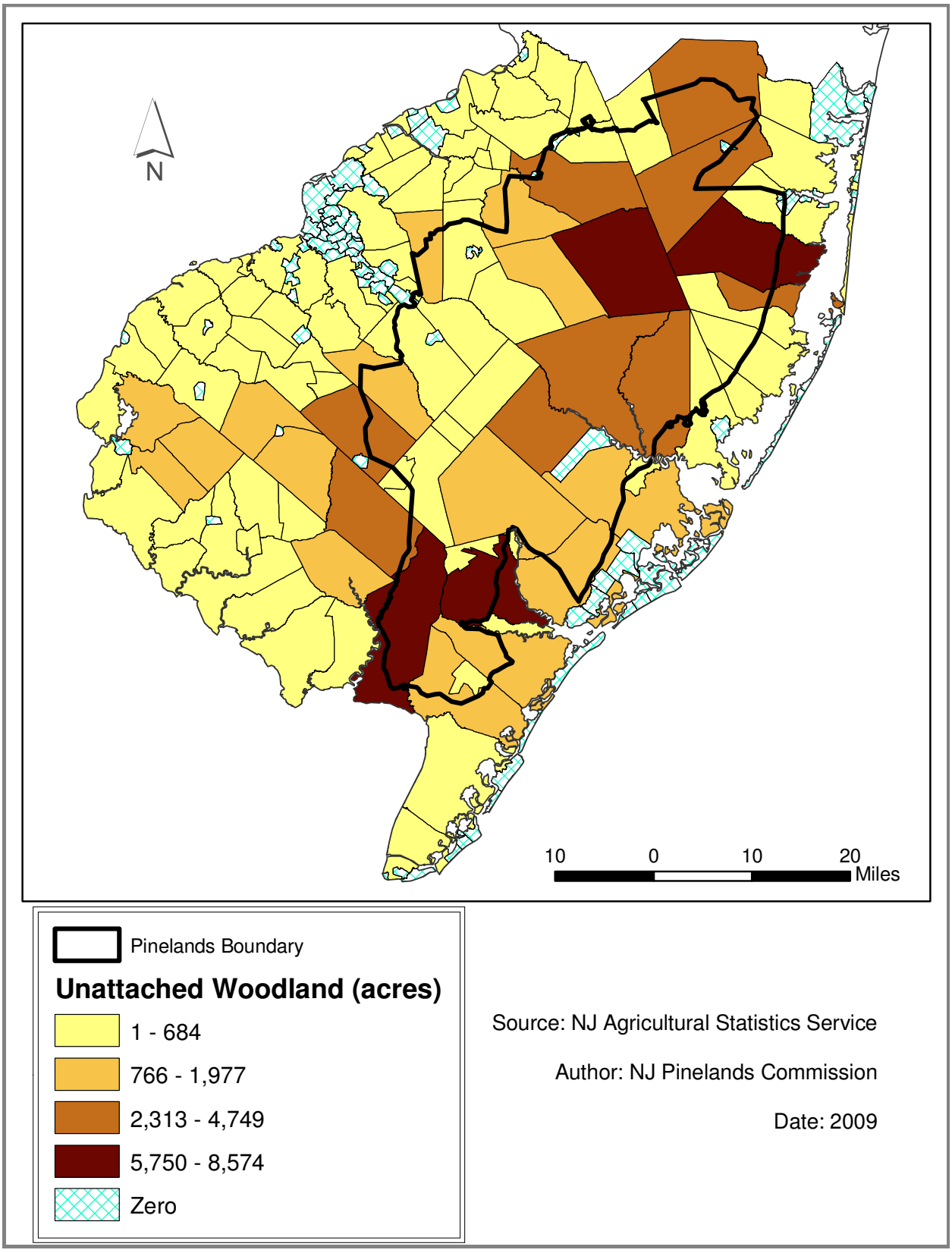


Table E5h Assessed Acres 2006 : CUT FLOWERS

Municipality	County	Acres	South Jersey Rank
Buena Vista	Atlantic	283	4
Galloway	Atlantic	206	6
New Hanover	Burlington	185	7
Franklin	Gloucester	108	11
Monroe	Gloucester	69	13
Buena	Atlantic	62	14
Mullica	Atlantic	42	16
Upper	Cape May	16	20
Medford	Burlington	13	21
Hammonton	Atlantic	9	23
Waterford	Camden	9	23
Pemberton Township	Burlington	6	26
Southampton	Burlington	6	26
Tabernacle	Burlington	5	28
Evesham	Burlington	4	30
Hamilton	Atlantic	4	30
Shamong	Burlington	3	36
Dennis	Cape May	2	42
Winslow	Camden	2	42
Bass River	Burlington	1	50
Egg Harbor Township	Atlantic	1	50
Stafford	Ocean	1	50
Total Acres in Pinelands		**1,037**	
Total Acres Statewide		**3,557**	
% of State Crop in Pinelands		**29.2%**	

Figure E5h Assessed Acres 2006 : CUT FLOWERS

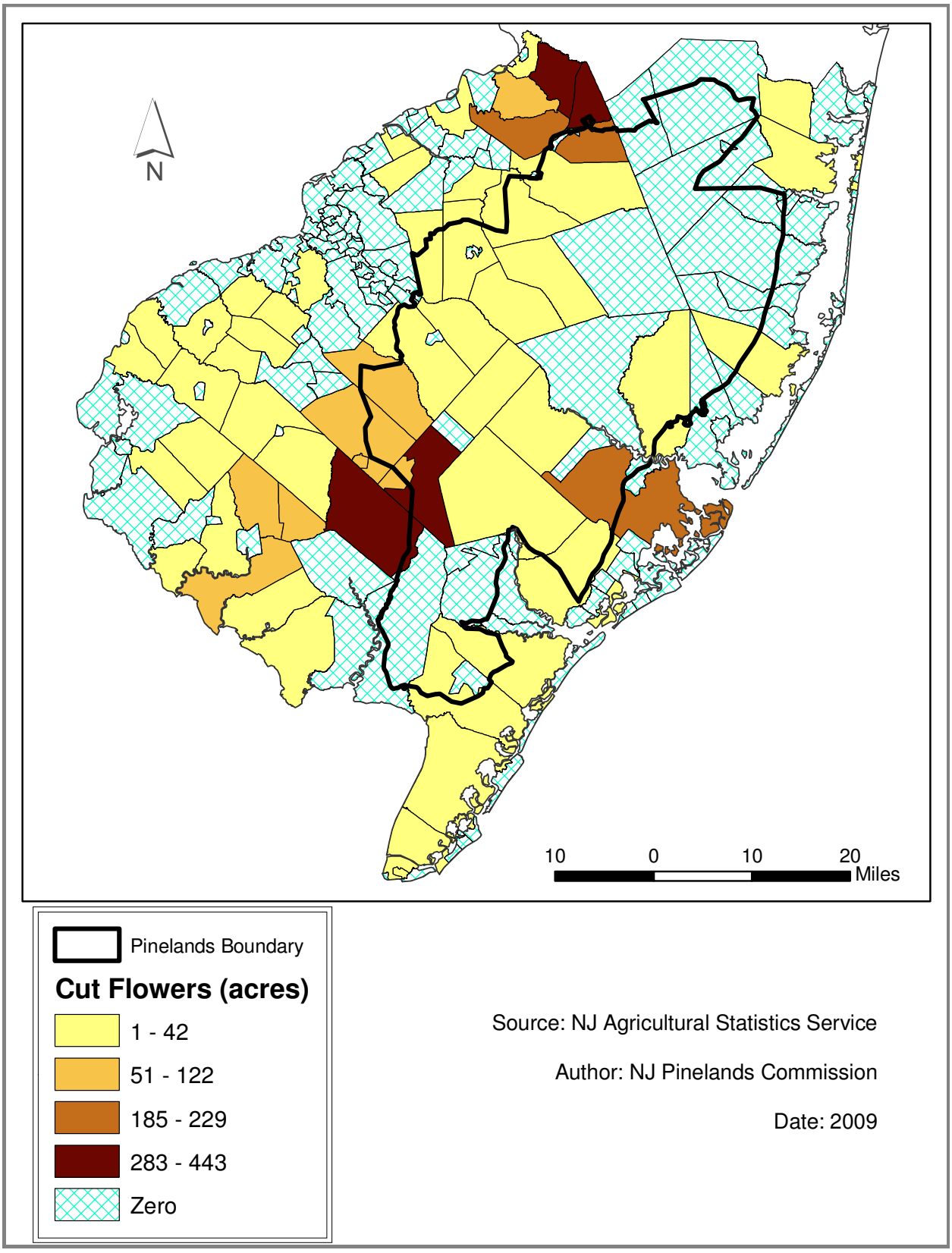


Table E5i Assessed Acres 2006 : SWEET CORN

Municipality	County	Acres	South Jersey Rank
Shamong	Burlington	446	2
Tabernacle	Burlington	419	3
Winslow	Camden	342	5
Hammonton	Atlantic	268	7
Southampton	Burlington	95	15
Plumsted	Ocean	77	18
Medford	Burlington	53	20
New Hanover	Burlington	53	20
Mullica	Atlantic	43	26
Jackson	Ocean	43	26
Evesham	Burlington	35	31
Monroe	Gloucester	24	34
Franklin	Gloucester	17	38
Egg Harbor Township	Atlantic	16	39
Pemberton Township	Burlington	16	39
Dennis	Cape May	15	41
Buena Vista	Atlantic	10	46
Galloway	Atlantic	10	46
Maurice River	Cumberland	8	48
Buena	Atlantic	3	53
Upper	Cape May	2	56
Port Republic	Atlantic	1	60
Waterford	Camden	1	60
Barnegat	Ocean	1	60
Stafford	Ocean	1	60
Total Acres in Pinelands		**1,037**	
Total Acres Statewide		**3,557**	
% of State Crop in Pinelands		**29.2%**	

Figure E5i Assessed Acres 2006 : SWEET CORN

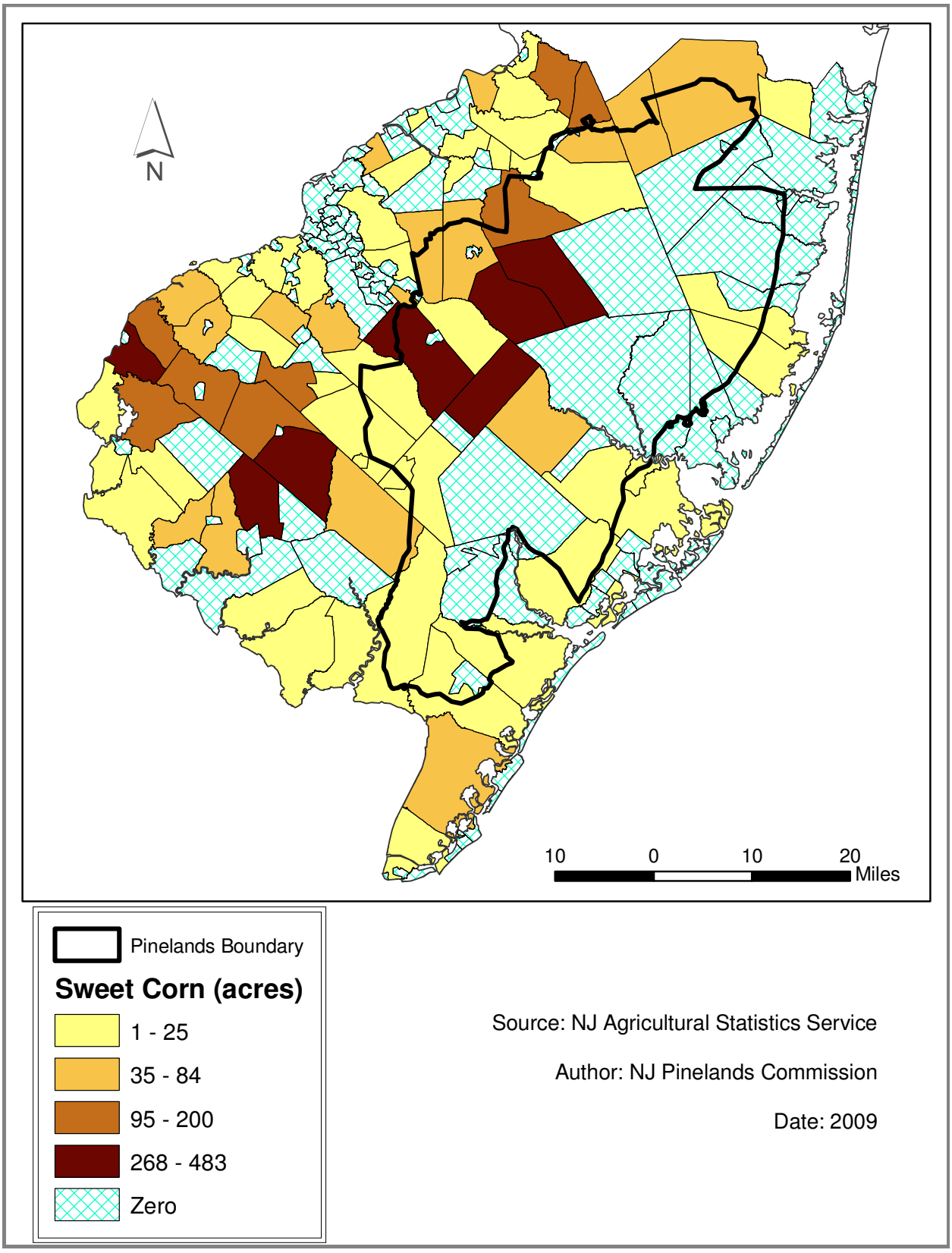


Table E5j Assessed Acres 2006 : LETTUCE

Municipality	County	Acres	South Jersey Rank
Buena Vista	Atlantic	242	2
Buena	Atlantic	186	3
Franklin	Gloucester	83	6
Monroe	Gloucester	11	11
Shamong	Burlington	5	13
Southampton	Burlington	3	16
Plumsted	Ocean	3	16
Pemberton Township	Burlington	2	19
Winslow	Camden	1	24
New Hanover	Burlington	1	24
Egg Harbor Township	Atlantic	1	24
Total Acres in Pinelands		**538**	
Total Acres Statewide		**2,060**	
% of State Crop in Pinelands		**26.1%**	

Figure E5j Assessed Acres 2006 : LETTUCE

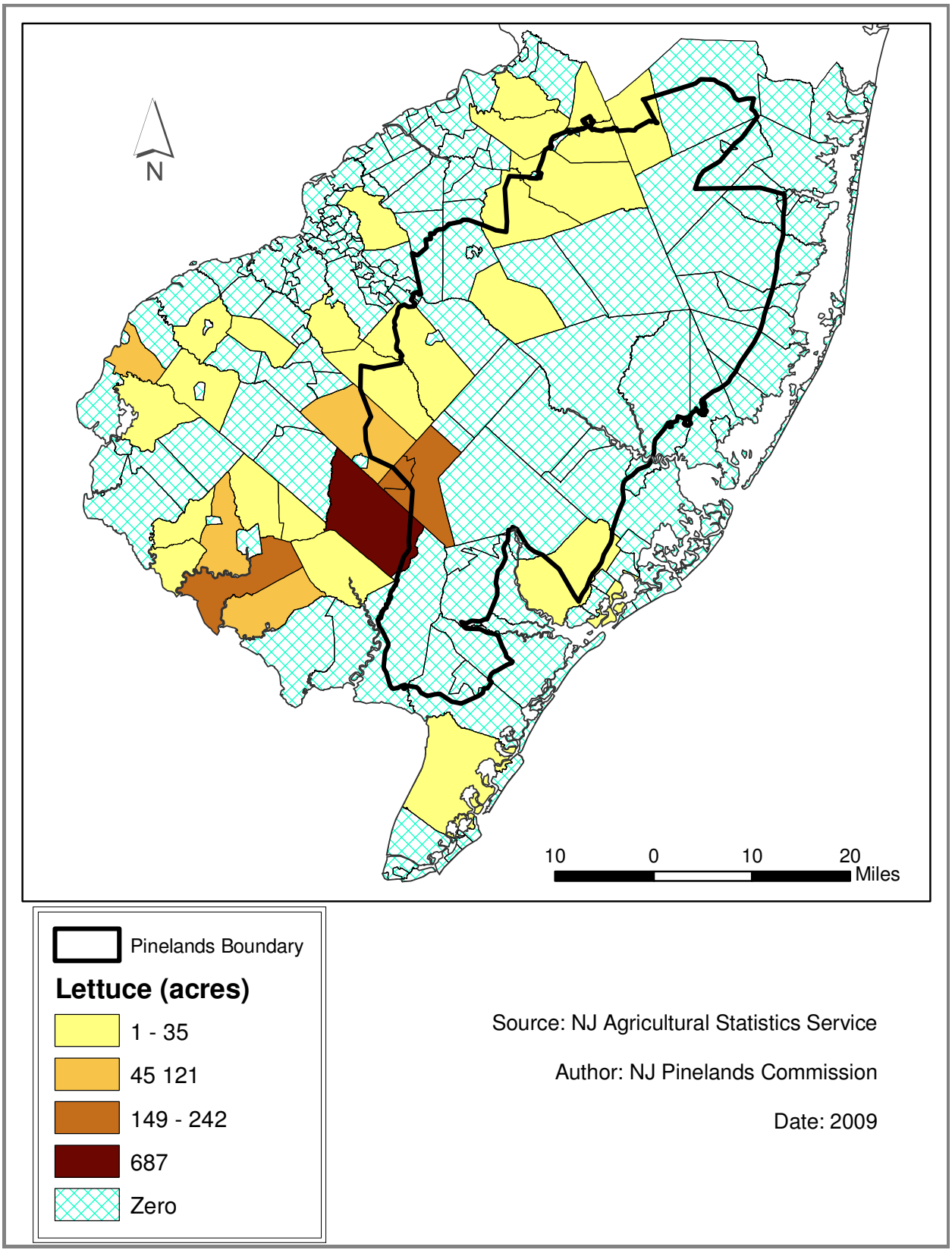
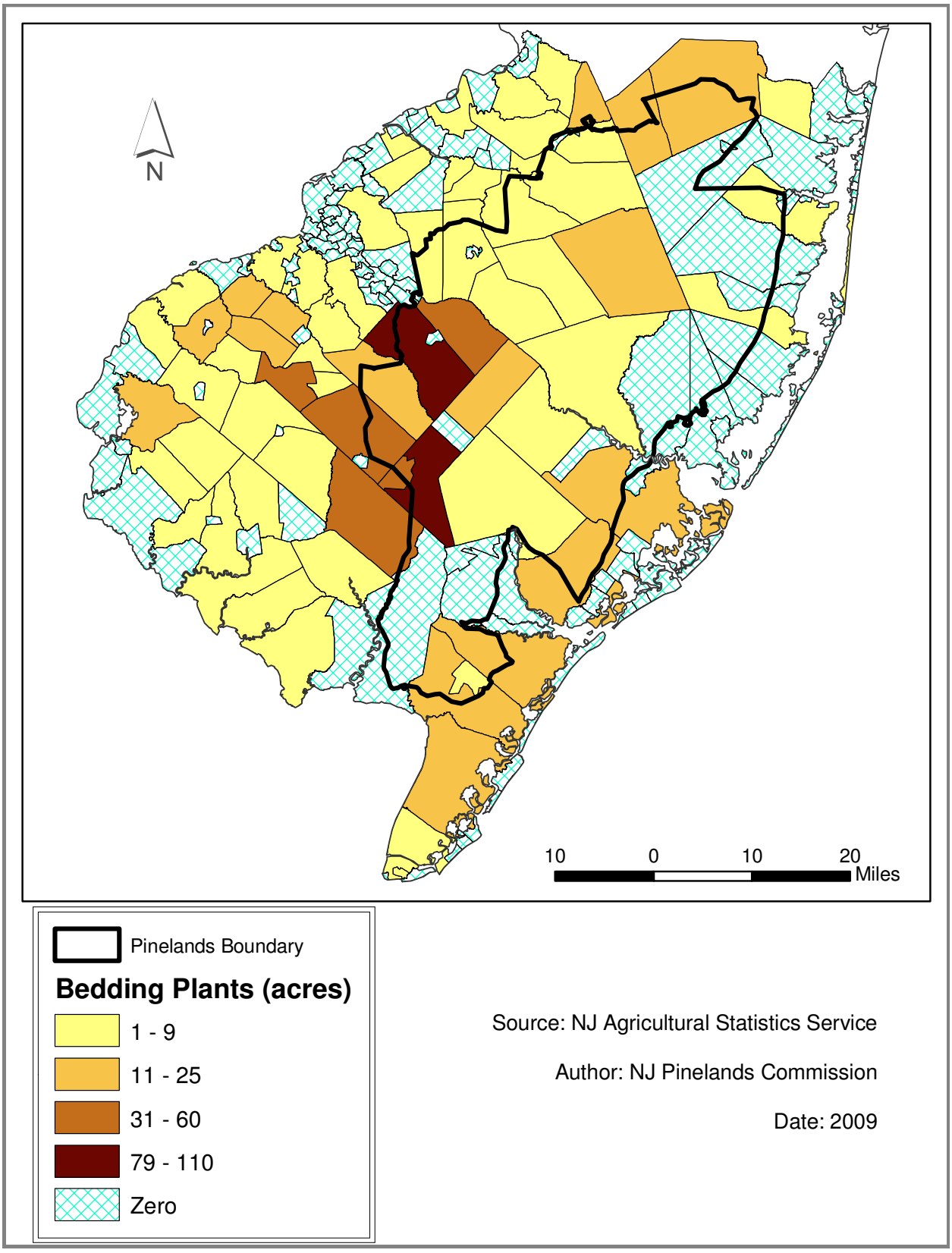


Table E5k Assessed Acres 2006 : BEDDING PLANTS

Municipality	County	Acres	South Jersey Rank
Buena Vista	Atlantic	110	1
Winslow	Camden	79	2
Buena	Atlantic	44	5
Waterford	Camden	37	6
Franklin	Gloucester	31	7
Woodland	Burlington	25	8
Hammonton	Atlantic	21	9
Plumsted	Ocean	19	10
Upper	Cape May	18	11
Galloway	Atlantic	16	13
Jackson	Ocean	15	15
Dennis	Cape May	13	18
Egg Harbor Township	Atlantic	12	20
Monroe	Gloucester	11	23
Shamong	Burlington	8	25
Southampton	Burlington	6	30
Tabernacle	Burlington	6	30
Hamilton	Atlantic	6	30
Evesham	Burlington	5	37
Berkeley	Ocean	4	43
Mullica	Atlantic	3	45
Woodbine	Cape May	3	45
Pemberton Township	Burlington	2	51
New Hanover	Burlington	2	51
Medford	Burlington	2	51
Washington	Burlington	2	51
Barnegat	Ocean	1	63
Total Acres in Pinelands		**501**	
Total Acres Statewide		**1,950**	
% of State Crop in Pinelands		**25.7%**	

Figure E5k Assessed Acres 2006 : BEDDING PLANTS



Economy 6

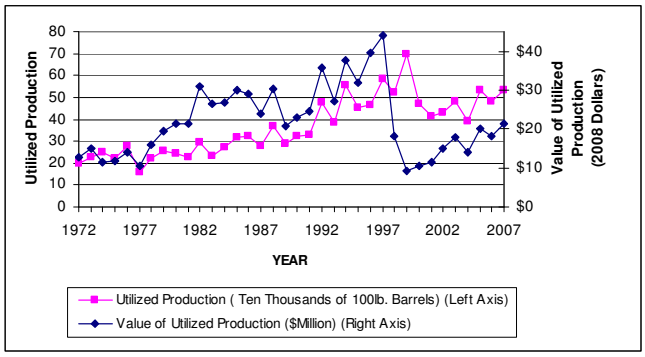
Cranberry and Blueberry Production

NJ Agricultural Statistics Service 1972 - 2007

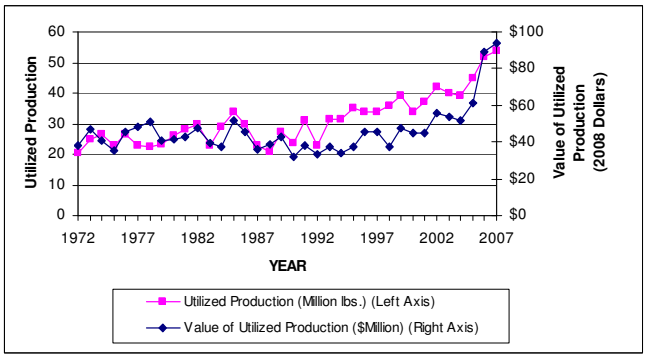
X Updated

- Both the cranberry and blueberry industry enjoyed across-the-board increases in prices, production, and value of utilized production in 2007. For the year, the value of utilized production rose 18% for cranberries and 5% for blueberries.

NJ Cranberry Production, Value and Volume



NJ Blueberry Production, Value and Volume



Description: Agriculture is recognized in federal and state Pinelands legislation as an industry of special significance and, therefore, receives a more detailed examination using three variables. The second indicator, *cranberry and blueberry production*, measures a critical component of Pinelands agriculture. Cash values are expressed in 2006 dollars.

Unit of Analysis: Cranberry and blueberry data are only available at the State level, but because these crops are found almost exclusively within the Pinelands, statewide figures provide sufficient information for the purposes of this analysis.

Summary of Previous Findings

Examination of two key Pinelands crops, cranberries and blueberries, revealed that cranberry production grew significantly from 1972 to 1996 but plummeted precipitously from 1997 to 1999 due to increased production (growers developed more efficient bogs to take advantage of good cranberry prices) without increased demand. Nationally, increased production combined with steady demand created a surplus of frozen cranberries. Increased foreign production of cranberries also may have been a contributing factor. A small recovery in cranberry farming began in 2000, which may have been aided by actions such as nationwide production cutbacks and USDA surplus. Production has increased by just 2.3% between 2000 and 2006. The value of production over that time increased dramatically, growing 73% between 2000 and 2006, with the price of cranberries climbing from $22.38 per 100 lbs in 2000 to $38.02 per 100 lbs in 2006, an increase of 70%. Despite this increase, prices remain well below their peak of $84.80 per 100 lbs in 1996.

Until recently, the value of utilized production for blueberries remained fairly steady, with yearly fluctuations from 1972-2004. Overall production increased by 33% between 2004 and 2006. The value of production increased dramatically over this two-year period, rising by 72%, while the sale price improved by 29%. (Figure E6). In both 2005 and 2006, the blueberry industry set records for the highest production and the highest value of utilized production over the entire 35-year monitoring period covered in this report.

Update

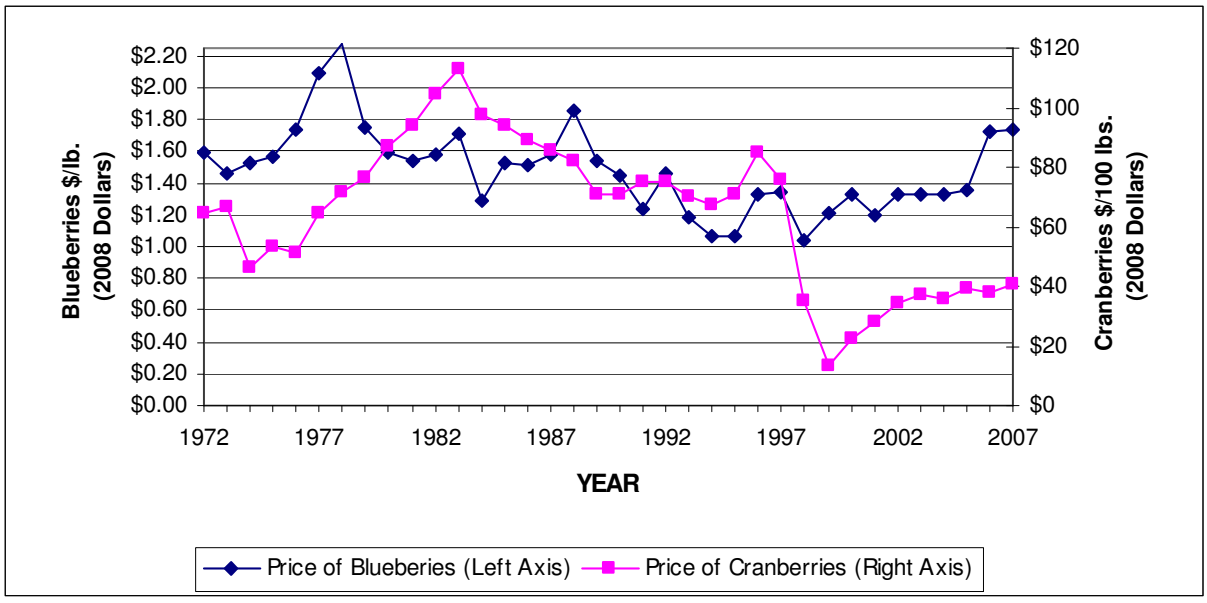
Both the cranberry and blueberry industry experienced across-the-board increases in prices, production, and value of utilized production in 2007. The value in utilized production of cranberries increased for the sixth time in the last eight years in 2007, rising 18% to $21.5 million. This increase was due to an increase in both price (+6%) and production (+11%) for the year. Cranberry prices finished the year at $40.39 per 100 lbs., which marks their highest level since 1997.

The blueberry industry followed its phenomenal growth in 2006 with another steady year of increases in 2007. Blueberry prices increased by 1.0% in 2007, posting a price of $1.73/lb. to finish at their highest level since 1988. Blueberry production also increased 4% for the year, with the value of utilized production increasing 5% for the year. This marks the third consecutive year that the blueberry industry has set the record for both the highest level of production and the highest utilized value of production over the entire monitoring period.

Table E6 Sales of New Jersey Farm Products (millions of $, 2008)

	Sales				Annual % Change		
Year	Cranberry	Blueberry	New Jersey		Cranberry	Blueberry	New Jersey
1992	$35,796	$33,485	$990,721		n/a	n/a	n/a
1993	$27,146	$37,257	$1,045,540		-24.2%	11.3%	5.5%
1994	$29,060	$33,712	$1,106,952		7.1%	-9.5%	5.9%
1995	$32,069	$37,438	$1,077,541		10.4%	11.1%	-2.7%
1996	$39,604	$45,297	$1,098,166		23.5%	21.0%	1.9%
1997	$44,189	$45,583	$1,071,265		11.6%	0.6%	-2.4%
1998	$18,099	$37,460	$1,068,468		-59.0%	-17.8%	-0.3%
1999	$9,137	$47,287	$956,895		-49.5%	26.2%	-10.4%
2000	$10,496	$45,136	$1,055,742		14.9%	-4.5%	10.3%
2001	$11,570	$44,653	$1,004,054		10.2%	-1.1%	-4.9%
2002	$16,416	$55,998	$1,035,463		41.9%	25.4%	3.1%
2003	$17,917	$53,463	$994,713		9.1%	-4.5%	-3.9%
2004	$14,011	$52,008	$974,744		-21.8%	-2.7%	-2.0%
2005	$20,742	$61,151	$969,063		48.0%	17.6%	-0.6%
2006	$20,095	$89,411	$991,323		-3.1%	46.2%	2.3%
2007	$23,268	$93,705	$982,245		15.8%	4.8%	-0.9%

Figure E6 Cranberry and Blueberry Prices



Economy 7

Census of Agriculture

X Updated

US Census of Agriculture 1982, 1987, 1992, 1997, 2002, 2007

- According to the 2007 Census of Agriculture, the net cash return per farm in the seven Pinelands counties ($42,000) is more than double the net cash return per farm in the remaining Non-Pinelands counties ($17,000).

Description: Agriculture is recognized in federal and state Pinelands legislation as an industry of special significance, and therefore receives a more detailed examination that uses three variables. The third indicator is actually a collection of indicators from the Agricultural Census, which is taken every five years.

Unit of Analysis: Agricultural Census data is limited to the county level and consequently inside/outside Pinelands trends cannot be distinguished.

Summary of Previous Findings

The seven Pinelands counties contained nearly 34% (287,000 acres) of the roughly 847,000 farm acres reported for New Jersey in the 1992 Census of Agriculture. From 1982-1992, the State lost 7.5% of its farm base, with Pinelands counties experiencing a 9.5% decline and Non-Pinelands counties experiencing a 6.4% loss. That trend began to change in the subsequent decade. From 1992-2002, while the State lost 4.9% of its farm base, the Pinelands counties experienced a 3.1% increase and Non-Pinelands counties experienced a 9.1% loss. Overall, from 1992-2002, farm acres in Pinelands counties increased by roughly 3% to 295,959 acres, which represents almost 37% of the State's 805,682 farm acres. Cape May and Gloucester Counties experienced declines in their farm base from 1992 to 2002. In contrast, Atlantic, Burlington, Camden, Cumberland and Ocean Counties experienced gains in farmland acreage over the same period.

The number of farms from 1992-2002 increased across all regions, while the size of the average farm showed uniform decreases across all regions. In the Pinelands, the number of farms increased by 6.5% over the ten-year period while the average farm size decreased by 2.2%. The numbers are more stark in the Non-Pinelands and statewide in this regard. The Non-Pinelands Counties experienced a 10.9% increase in the number of farms while their average farm size decreased by 18.1%. Statewide total farms increased by 9.3% while average farm size decreased by 12.9%.

With respect to agricultural sales, Pinelands counties accounted for nearly 48% of total sales statewide in 1992. By 2002, this number had increased to 53% of total statewide sales. The trend here is clear, as Pinelands counties contributed 45% of total agricultural sales statewide in 1982 while accounting for only 35% of farm acreage.

In terms of net cash returns, farms in the Pinelands counties accounted for 57.4% of statewide net returns in 1997, up 3% from 1992. By 2002, this figure climbed to 68.4% for the Pinelands counties. Comparison of total net cash returns over the monitoring period (1987-2002) clearly demonstrates the influence of economic conditions on the State's farm sector. The effect of the 1990 recession can be seen as statewide returns dropped 24.2% from 1987-1992, with Non-Pinelands counties experiencing a steeper decline of 32.4% and Pinelands counties a more moderate decline of 15.6%. Aggregate trends, however, were somewhat misleading, with the Pinelands county returns dropping 29% when Cumberland County's contribution was removed. The economic upswing can be seen as statewide returns increased 60.5% from 1992-1997, with Pinelands counties experiencing a greater increase of 69.6% and Non-Pinelands counties a more moderate increase of 49.8%.

Net cash return per farm in Pinelands counties have also increased at a faster rate than the remainder of the State and remained at overall higher levels. As of 2002, net cash return per farm in Pinelands counties were twice as high as the remainder of the state ($37,180 per farm in the Pines vs. $18,099 statewide) and four times as high as in the Non-Pinelands ($8,583).

More than half of New Jersey's farms lost money in 1987, 1992, 1997, and 2002. However, farmers in Pinelands counties continued to fare better than farmers in Non-Pinelands counties. In each of those years, 5-10% fewer farms in the Pinelands counties registered net losses than in the rest of the state. The percentage of farmers in Pinelands counties that lost money in 2002 was 56.1%, while in the Non-Pinelands 64.4% lost money and statewide 61.6% showed net losses for the year.

Update

An examination of the recently-released 2007 Census of Agriculture shows that four dominant trends continued across all regions of the state from 2002 to 2007:

(1) The total amount of land in farming continues to decrease.
(2) The absolute number of farms continues to increase.
(3) The average farm size continues to decrease.
(4) Agricultural sales continue to increase.

In the previous Census released in 2002, the Pinelands counties generally fared favorably on all of these measures when compared to their Non-Pinelands counterparts. For example, the Pinelands counties actually increased total acreage in farming from 1997 – 2002, bucking the statewide trend. In the current 2007 census, the Pinelands counties did not fare quite as favorably to the Non-Pinelands counties over the five-year period from 2002 – 2007.

Over the five-year period, Pinelands counties decreased their acres in farming by 12.5% to 258,882 acres. The remainder of counties in the state had a net decrease of 6.9% in acres farmed. Primarily, the decrease in the Pinelands is a result of reductions in Burlington and Gloucester counties. These reductions totaled almost 30,000 acres (Burlington -25,447 acres down 22.9%, and Gloucester -4,091 acres down 8.1%).

The same relative changes hold true for the number of farms during the 2002-2007 period. Pinelands counties had an increase of 2.6% in the number of farms during the period, in contrast to a 4.8% increase in the rest of the state. Average farm size decreased in the Pinelands counties by -15.0% from 2002-2007, while the rest of the state saw a decline in average farm size of 11.2%.

Agricultural sales in all parts of the state continued an impressive climb despite the decrease in farm acreage and average farm size. Pinelands counties increased their total agricultural sales by 14.3% from 2002-2007, while the rest of the counties in the state enjoyed a 19.6% increase in total sales. With $530 million in sales in 2007, the Pinelands counties make up more than half of the state's agricultural sales (51.7%) while comprising only 35.3% of the total acres farmed in the state. In terms of net cash returns, farms in the Pinelands counties posted profits of $137.7 million in 2007, a total that represents 54.6% of statewide agricultural profits. Net cash return per farm in the Pinelands counties increased 13.1% from 2002 to 2007. However, in the rest of the state, net cash return per farm almost doubled over the same period (+99%).

Farm viability continues to be an issue in New Jersey. In 2007, more than half (57.8%) of the farms in the Pinelands counties posted net losses. In the rest of the state, 62.2% of farms had net losses for the year. Gloucester and Ocean counties had the highest percentage of farms with losses in the Pinelands in 2007 (66.7% and 61.2% respectively).

Table E7a Land in Farming

	Land in Farming (acres)				Percentage Change			
County	**1992**	**1997**	**2002**	**2007**	**'92-'97**	**'97-'02**	**02-'07**	**92-'07**
Atlantic	29,606	31,620	30,337	30,372	6.8%	-4.1%	0.1%	2.6%
Burlington	97,186	103,627	111,237	85,790	6.6%	7.3%	-22.9%	-11.7%
Camden	7,799	9,446	10,259	8,760	21.1%	8.6%	-14.6%	12.3%
Cape May	11,644	9,840	10,037	7,976	-15.5%	2.0%	-20.5%	-31.5%
Cumberland	68,627	67,194	71,097	69,489	-2.1%	5.8%	-2.3%	1.3%
Gloucester	61,748	58,888	50,753	46,662	-4.6%	-13.8%	-8.1%	-24.4%
Ocean	10,365	12,061	12,239	9,833	16.4%	1.5%	-19.7%	-5.1%
Pinelands Counties	**286,975**	**289,435**	**295,959**	**258,882**	**0.9%**	**2.3%**	**-12.5%**	**-9.8%**
Non-Pinelands Counties	560,620	567,474	509,723	474,568	1.2%	-10.2%	-6.9%	-15.3%
State Total	847,595	856,909	805,682	733,450	1.1%	-6.0%	-9.0%	-13.5%

	Number of Farms				Percentage Change			
County	**1992**	**1997**	**2002**	**2007**	**'92-'97**	**'97-'02**	**02-'07**	**92-'07**
Atlantic	391	465	456	499	18.9%	-1.9%	9.4%	27.6%
Burlington	816	935	906	922	14.6%	-3.1%	1.8%	13.0%
Camden	188	236	216	225	25.5%	-8.5%	4.2%	19.7%
Cape May	163	165	197	201	1.2%	19.4%	2.0%	23.3%
Cumberland	609	622	616	615	2.1%	-1.0%	-0.2%	1.0%
Gloucester	704	718	692	669	2.0%	-3.6%	-3.3%	-5.0%
Ocean	233	268	217	255	15.0%	-19.0%	17.5%	9.4%
Pinelands Counties	**3,104**	**3,101**	**3,300**	**3,386**	**-0.1%**	**6.4%**	**2.6%**	**9.1%**
Non-Pinelands Counties	5,975	6,944	6,624	6,941	16.2%	-4.6%	4.8%	16.2%
State Total	9,079	10,045	9,924	10,327	10.6%	-1.2%	4.1%	13.7%

	Average Farm Size (acres)				Percentage Change			
County	**1992**	**1997**	**2002**	**2007**	**'92-'97**	**'97-'02**	**02-'07**	**92-'07**
Atlantic	76	68	67	61	-10.5%	-2.2%	-9.2%	-19.9%
Burlington	119	111	123	93	-6.9%	10.8%	-24.4%	-21.8%
Camden	41	40	47	39	-2.4%	18.7%	-17.2%	-5.0%
Cape May	71	60	51	40	-16.0%	-14.6%	-22.2%	-44.1%
Cumberland	113	108	115	113	-4.4%	6.8%	-1.7%	0.0%
Gloucester	88	82	73	70	-6.8%	-10.6%	-4.5%	-20.7%
Ocean	44	45	56	39	2.3%	25.3%	-31.1%	-12.4%
Pinelands Counties	**92**	**93**	**90**	**76**	**1.5%**	**-3.9%**	**-15.0%**	**-16.9%**
Non-Pinelands Counties	94	82	77	68	-13.1%	-5.8%	-11.2%	-27.3%
State Total	93	85	81	71	-8.3%	-4.8%	-12.3%	-23.6%

Table E7b Agricultural Sales (2008 Dollars)

	Agricultural Sales ($1,000s)				Percentage Change				Agricultural Sales as % of New Jersey			
County	**1992**	**1997**	**2002**	**2007**	**'92-'97**	**'97-'02**	**02-'07**	**92-'07**	**1992**	**1997**	**2002**	**2007**
Atlantic	66,889	85,421	94,261	133,267	27.7%	10.3%	41.4%	99.2%	8.2%	9.1%	10.7%	13.0%
Burlington	99,404	117,811	99,958	89,616	18.5%	-15.2%	-10.3%	-9.8%	12.1%	12.6%	11.4%	8.7%
Camden	12,594	23,516	16,374	19,266	86.7%	-30.4%	17.7%	53.0%	1.5%	2.5%	1.9%	1.9%
Cape May	8,643	9,161	13,509	15,146	6.0%	47.5%	12.1%	75.2%	1.1%	1.0%	1.5%	1.5%
Cumberland	112,383	126,717	147,287	162,965	12.8%	16.2%	10.6%	45.0%	13.7%	13.5%	16.8%	15.9%
Gloucester	84,026	90,135	79,255	97,488	7.3%	-12.1%	23.0%	16.0%	10.2%	9.6%	9.0%	9.5%
Ocean	7,770	10,996	12,880	11,957	41.5%	17.1%	-7.2%	53.9%	0.9%	1.2%	1.5%	1.2%
Pinelands Counties	**391,708**	**463,757**	**463,524**	**529,707**	**18.4%**	**-0.1%**	**14.3%**	**35.2%**	**47.7%**	**49.4%**	**52.8%**	**51.7%**
Non-Pinelands Counties	428,904	474,826	413,915	495,075	10.7%	-12.8%	19.6%	15.4%	52.3%	50.6%	47.2%	48.3%
State Total	820,612	938,583	877,440	1,024,781	14.4%	-6.5%	16.8%	24.9%	100.0%	100.0%	100.0%	100.0%

Table E7c Net Cash Return for New Jersey Farms (2008 Dollars)

	Total Net Cash Return (1,000's)			Percentage Change			Total Net Cash Return as Pct. of NJ		
County	**1997**	**2002**	**2007**	**'97-'02**	**02-'07**	**97-'07**	**1997**	**2002**	**2007**
Atlantic	$17,542	$28,037	$46,246	59.8%	64.9%	163.6%	8.4%	17.8%	18.4%
Burlington	$27,948	$23,347	$18,506	-16.5%	-20.7%	-33.8%	13.5%	14.8%	7.4%
Camden	$9,263	$3,977	$6,856	-57.1%	72.4%	-26.0%	4.5%	2.5%	2.7%
Cape May	$2,287	$5,637	$5,927	146.4%	5.1%	159.2%	1.1%	3.6%	2.4%
Cumberland	$34,678	$34,152	$36,907	-1.5%	8.1%	6.4%	16.7%	21.7%	14.7%
Gloucester	$24,340	$10,901	$21,862	-55.2%	100.6%	-10.2%	11.7%	6.9%	8.7%
Ocean	$3,115	$1,631	$815	-47.6%	-50.0%	-73.8%	1.5%	1.0%	0.3%
Pinelands Counties	**$119,173**	**$107,681**	**$137,119**	**-9.6%**	**27.3%**	**15.1%**	**57.4%**	**68.4%**	**54.6%**
Non-Pinelands Counties	$88,527	$49,838	$114,241	-43.7%	129.2%	29.0%	42.6%	31.6%	45.4%
New Jersey	$207,700	$157,519	$251,360	-24.2%	59.6%	21.0%	100.0%	100.0%	100.0%

Table E7d Net Cash Return per Farm (2008 Dollars)

	Net Cash Return per Farm			Percentage Change		
County	**1997**	**2002**	**2007**	**'97-'02**	**02-'07**	**97-'07**
Atlantic	$47,379	$70,081	$96,237	47.9%	37.3%	103.1%
Burlington	$37,214	$29,276	$20,843	-21.3%	-28.8%	-44.0%
Camden	$50,517	$21,081	$31,642	-58.3%	50.1%	-37.4%
Cape May	$17,493	$32,285	$30,619	84.6%	-5.2%	75.0%
Cumberland	$68,860	$63,192	$62,316	-8.2%	-1.4%	-9.5%
Gloucester	$42,615	$17,980	$33,933	-57.8%	88.7%	-20.4%
Ocean	$15,042	$8,644	$3,317	-42.5%	-61.6%	-78.0%
Pinelands Counties	**$43,860**	**$37,180**	**$42,051**	**-15.2%**	**13.1%**	**-4.1%**
Non-Pinelands Counties	$16,825	$8,583	$17,091	-49.0%	99.1%	1.6%
New Jersey	$26,032	$18,099	$25,275	-30.5%	39.6%	-2.9%

Table E7e Farms with Net Losses

	Farms with Net Losses			Percentage of All Farms with Net Losses		
County	**1997**	**2002**	**2007**	**1997**	**2002**	**2007**
Atlantic	227	197	275	53.5%	43.2%	55.1%
Burlington	369	478	526	43.1%	52.8%	57.0%
Camden	94	108	133	44.5%	50.0%	59.1%
Cape May	75	111	103	50.3%	56.3%	51.2%
Cumberland	248	314	319	43.3%	51.0%	51.9%
Gloucester	286	513	446	43.9%	74.1%	66.7%
Ocean	114	131	156	48.5%	60.4%	61.2%
Pinelands Counties	**1,413**	**1,852**	**1,958**	**45.6%**	**56.1%**	**57.8%**
Non-Pinelands Counties	3,582	4,265	4,320	59.7%	64.4%	62.2%
New Jersey	4,995	6,117	6,278	54.9%	61.6%	60.8%

Municipal Finance

1

Avg Residential Property Tax Bill

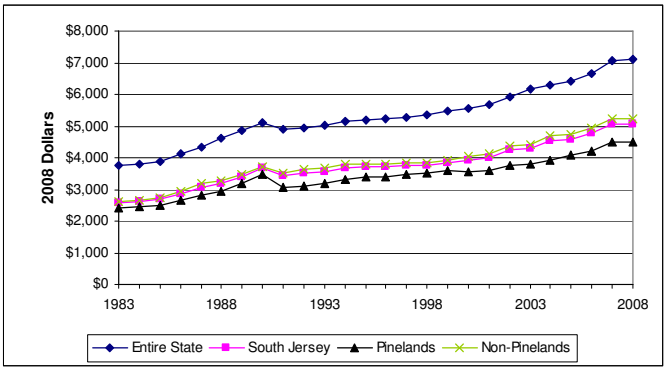
X Updated

NJ Dept of Treasury, Division of Taxation 1983 - 1999

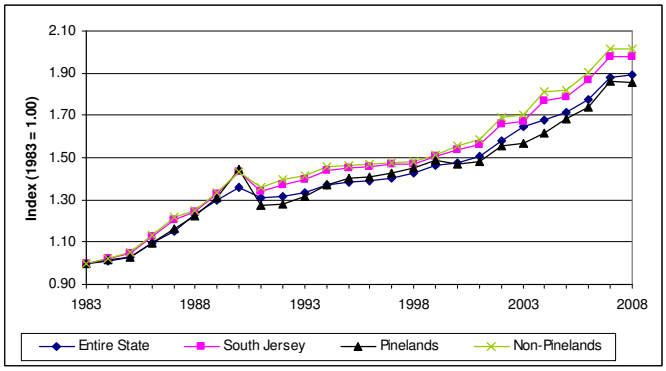
NJ Dept of Community Affairs, Div LGS 2000 - 2008

- Average residential property tax bills decreased by 0.5% in the Pinelands in 2008, while posting slight increases in other regions (Statewide +0.4%, Non-Pinelands +0.1%).

Average Residential Property Tax Bill



Index of Average Residential Property Tax Bill



Description: The average residential property tax bill measures the impact of property taxes on municipal residents. It is calculated by dividing the average residential property value by 100 and multiplying the result by the general tax rate. Values are adjusted for inflation and shown in 2008 dollars.

Unit of Analysis: Average residential property tax data are compiled at the municipal level and aggregated to allow for inside/outside Pinelands, regional, and statewide analyses.

Summary of Previous Findings

Average residential property tax bills in New Jersey demonstrated a gradual but steady pattern of increase throughout the 1980s. Following a large one-year decline in 1991, residential property taxes subsequently began a slow, continued increase from 1992-2007. The annual rate of change over the monitoring period was virtually the same for all geographic areas. By 1998, average residential tax bills in all areas surpassed their previous 1990 peaks. From 1998 to 2007, real tax rates increased by 36.1% for the Non-Pinelands versus just 28.6% for the Pinelands.

Update

The average residential property tax bill slowed considerably across all regions in 2008. Statewide, average residential property taxes rose just 0.4%, while in South Jersey there was a miniscule increase of less than 0.1% for the year. However, within South Jersey, the story was different. Pinelands communities registered a 0.5% decrease in average residential property taxes versus a 0.1% increase in the Non-Pinelands. As a result, the gap between the taxes paid in the Pinelands and other regions continued to grow wider in 2008. Average residential property taxes in the Pinelands are now $756 lower than in the Non-Pinelands and $2,611 lower than the state as a whole.

The average residential property tax bill in New Jersey, adjusted for inflation, has increased by 54% between 1988 and 2008, from $4,617 to $7,088. Within Southern New Jersey, the average Pinelands bill increased by 52% (from $2,953 to $4,477) while the average Non-Pinelands bill increased by 61% (from $3,251 to $5,233).

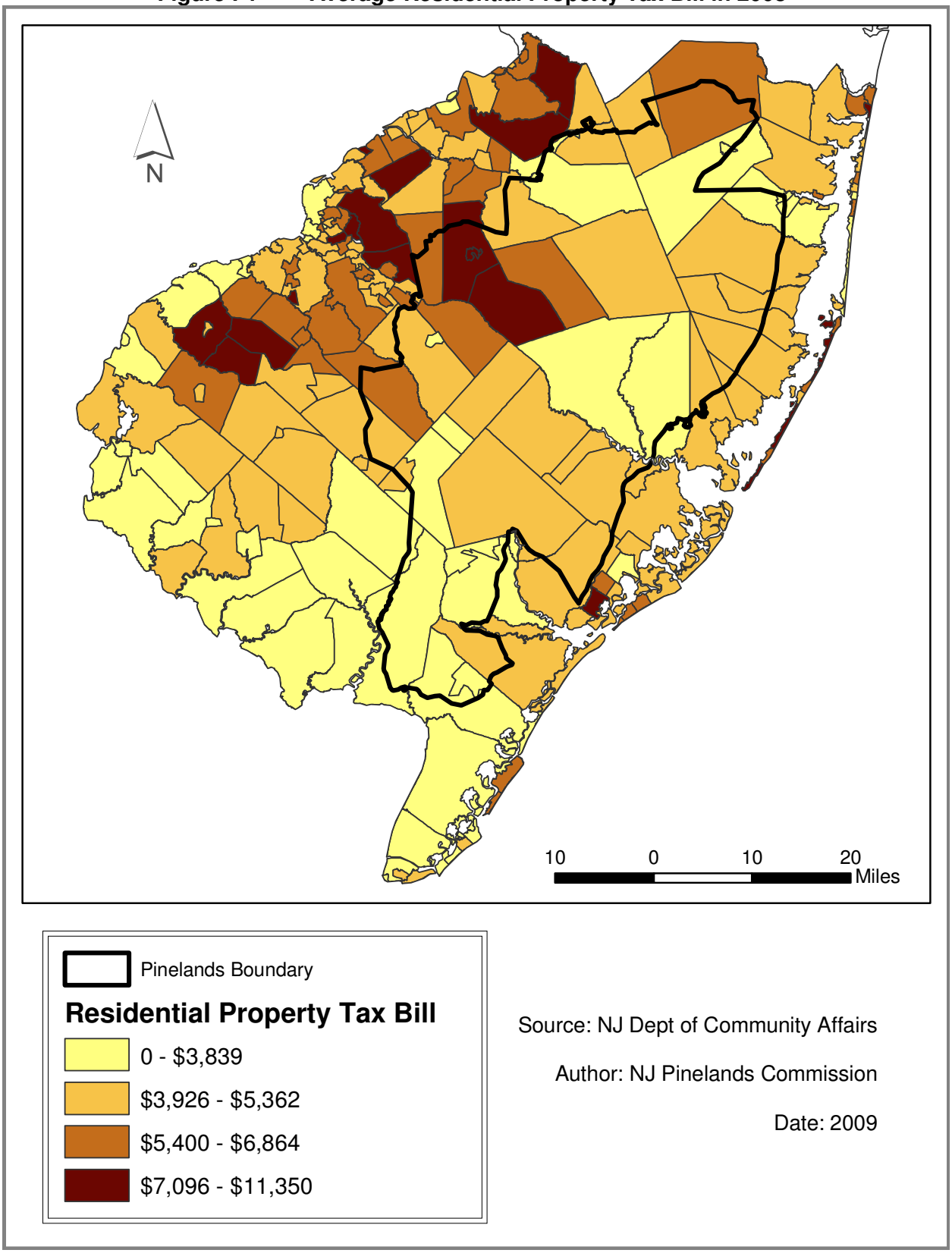
The rapidly growing second ring of suburbs surrounding the Philadelphia metropolitan area experienced the highest increases in average residential property taxes over the past 20 years. Smaller concentrations of increasing tax bills exist in Ocean County and along the shore. The southern, rural municipalities had the smallest increases in property taxes from 1988-2008.

From 2007 to 2008, 28 of the 47 Pinelands municipalities (60%) experienced real tax decreases (Table F1). In the remaining 155 municipalities that comprise the Non-Pinelands, 72 had real tax decreases from 2007 to 2008 (46%).

Table F1 Average Residential Property Tax Bill in the Pinelands

Municipality	County	Avg. Property Tax Bill 2008	Actual Change from 2007	% Change from 2007	South Jersey Rank 2008
South Toms River	Ocean	$3,592	$194	5.7%	167
Egg Harbor Township	Atlantic	$5,186	$119	2.3%	77
Beachwood	Ocean	$3,833	$116	3.1%	154
Franklin	Gloucester	$4,782	$93	2.0%	101
Manchester	Ocean	$3,355	$90	2.8%	180
New Hanover	Burlington	$3,949	$87	2.3%	151
Woodbine	Cape May	$1,357	$78	6.1%	199
Maurice River	Cumberland	$3,349	$69	2.1%	181
Eagleswood	Ocean	$4,823	$62	1.3%	96
Egg Harbor City	Atlantic	$4,912	$60	1.2%	91
Berkeley	Ocean	$3,550	$56	1.6%	169
Little Egg Harbor	Ocean	$4,145	$42	1.0%	142
Upper	Cape May	$3,977	$35	0.9%	150
Ocean	Ocean	$4,291	$31	0.7%	134
Winslow	Camden	$4,953	$30	0.6%	86
Evesham	Burlington	$6,634	$27	0.4%	28
Dennis	Cape May	$2,558	$25	1.0%	195
Port Republic	Atlantic	$4,788	$16	0.3%	100
Weymouth	Atlantic	$3,400	$11	0.3%	176
Lakehurst	Ocean	$3,761	-$3	-0.1%	159
Chesilhurst	Camden	$3,691	-$8	-0.2%	163
Stafford	Ocean	$5,275	-$9	-0.2%	72
Galloway	Atlantic	$4,313	-$10	-0.2%	132
Shamong	Burlington	$7,319	-$11	-0.2%	17
Mullica	Atlantic	$4,193	-$14	-0.3%	140
Washington	Burlington	$3,538	-$15	-0.4%	172
Monroe	Gloucester	$5,788	-$27	-0.5%	53
Wrightstown	Burlington	$1,945	-$31	-1.6%	197
Buena	Atlantic	$4,213	-$37	-0.9%	139
Buena Vista	Atlantic	$3,742	-$40	-1.1%	162
Hamilton	Atlantic	$3,926	-$44	-1.1%	152
Folsom	Atlantic	$3,057	-$48	-1.5%	192
Barnegat	Ocean	$5,107	-$61	-1.2%	79
Pemberton Township	Burlington	$3,296	-$65	-1.9%	185
Southampton	Burlington	$4,814	-$68	-1.4%	98
Bass River	Burlington	$3,776	-$68	-1.8%	157
Hammonton	Atlantic	$4,446	-$93	-2.0%	125
Medford Lakes	Burlington	$7,731	-$100	-1.3%	12
Berlin Township	Camden	$4,713	-$104	-2.2%	106
Tabernacle	Burlington	$6,751	-$106	-1.5%	24
Plumsted	Ocean	$5,209	-$138	-2.6%	76
Waterford	Camden	$5,495	-$160	-2.8%	65
Lacey	Ocean	$4,438	-$168	-3.7%	126
Woodland	Burlington	$4,665	-$175	-3.6%	110
Estell Manor	Atlantic	$3,280	-$176	-5.1%	188
Jackson	Ocean	$5,884	-$234	-3.8%	48
Medford	Burlington	$8,629	-$368	-4.1%	6
"Outside Municipalities"					
Corbin City	Atlantic	$4,282	$173	4.2%	136
Toms River	Ocean	$4,548	$170	3.9%	121
Vineland	Cumberland	$3,771	$89	2.4%	158
North Hanover	Burlington	$5,303	-$10	-0.2%	71
Berlin Borough	Camden	$5,759	-$119	-2.0%	55

Figure F1 Average Residential Property Tax Bill in 2008*



* Range excludes outliers Tavistock Borough and Mantoloking Borough.

Municipal Finance

2

State Equalized Valuation

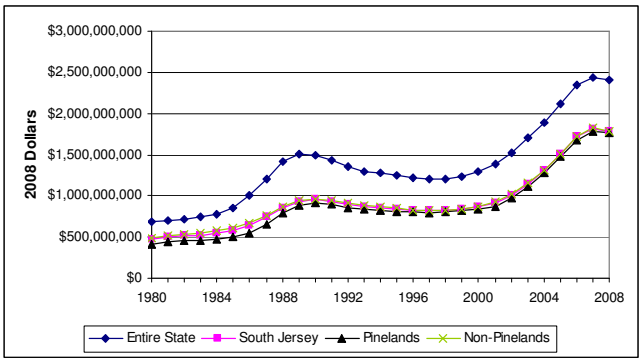
X Updated

NJ Dept of Community Affairs, Div LGS 1980 - 1993

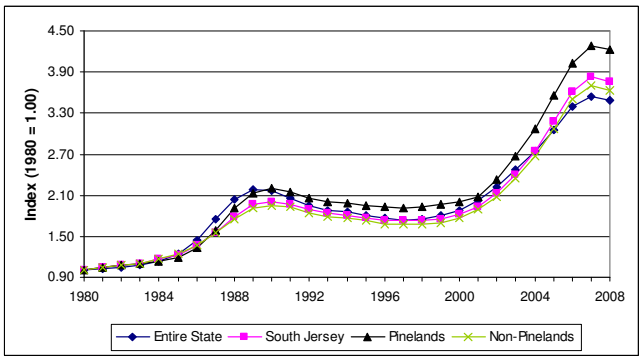
NJ Dept of Treasury, Division of Taxation 1994 – 2008

2008 marked the first time in 11 years that the average equalized property value decreased in all regions (Pinelands -1.5%, Non-Pines -2.2%, Statewide -1.5%).

Average State Equalized Valuation (2008 Dollars)



Index of State Equalized Valuation



Description: Equalized property value is the total assessed value of all property in a municipality adjusted for different municipal assessment biases in order to make values across New Jersey municipalities comparable to one another. It is useful as a measurement of the wealth of one municipality relative to other municipalities. Values are adjusted for inflation and shown in 2006 dollars.

Unit of Analysis: State equalized valuation data are compiled at the municipal level and aggregated to allow for inside/outside Pinelands, regional, and statewide analyses.

Summary of Previous Findings

Equalized property valuation in New Jersey rose throughout the 1980s, with most of the growth concentrated in the latter part of the decade. Average municipal valuation in the Pinelands tracked closely with average valuation outside the Pinelands. While average valuation in the Pinelands was lower than average valuation outside of the Pinelands over the monitoring period, the gap progressively narrowed. Conversely, while average valuation in Southern New Jersey remained lower than average valuation in the entire State, the differential did not diminish over the monitoring period. Following a peak in 1989, statewide average valuation experienced a steeper decline than average valuation throughout Southern New Jersey. From 1990 to 1997, average equalized valuation declined across all areas of the State. This trend reversed after 1997 as average equalized property valuations rose between 1998 and 2007 in all regions.

Update

After 10 consecutive years of increasing property values statewide, all regions experienced a decline in equalized property values in 2008. For the year, the decrease in valuation for the Pinelands was slightly lower than in the Non-Pinelands (-1.5% versus -2.2%). Statewide, equalized property values mirrored the 1.5% decrease in the Pinelands as the continued downturn in the real estate market finally began to show up as real decreases in total property values. The valuation for the average Pinelands municipality was $1.76 billion in 2008, compared to an average of $1.79 billion for the average Non-Pinelands municipality. The gap in valuation between the Pinelands and Non-Pinelands continues to narrow. In 1985, the average Non-Pinelands municipality valuation was 22.8% higher than the average Pinelands municipality. By 2008, that difference has almost evaporated; the average Non-Pinelands municipality valuation is now only 1.5% higher than in the Pinelands.

More populated municipalities tend to have higher equalized values, as more structures and higher densities push up property values. Per capita equalized values can be used to make more equal comparisons by accounting for the relative wealth of inhabitants for particular jurisdictions. Total 2008 equalized values were divided by 2007 population estimates for each region. The results show that the state has a higher equalized value per capita than Southern New

Jersey ($156,600 versus $149,755), while the Pinelands region has a much lower per capita value compared to the Non-Pinelands region ($121,031 versus $161,187). The Pinelands municipalities exhibit a great deal of variation, with per capita values ranging from a high of $201,494 in Upper Township to a low of $9,694 in New Hanover (Table F2).

Table F2 Equalized Value and Equalized Value Per Capita 2008

County	Municipality	Population Est 2007	Equalized Value 2008*	Eq Value Per Capita*
Cape May	Upper	11,110	$2,238,600,000	$201,494
Ocean	Stafford	26,282	$5,106,400,000	$194,293
Burlington	Washington	643	$124,700,000	$193,935
Ocean	Eagleswood	1,645	$307,500,000	$186,930
Cape May	Dennis	5,791	$1,057,600,000	$182,628
Ocean	Lacey	26,322	$4,399,800,000	$167,153
Ocean	Ocean	8,643	$1,431,200,000	$165,591
Burlington	Medford	22,838	$3,491,000,000	$152,859
Ocean	Little Egg Harbor	20,517	$3,101,600,000	$151,172
Ocean	Berkeley	42,664	$6,379,200,000	$149,522
Ocean	Jackson	52,577	$7,473,800,000	$142,150
Atlantic	Egg Harbor Township	39,493	$5,240,400,000	$132,692
Atlantic	Port Republic	1,220	$160,100,000	$131,230
Atlantic	Estell Manor	1,714	$224,000,000	$130,688
Burlington	Evesham	45,619	$5,939,600,000	$130,200
Burlington	Woodland	1,344	$173,900,000	$129,390
Burlington	Southampton	10,885	$1,370,800,000	$125,935
Ocean	Barnegat	21,867	$2,680,200,000	$122,568
Burlington	Bass River	1,547	$189,400,000	$122,431
Burlington	Shamong	6,738	$819,800,000	$121,668
Ocean	Plumsted	8,177	$994,000,000	$121,560
Burlington	Medford Lakes	4,099	$492,100,000	$120,054
Burlington	Tabernacle	7,182	$855,000,000	$119,048
Atlantic	Hammonton	13,500	$1,549,300,000	$114,763
Ocean	Manchester	41,713	$4,740,800,000	$113,653
Camden	Berlin Township	5,381	$599,700,000	$111,448
Atlantic	Hamilton	24,553	$2,686,200,000	$109,404
Atlantic	Galloway	36,105	$3,921,700,000	$108,619
Atlantic	Mullica	6,034	$654,600,000	$108,485
Atlantic	Folsom	1,918	$199,800,000	$104,171
Ocean	Beachwood	10,789	$1,054,200,000	$97,711
Gloucester	Monroe	32,607	$3,070,400,000	$94,164
Atlantic	Buena Vista	7,359	$680,100,000	$92,417
Gloucester	Franklin	17,143	$1,507,100,000	$87,913
Camden	Waterford	10,636	$931,200,000	$87,552
Atlantic	Buena	3,747	$315,600,000	$84,227
Atlantic	Weymouth	2,257	$187,500,000	$83,075
Camden	Winslow	39,173	$3,116,100,000	$79,547
Ocean	South Toms River	3,713	$290,500,000	$78,239
Atlantic	Egg Harbor City	4,398	$322,200,000	$73,261
Cape May	Woodbine	2,485	$178,000,000	$71,630
Ocean	Lakehurst	2,708	$192,300,000	$71,012
Burlington	Wrightstown	733	$49,000,000	$66,849
Burlington	Pemberton Township	28,158	$1,735,500,000	$61,634
Cumberland	Maurice River	8,034	$313,600,000	$39,034
Camden	Chesilhurst	1,874	$69,300,000	$36,980
Burlington	New Hanover	9,439	$91,500,000	$9,694
"Outside" Municipalities				
Burlington	Springfield	3,492	$499,100,000	$142,927
Camden	Berlin Borough	7,870	$843,100,000	$107,128
Atlantic	Corbin City	520	$53,600,000	$103,077
Burlington	North Hanover	7,415	$557,400,000	$75,172
Cumberland	Vineland	58,505	$4,166,600,000	$71,218

* Values have been rounded. Shown in current 2008 dollars.

Municipal Finance

3

Effective Tax Rate

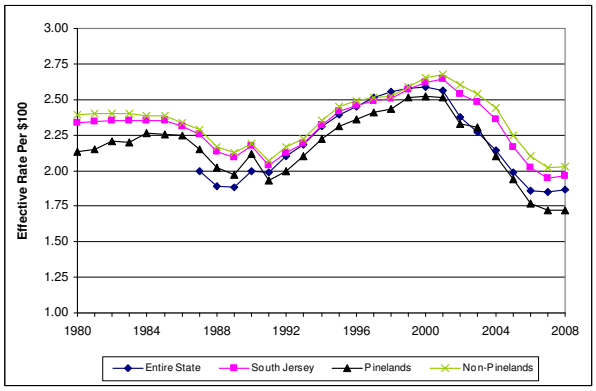
X Updated

NJ Dept of Treasury, Division of Taxation 1994 - 2001

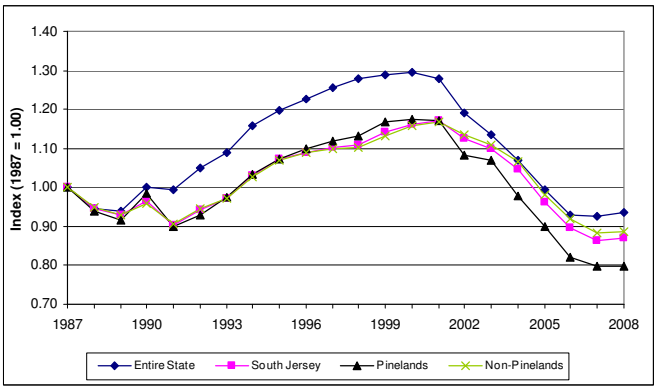
NJ Dept of Community Affairs, Div LGS 1980 - 93, 2002 - 08

- Effective tax rates remained unchanged in the Pinelands in 2008 while rising in both the Non-Pinelands (+0.5%) and statewide (+1.1%).

Effective Tax Rate (Per $100 State Equalized Valuation)



Index of Effective Tax Rate



Description: The effective tax rate measures the ratio of taxes to property value. The effective tax rate is the rate at which the municipality taxes the (equalized) assessed value of property, and is equal to the general property tax adjusted by the municipality's equalization ratio as calculated by the NJ Dept of the Treasury, Division of Taxation.

Unit of Analysis: Average effective tax rate data are compiled at the municipal level and aggregated to allow for inside/outside Pinelands, regional, and statewide analyses.

Summary of Previous Findings

Effective tax rates in all regions remained steady or increased slightly in the early 1980s before beginning a period of decline in 1986. Although statewide data were not available until 1987, statewide effective tax rates were below rates outside of the Pinelands, but surpassed rates inside of the Pinelands in 1991. Effective tax rates have gradually increased in all regions since the early 1990s and surpassed earlier highs set in the 1980s. Pinelands' effective tax rates continue to remain lower than all other regions of New Jersey. Rates began falling in 2001 and continued to fall through 2007.

Update

For the first time in eight years, effective tax rates began to slowly rise in 2008. Statewide, New Jersey posted an increase of 1.1% in effective tax rates in 2008, rising from 1.85 in 2007 to 1.87 in 2008. In Southern New Jersey, effective tax rates rose 0.5% in the Non-Pinelands (from 2.02 to 2.03). However, in the Pinelands the effective tax rate remained unchanged in 2008 at 1.72. The small increase in effective tax rates is linked to a decrease in home sale prices and a corresponding decrease in equalized property valuation. A detailed explanation of how effective tax rates are computed and the synergy between home sales price, equalized value, and effective tax rates can be found in the 2003 Annual Report.

Studies have suggested that effective tax rates above 3.00 indicate municipal fiscal stress.[15] Currently, there are not any Pinelands municipalities with a rate higher than 3.00. By contrast, in the Non-Pinelands,14 municipalities have effective tax rates above 3.00, which represents 9% of the Non-Pinelands municipalities. The majority of municipalities with rates above 3.00 are clustered in Camden County (Figure F3).

15 See "The Property Tax Trouble Zone Moves Beyond Big Cities" by Coleman, *New Jersey Municipalities*, Dec 2002, p. 66-69

Figure F3 Effective Tax Rates 2008

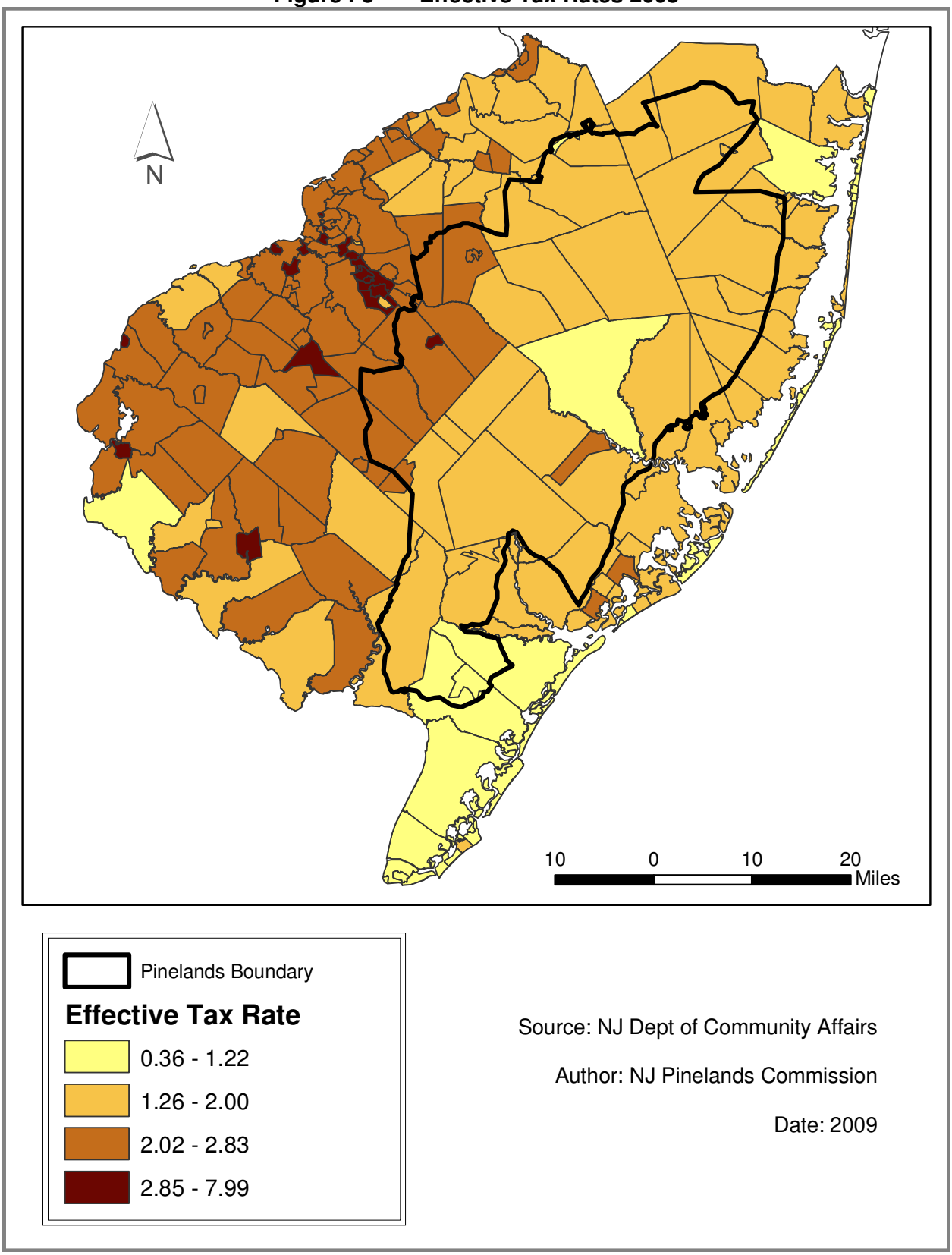


Table F3 Effective Tax Rates 2008

Municipality	County	Effective Tax Rate	South Jersey Rank
Chesilhurst	Camden	2.849	20
Berlin Township	Camden	2.615	36
Medford Lakes	Burlington	2.470	46
Waterford	Camden	2.417	53
Egg Harbor City	Atlantic	2.415	55
Monroe	Gloucester	2.367	60
Winslow	Camden	2.314	65
Buena	Atlantic	2.203	78
Medford	Burlington	2.178	81
Evesham	Burlington	2.137	85
Franklin	Gloucester	2.074	94
Tabernacle	Burlington	1.950	104
Shamong	Burlington	1.905	111
Maurice River	Cumberland	1.875	115
Hamilton	Atlantic	1.824	119
Southampton	Burlington	1.813	120
Egg Harbor Township	Atlantic	1.791	122
Hammonton	Atlantic	1.788	123
Pemberton Township	Burlington	1.744	127
Barnegat	Ocean	1.730	130
Galloway	Atlantic	1.726	131
Buena Vista	Atlantic	1.672	134
Lakehurst	Ocean	1.661	135
Mullica	Atlantic	1.629	136
South Toms River	Ocean	1.618	137
Woodland	Burlington	1.612	138
New Hanover	Burlington	1.559	142
Jackson	Ocean	1.559	142
Eagleswood	Ocean	1.500	145
Stafford	Ocean	1.481	148
Little Egg Harbor	Ocean	1.479	149
Port Republic	Atlantic	1.472	150
Plumsted	Ocean	1.464	151
Weymouth	Atlantic	1.451	152
Manchester	Ocean	1.433	154
Bass River	Burlington	1.432	155
Beachwood	Ocean	1.425	156
Berkeley	Ocean	1.373	159
Folsom	Atlantic	1.355	160
Lacey	Ocean	1.324	163
Ocean	Ocean	1.316	165
Estell Manor	Atlantic	1.280	166
Wrightstown	Burlington	1.174	172
Upper	Cape May	1.170	173
Washington	Burlington	1.154	174
Woodbine	Cape May	1.103	176
Dennis	Cape May	1.078	177
"Outside" Municipalities			
Berlin Borough	Camden	2.134	86
Corbin City	Atlantic	1.997	101
Vineland	Cumberland	1.969	102
Springfield	Burlington	1.959	103
North Hanover	Burlington	1.261	167

Municipal Finance

4

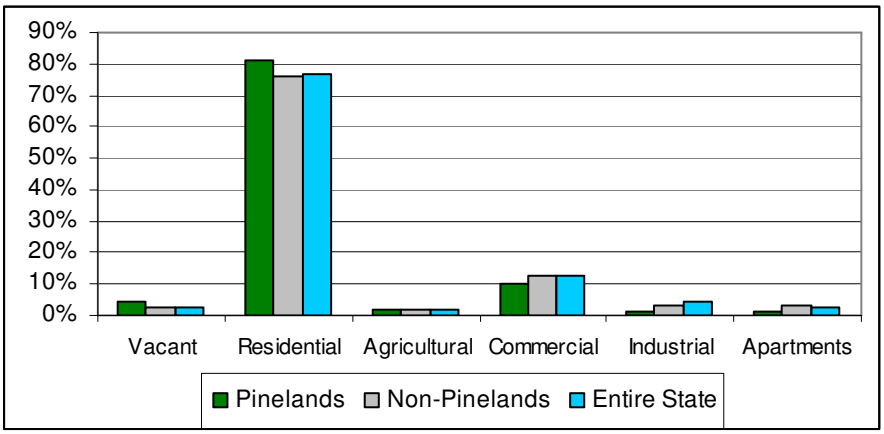
Assessment Class Proportions in Municipal Tax Revenues

X Updated

NJ Dept of Community Affairs, Div LGS 1980 – 1998, 2002 - 2008

- The vacant land category in the Pinelands has declined from 10.2% of total assessment in 1988 to 4.0% in 2008. Over the same period, the residential category has increased 9.3%.

Assessment Class Proportions in Municipal Tax Revenue 2008



Description: The relative contribution of the different assessment classes (e.g., commercial, residential, and vacant land) to the tax revenue of each municipality measures the reliance of the municipality on different types of land uses for tax revenues.

Unit of Analysis: Data for assessment class proportions are compiled at the municipal level and aggregated to allow for inside/outside Pinelands, regional, and statewide analyses.

Summary of Previous Findings

The Department of Community Affairs once again began compiling this data in 2004. Because a complete time series is still unavailable, this section examines changes in assessment class proportions using ten-year intervals of 1988, 1998, and 2008. Since land use changes of any magnitude evolve rather slowly, it is appropriate to look at changes over such larger periods as opposed to annual reviews.

Update

The Pinelands has a slightly higher percentage of assessed property in the vacant and residential categories than the Non-Pinelands, and has generally had lower percentages in the remaining categories compared to the Non-Pinelands, particularly in the industrial and apartment categories. The predominant trend in the Pinelands is the decrease in the vacant assessment category as a percentage of total assessment and an increase in the residential category. Vacant land comprised 10.2% of total Pinelands assessed value in 1988, but dropped to 6.2% in 1998 and declined even further to 4.0% in 2008. Possible explanations include the development of vacant land, an increase in the value of developed land at a higher rate than that of vacant land, and/or a decrease in the value of vacant land. Meanwhile, the percent total of residential land increased from 71.8% in 1988, to 77.1% in 1998, to 81.1% in 2008. The percentage of assessment in agricultural and commercial land has remained relatively steady between 1998 and 2008, while the percentage of industrial assessed value has decreased.

As of 2008, the Pinelands municipalities of Medford Lakes, Beachwood, Tabernacle, Berkeley, Shamong, and Port Republic have the highest percentage of assessed value in the residential category (above 90%) in the Pinelands. Wrightstown and Berlin Township have the lowest percentage of assessed value in the residential category (below 60%).

Table F4a Assessment Class Proportions in Municipal Valuations

	1988	1998	2008	Change from 1988 - 2008
Pinelands				
Vacant	10.2%	6.2%	4.0%	-6.2%
Residential	71.8%	77.1%	81.1%	9.3%
Agricultural	2.7%	2.0%	2.1%	-0.6%
Commercial	11.4%	11.4%	10.2%	-1.2%
Industrial	2.2%	1.9%	1.4%	-0.8%
Apartments	1.7%	1.5%	1.3%	-0.4%
Non-Pinelands				
Vacant	4.0%	3.0%	2.6%	-1.4%
Residential	69.7%	74.1%	76.4%	6.7%
Agricultural	3.8%	2.4%	2.4%	-1.4%
Commercial	14.1%	13.3%	12.4%	-1.7%
Industrial	4.6%	4.0%	3.4%	-1.2%
Apartments	3.2%	3.2%	2.8%	-0.4%
State				
Vacant	3.9%	3.3%	2.2%	-1.7%
Residential	67.4%	71.4%	75.7%	8.3%
Agricultural	0.9%	0.9%	0.8%	-0.1%
Commercial	15.9%	15.5%	14.6%	-1.3%
Industrial	8.0%	6.1%	3.9%	-4.1%
Apartments	3.9%	2.9%	2.8%	-1.1%

Table F4b Assessment Class Proportions for Pinelands Municipalities - 2008

Municipality	County	Vacant	Residential	Agricultural	Commercial	Industrial	Apartments
Medford Lakes	Burlington	0.2%	97.9%	0.0%	1.9%	0.0%	0.0%
Beachwood	Ocean	1.9%	94.5%	0.0%	3.3%	0.0%	0.2%
Tabernacle	Burlington	1.5%	92.9%	2.8%	2.7%	0.1%	0.0%
Shamong	Burlington	1.3%	92.5%	4.0%	2.0%	0.3%	0.0%
Port Republic	Atlantic	3.1%	92.3%	1.6%	3.0%	0.0%	0.0%
Berkeley	Ocean	1.9%	92.3%	0.0%	4.6%	0.4%	0.9%
Little Egg Harbor	Ocean	5.0%	89.6%	0.1%	5.2%	0.0%	0.1%
Ocean	Ocean	5.5%	89.5%	0.3%	4.8%	0.0%	0.0%
Medford	Burlington	1.1%	87.0%	1.3%	8.4%	0.5%	1.7%
Pemberton Township	Burlington	2.1%	86.8%	2.0%	6.4%	0.5%	2.2%
Winslow	Camden	2.4%	86.5%	1.7%	6.0%	1.3%	2.1%
Jackson	Ocean	2.7%	86.5%	0.4%	8.8%	0.6%	1.0%
Stafford	Ocean	3.7%	86.4%	0.0%	9.7%	0.0%	0.1%
Lacey	Ocean	2.2%	86.2%	0.1%	7.7%	3.8%	0.1%
Waterford	Camden	2.4%	86.1%	2.9%	7.9%	0.3%	0.5%
Mullica	Atlantic	5.0%	85.6%	2.9%	5.4%	0.9%	0.2%
Barnegat	Ocean	7.0%	85.2%	0.1%	5.9%	0.3%	1.5%
Plumsted	Ocean	3.2%	84.9%	5.1%	5.6%	0.8%	0.4%
Upper	Cape May	4.7%	84.8%	0.7%	8.6%	1.2%	0.1%
Chesilhurst	Camden	8.3%	84.8%	0.0%	5.5%	0.9%	0.5%
Southampton	Burlington	1.7%	84.5%	6.2%	6.7%	0.9%	0.0%
South Toms River	Ocean	2.2%	84.0%	0.0%	13.7%	0.1%	0.0%
Franklin	Gloucester	3.2%	83.9%	5.1%	7.6%	0.0%	0.2%
Estell Manor	Atlantic	8.0%	83.3%	3.9%	2.9%	1.3%	0.6%
Galloway	Atlantic	3.4%	83.2%	0.8%	10.2%	0.4%	2.1%
Monroe	Gloucester	3.6%	83.1%	1.1%	10.4%	0.5%	1.3%
Weymouth	Atlantic	5.7%	82.1%	0.5%	9.9%	0.2%	1.5%
Lakehurst	Ocean	2.0%	82.1%	0.0%	15.6%	0.0%	0.3%
Maurice River	Cumberland	6.0%	79.5%	3.4%	5.5%	5.3%	0.3%
Evesham	Burlington	0.6%	79.3%	0.3%	15.9%	0.7%	3.3%
Buena Vista	Atlantic	6.1%	78.7%	5.1%	7.9%	2.3%	0.0%
Dennis	Cape May	6.1%	78.4%	1.8%	13.7%	0.0%	0.0%
Egg Harbor City	Atlantic	2.5%	78.3%	0.0%	14.1%	2.7%	2.3%
Manchester	Ocean	3.2%	76.8%	0.1%	6.9%	0.8%	12.4%
Egg Harbor Township	Atlantic	5.5%	76.0%	0.2%	17.0%	1.1%	0.3%
Buena	Atlantic	3.4%	74.6%	6.9%	10.5%	1.8%	2.8%
Woodland	Burlington	5.9%	74.3%	10.9%	3.4%	5.5%	0.0%
Bass River	Burlington	6.2%	74.3%	3.2%	16.3%	0.0%	0.0%
Folsom	Atlantic	4.3%	74.0%	1.9%	9.8%	10.0%	0.0%
Woodbine	Cape May	4.9%	73.6%	2.8%	13.1%	2.7%	2.8%
Washington	Burlington	3.8%	73.5%	8.7%	12.1%	1.9%	0.0%
Hammonton	Atlantic	2.3%	73.1%	3.5%	17.7%	2.5%	0.9%
Eagleswood	Ocean	14.6%	72.1%	0.1%	11.7%	1.4%	0.2%
New Hanover	Burlington	3.3%	69.1%	6.7%	20.7%	0.1%	0.0%
Hamilton	Atlantic	5.4%	66.9%	0.7%	22.3%	1.2%	3.5%
Berlin Township	Camden	3.3%	50.7%	0.1%	35.0%	9.8%	1.2%
Wrightstown	Burlington	3.2%	48.4%	0.0%	35.3%	0.9%	12.1%
“Outside” Munis							
Corbin City	Atlantic	5.7%	85.2%	1.2%	7.9%	0.0%	0.0%
Berlin Borough	Camden	2.5%	80.8%	0.1%	14.3%	1.6%	0.7%
Springfield	Burlington	1.6%	73.2%	14.4%	10.8%	0.0%	0.0%
North Hanover	Burlington	2.0%	72.0%	10.5%	12.5%	0.0%	3.0%
Vineland	Cumberland	1.7%	70.1%	1.9%	17.8%	6.0%	2.5%

Municipal Finance

5

Local Municipal Purpose Revenues

NJ Dept of Community Affairs, Div LGS 1998 - 2008
Individual SJ County Tax Divisions 1995 - 1997

X Updated

- Since 2000, municipal budgets in the Pinelands have increased by 13% while budgets in the Non-Pinelands have increased by 18%. Over the same time period, state aid has been cut to both regions by 23%.

	Local Municipal Budget*	Budget Per Capita	Population Estimate	State Aid	State Aid Per Capita
Pinelands 1998	$460,665,753	$761	604,928	NA	NA
Pinelands 2008	$581,640,470	$851	683,374	$104,363,012	$153
Change	26.3%	11.8%	13.0%	NA	NA
Non-Pinelands 1998	$1,829,385,703	$1,121	1,630,733	NA	NA
Non-Pinelands 2008	$2,237,713,782	$1,303	1,717,084	$281,808,581	$164
Change	22.3%	16.2%	5.3%	NA	NA

* = Local Municipal Purposes + Total of Miscellaneous Revenues. Does not include school budget.

Description: Per capita revenues provide insight into the level or amount of service a municipality can provide. Money budgeted for local municipal purposes is used for maintaining all services within a municipality other than schools or infrastructure maintained by the county or state (such as roads). Local municipal purpose monies are raised largely through property taxes. Miscellaneous revenues have been added to local purpose monies and include: surplus revenues apportioned, receipts from delinquent taxes and liens, and other miscellaneous revenues anticipated such as user or license fees. Per capita rates were calculated by using: intercensal estimates from 1995 to 1999, the 2000 Census, and municipal estimates for 2001 to 2007. The population estimate for 2007 was used to calculate per capita figures for 2008, as 2008 municipal estimates were not available when this report was prepared. Per capita figures for 2008 may be slightly inflated as a result of using the 2007 population estimate.

Unit of Analysis: Municipal level data are aggregated to allow for inside/outside Pinelands analysis. Aggregates are sums, not averages.

Summary of Previous Findings

As a whole, the local municipal budgets of Pinelands municipalities increased faster than the Non-Pinelands from 1995 to 2006. The average Pinelands municipal budget increased by 26% during this period, compared to 18% for the Non-Pinelands. Within the local budget, monies raised through local municipal purposes increased substantially (by 71% in the Pinelands and 32% in the Non-Pinelands). Monies raised through miscellaneous revenues increased slightly in the Pinelands (+4%) while the Non-Pinelands enjoyed an increase of 6% during the same time frame.

While municipal revenues increased both inside and outside the Pinelands from 1995 to 2006, the amount of revenue collected per person has risen only modestly. As a whole, the Pinelands municipalities collected $740 in municipal revenues per capita in 1995 and $799 per capita in 2006, an increase of 8.0%. The Non-Pinelands municipalities collected $1,082 per capita in 1995 versus $1,189 in 2006, an increase of 9.8%. The increase in revenues corresponds with population increases. As the population increases, the ability and need to raise additional revenues increases. Per capita revenues have remained rather constant, as additional citizens require additional services, which require additional expenditures. It is interesting to note that the increase in per capita revenues has not been consistent over time. Per capita revenues declined slightly in both the Pinelands and Non-Pinelands from 1995 through 2001. Per Capita revenues did not surpass 1995 levels until 2002 in the Non-Pinelands and 2003 in the Pinelands (Table F5a).

From 1995-2006, the Pinelands municipalities collected approximately $360 less per person annually compared to the Non-Pinelands. This difference is due to the fact that the Pinelands has lower tax rates than the Non-Pinelands (see sections F1 through F3) and because Pinelands municipalities tend to offer less in terms of municipal services. For example, the percentage of Pinelands municipalities that have no local police force is about twice that of Non-Pinelands municipalities (30% in the Pines vs. 15% in the Non-Pines).

Municipalities also rely on the state for aid to supplement local revenues. The earliest year available for state aid figures (in digital format) was 1999. From 1999-2006, state aid decreased by 9% to Pinelands municipalities and by 8% to Non-Pinelands municipalities. Per capita rates decreased by 19% in the Pines and 13% in the Non-Pines. While there is quite a gulf between Pinelands and Non-Pinelands municipalities in terms of municipal revenues per capita, the difference between the regions is much smaller in relation to the amount of state aid per capita. The Non-Pinelands region received 17% more in aid per capita than did the Pinelands area in 2006.

There has been a large degree of variation among the Pinelands municipalities in terms of local municipal revenues and state aid. Between 1995 and 2006, municipal revenues ranged from a high of approximately $2,800 to a low of $220 in the Pinelands. Similarly, state aid figures in the Pinelands have ranged from a high of approximately $700 to a low of $80 annually during the period.

When per capita revenues and per capita state aid are viewed as averages (average per capita figures for all municipalities within a region, as opposed to a per capita figure for the entire region), different patterns emerge. When compared as regions (using aggregates illustrated in Table F5a), the Pinelands has had lower per capita revenue and received slightly less state aid per capita than the Non-Pinelands. When municipal averages for each of the aggregates are compared, the Pinelands has had substantially lower per capita revenue and received more state aid per capita compared to the Non-Pinelands over the period 1995-2006.

Update

The total municipal budgets for the Pinelands municipalities increased by 21.1% in 2008, while the total municipal budgets for the Non-Pinelands municipalities rose by 20.0% for the year. The large gain is due mostly to a return to normal levels of miscellaneous revenues which had dropped by almost 30% in both regions in 2007. When examined on a per capita basis, the Non-Pinelands municipal budgets are 53% higher than those in the Pinelands ($1,303 in the Non-Pines versus $851 in the Pinelands).

Total municipal state aid decreased 6.1% in the Pinelands while falling by 11.4% in the Non-Pinelands in 2008. Since 2000, municipal budgets in the Pinelands have increased by 13% while budgets in the Non-Pinelands have increased by 18%. Over the same period, state aid has been cut to both regions by 23% (Table F5a).

Among Pinelands municipalities, there were six who increased their municipal budget by more than 50% in 2008: Bass River (+124%), New Hanover (+79%), Estell Manor (+71%), Shamong (+69%), Port Republic (+57%), and Maurice River (+52%). In contrast, five Pinelands municipalities increased their total municipal budget by less than 10%: Berkeley (+9%), Woodland (+6%), Egg Harbor City (+4%), Woodbine (+2%), and Wrightstown (-18%). After a uniform decrease in state aid of 2.2% in 2007, the decreases in aid in 2008 were much more varied. Four Pinelands municipalities saw decrease in aid of greater than 20% for the year: Lakehurst (-23%), Woodbine (-21%), South Toms River (-21%), and Medford Lakes (-20%). The only Pinelands municipality to receive an increase in state aid in 2008 was Estell Manor (+4.7%).

Table F5a Local Municipal Purpose Revenues and State Aid for Pinelands and Non-Pinelands Regions (In 2008 $s)

Region	Year	Local Municipal Purposes	Misc Revenues	Total Municipal Budget	Budget Per Capita	Population Estimate	State Aid	Aid Per Capita
Pines	1995	$152,193,422	$296,580,004	$448,773,428	$768	584,232		
Pines	1996	$156,968,414	$294,104,717	$451,073,133	$762	591,420		
Pines	1997	$161,934,258	$293,896,503	$455,830,762	$763	597,454		
Pines	1998	$167,570,295	$293,095,458	$460,665,753	$761	604,928		
Pines	1999	$175,266,024	$286,657,415	$461,923,440	$756	610,785	$125,371,918	$206
Pines	2000	$178,650,902	$284,729,457	$463,380,358	$752	615,984	$122,081,838	$198
Pines	2001	$192,049,843	$290,979,680	$483,029,523	$766	630,550	$125,367,677	$198
Pines	2002	$200,272,902	$294,739,286	$495,012,186	$768	643,787	$118,118,515	$184
Pines	2003	$213,303,639	$290,291,249	$503,594,888	$765	657,971	$122,157,089	$186
Pines	2004	$227,422,695	$291,018,913	$518,441,609	$773	670,666	$116,455,887	$173
Pines	2005	$240,655,327	$303,694,234	$544,349,561	$805	675,977	$117,756,911	$174
Pines	2006	$259,624,402	$307,075,376	$566,699,778	$830	682,822	$114,075,611	$167
Pines	2007	$273,361,531	$206,915,268	$480,276,798	$703	683,374	$111,619,395	$163
Pines	2008	$291,979,867	$289,660,603	$581,640,470	$851	683,374	$104,363,012	$153
NonPines	1995	$819,516,616	$979,386,494	$1,798,903,111	$1,124	1,601,776		
NonPines	1996	$820,011,494	$968,012,337	$1,788,023,831	$1,109	1,612,610		
NonPines	1997	$821,917,956	$971,541,814	$1,793,459,770	$1,106	1,622,388		
NonPines	1998	$834,947,326	$994,438,375	$1,829,385,703	$1,121	1,630,733		
NonPines	1999	$852,287,196	$973,159,734	$1,825,446,930	$1,114	1,639,053	$357,638,266	$218
NonPines	2000	$851,458,421	$981,548,642	$1,833,007,063	$1,112	1,647,532	$350,127,963	$213
NonPines	2001	$847,210,101	$980,520,963	$1,827,731,063	$1,101	1,660,123	$353,383,040	$213
NonPines	2002	$894,771,024	$1,000,044,785	$1,894,815,809	$1,129	1,678,078	$354,083,121	$211
NonPines	2003	$931,722,148	$993,661,504	$1,925,383,652	$1,137	1,692,777	$342,439,180	$202
NonPines	2004	$972,121,708	$1,045,054,166	$2,017,175,875	$1,182	1,706,338	$338,675,894	$198
NonPines	2005	$1,031,203,408	$1,087,661,861	$2,118,865,269	$1,238	1,711,841	$335,539,918	$196
NonPines	2006	$1,085,112,343	$1,037,808,449	$2,122,920,792	$1,235	1,719,934	$327,508,030	$190
NonPines	2007	$1,114,771,522	$749,652,406	$1,864,423,927	$1,086	1,717,084	$318,223,387	$185
NonPines	2008	$1,193,818,876	$1,043,894,906	$2,237,713,782	$1,303	1,717,084	$281,808,581	$164

Total Budget Per Capita Pinelands Versus Non-Pinelands

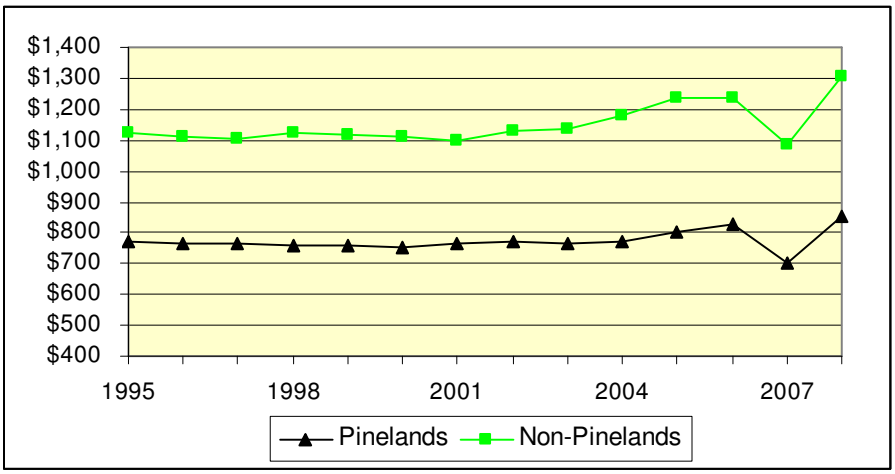


Table F5b Local Municipal Purpose Revenues and State Aid for Pinelands Municipalities in 2008

County	Municipality	Population Est 2005	Municipal Budget*	State Aid	Budget Per Capita	Aid Per Capita
Burlington	Washington	643	$1,693,332	$1,267,597	$2,633	$1,971
Burlington	Wrightstown	733	$1,251,611	$489,060	$1,708	$667
Burlington	Woodland	1,344	$2,278,461	$1,376,813	$1,695	$1,024
Atlantic	Egg Harbor City	4,398	$6,180,507	$553,538	$1,405	$126
Camden	Berlin Township	5,381	$7,503,960	$1,554,441	$1,395	$289
Ocean	Stafford	26,282	$36,223,964	$3,405,915	$1,378	$130
Camden	Chesilhurst	1,874	$2,578,287	$804,871	$1,376	$429
Ocean	Lakehurst	2,708	$3,608,614	$353,270	$1,333	$130
Ocean	Eagleswood	1,645	$1,962,897	$268,321	$1,193	$163
Ocean	Ocean	8,643	$9,722,044	$793,308	$1,125	$92
Cape May	Woodbine	2,485	$2,713,779	$377,890	$1,092	$152
Burlington	Medford Lakes	4,099	$4,387,413	$373,383	$1,070	$91
Cape May	Upper	11,110	$11,781,854	$6,771,173	$1,060	$609
Atlantic	Port Republic	1,220	$1,272,068	$220,602	$1,043	$181
Atlantic	Buena	3,747	$3,875,350	$540,569	$1,034	$144
Gloucester	Monroe	32,607	$32,709,470	$5,407,080	$1,003	$166
Ocean	Lacey	26,322	$25,797,408	$12,295,373	$980	$467
Burlington	Medford	22,838	$22,335,853	$2,637,430	$978	$115
Atlantic	Hamilton	24,553	$23,980,072	$3,784,876	$977	$154
Burlington	Bass River	1,547	$1,502,979	$394,683	$972	$255
Ocean	Little Egg Harbor	20,517	$19,598,290	$1,862,506	$955	$91
Camden	Waterford	10,636	$9,739,692	$1,732,261	$916	$163
Atlantic	Hammonton	13,500	$12,274,346	$1,649,628	$909	$122
Ocean	South Toms River	3,713	$3,354,077	$395,786	$903	$107
Ocean	Berkeley	42,664	$38,042,014	$5,576,090	$892	$131
Atlantic	Mullica	6,034	$5,332,980	$655,012	$884	$109
Atlantic	Estell Manor	1,714	$1,481,692	$473,988	$864	$277
Cape May	Dennis	5,791	$4,988,544	$1,939,277	$861	$335
Atlantic	Egg Harbor Township	39,493	$33,764,595	$6,965,260	$855	$176
Ocean	Barnegat	21,867	$18,680,273	$1,369,399	$854	$63
Burlington	Pemberton Township	28,158	$23,232,735	$3,605,825	$825	$128
Ocean	Beachwood	10,789	$8,557,581	$857,772	$793	$80
Ocean	Jackson	52,577	$41,498,474	$4,415,616	$789	$84
Camden	Winslow	39,173	$29,437,700	$7,849,598	$751	$200
Ocean	Manchester	41,713	$30,501,974	$4,191,101	$731	$100
Atlantic	Folsom	1,918	$1,384,838	$241,530	$722	$126
Burlington	Evesham	45,619	$32,095,427	$4,149,298	$704	$91
Burlington	Southampton	10,885	$7,203,656	$1,618,089	$662	$149
Atlantic	Galloway	36,105	$23,688,011	$3,465,784	$656	$96
Gloucester	Franklin	17,143	$11,244,422	$1,879,749	$656	$110
Atlantic	Buena Vista	7,359	$4,770,107	$932,747	$648	$127
Atlantic	Weymouth	2,257	$1,408,981	$367,172	$624	$163
Burlington	Tabernacle	7,182	$3,672,884	$868,915	$511	$121
Ocean	Plumsted	8,177	$3,693,510	$617,617	$452	$76
Cumberland	Maurice River	8,034	$3,567,995	$1,188,461	$444	$148
Burlington	Shamong	6,738	$2,767,759	$811,017	$411	$120
Burlington	New Hanover	9,439	$2,297,988	$1,013,321	$243	$107
"Outside" Municipalities						
Cumberland	Vineland	58,505	$60,978,093	$7,803,219	$1,042	$133
Atlantic	Corbin City	520	$539,690	$155,320	$1,038	$299
Burlington	Springfield	3,492	$3,314,157	$550,259	$949	$158
Camden	Berlin Borough	7,870	$6,687,239	$898,255	$850	$114
Burlington	North Hanover	7,415	$3,512,701	$1,014,011	$474	$137

* Municipal budget = Local Municipal Purpose Revenues + Miscellaneous Revenue

Municipal Finance

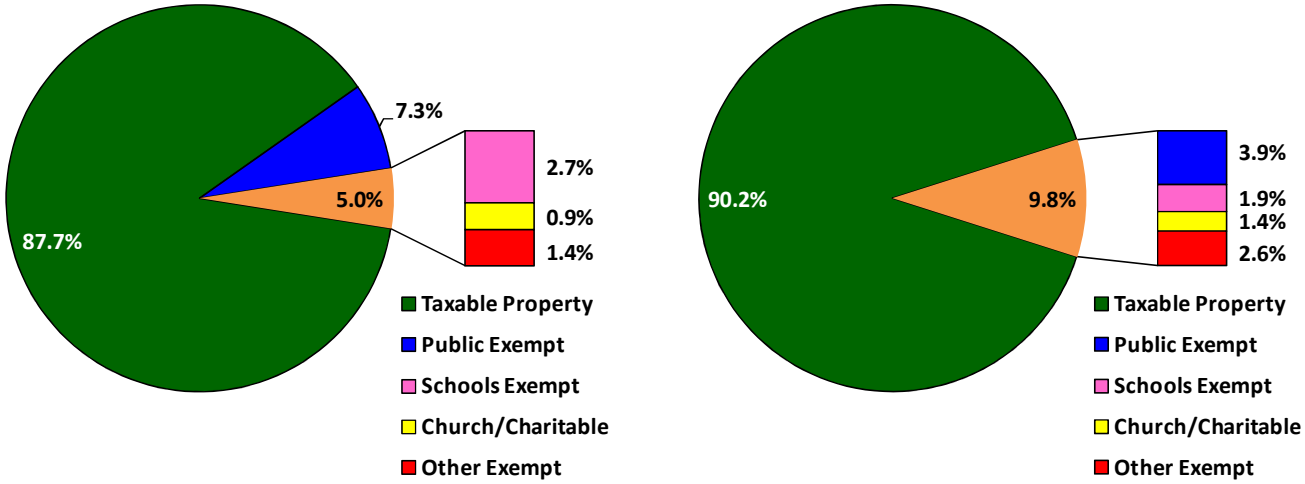
6S

Tax Exempt Property

NJ Dept of Treasury, Division of Taxation 2008

X New

- The Pinelands region has a slightly higher percentage of its assessed property value in the tax exempt category than the Non-Pinelands (Pines 12.3% vs. 9.8% Non-Pinelands). Land in public uses (hospitals, prisons, federal military installations, and conservation lands) accounts for much of the difference between the two regions.



Pinelands Non-Pinelands

Description: Municipalities in New Jersey are required by law to maintain an accurate assessment of all property values within their jurisdiction by block and lot. The primary use for this data is to provide a fair and equitable basis upon which to levy taxes among property owners. Historically, a number of classes of property have been exempted from paying taxes, although they are still required to have property value assessments. At present, there are six distinct classes of property in New Jersey that qualify for a full tax exemption: (1) Public property (e.g. municipal property, federal property, publicly owned parks, etc.), (2) Public schools, (3) Other non-public schools (e.g. private universities, charter schools, and any other private schools), (4) Church and charitable organizations, (5) Graveyards/cemeteries, and (6) Any other exemptions not included in the aforementioned categories.

Unit of Analysis: Population data are compiled at the municipal level and aggregated to allow for inside/outside Pinelands, regional, and statewide analyses.

Summary of Findings

On a region-wide basis, 12.3% of the total assessed land values in the Pinelands were in one of the tax-exempt categories in 2008. This is a slightly higher figure than in the Non-Pinelands, where 9.8% of total assessed property values were in a tax exempt status. However, upon closer examination, there is a much wider variation in the amount of tax exempt land in individual Pinelands municipalities than in the Non-Pinelands municipalities (see Figure F6).

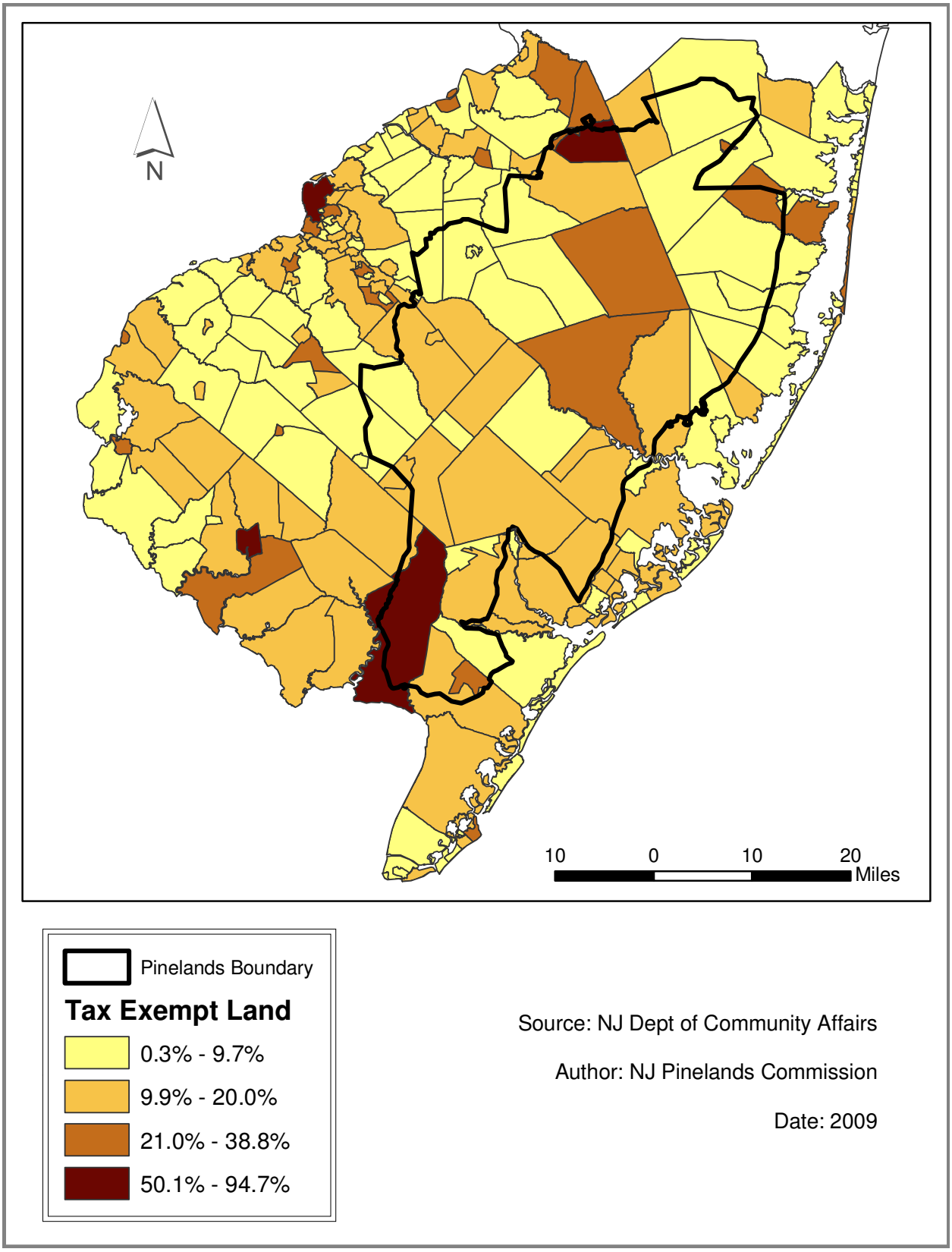
Five municipalities in the Pinelands have at least one-third of their assessed property in a tax-exempt category (New Hanover, Maurice River, Wrightstown, Washington, and Woodbine). This represents 10.6% of all Pinelands municipalities. By contrast, only three of the 155 Non-Pinelands municipalities (1.9%) have at least one-third of their land in a tax exempt category (Camden, Bridgeton, and Fairfield). Upon closer examination, much of the difference in the towns with high proportions of tax-exempt land comes from uses that serve a regional purpose. For instance, New Hanover and Wrightstown have much of their land in tax-exempt status due to the presence of the Ft. Dix federal military installation. Maurice River has a tax exemption for Bayside State Prison which encompasses more than 1,000 acres in the township. Woodbine and Woodland both have developmental centers that qualify for tax

exemptions, and Washington Township has large areas of public forest that serve as recreation areas to the wider region. In light of the regional purposes served by these uses, the State of New Jersey administers a payment-in-lieu-of-taxes program (PILOT) to compensate the municipalities for the amount of land they have in municipal, state-owned, or non-profit uses. This program awards funds based on a sliding scale of the percentage of total acreage in a municipality that is municipal, state-owned, or non-profit.

Table F5b Percentages of Tax Exempt Property in 2008

County	Municipality	Taxable Property	Public Exempt	Schools Exempt	Church/Charitable Exempt	Other Exempt
Burlington	New Hanover	5.4%	94.6%	0.0%	0.1%	0.0%
Cumberland	Maurice River	49.9%	46.1%	1.8%	1.0%	1.3%
Burlington	Wrightstown	61.2%	30.2%	6.9%	1.3%	0.5%
Burlington	Washington	62.2%	33.0%	4.0%	0.3%	0.6%
Cape May	Woodbine	62.3%	34.9%	1.0%	1.8%	0.1%
Burlington	Woodland	72.4%	24.7%	1.4%	0.6%	1.0%
Ocean	Berkeley	76.8%	20.9%	1.2%	0.5%	0.5%
Ocean	Lakehurst	77.4%	13.6%	3.0%	4.9%	1.1%
Burlington	Bass River	80.5%	18.0%	0.8%	0.5%	0.3%
Burlington	Pemberton Township	80.5%	4.3%	7.3%	5.3%	2.6%
Atlantic	Galloway	81.8%	1.7%	8.8%	1.5%	6.2%
Camden	Chesilhurst	82.6%	9.7%	3.2%	1.0%	3.6%
Atlantic	Estell Manor	83.6%	12.8%	1.9%	0.5%	1.3%
Ocean	Plumsted	84.3%	11.1%	3.3%	0.9%	0.3%
Atlantic	Egg Harbor City	84.3%	8.0%	2.3%	2.6%	2.8%
Camden	Winslow	85.3%	8.6%	2.6%	0.5%	3.0%
Atlantic	Hamilton	86.1%	2.4%	4.8%	0.4%	6.3%
Cape May	Dennis	86.9%	9.6%	1.4%	0.5%	1.7%
Atlantic	Buena	87.3%	1.6%	2.6%	1.5%	7.1%
Ocean	Eagleswood	87.8%	9.7%	0.7%	0.9%	0.9%
Atlantic	Egg Harbor Township	88.7%	6.1%	2.7%	1.3%	1.3%
Atlantic	Hammonton	88.8%	2.0%	5.0%	1.6%	2.6%
Atlantic	Buena Vista	89.8%	3.5%	4.9%	0.4%	1.3%
Camden	Waterford	90.0%	3.8%	4.2%	0.9%	1.0%
Gloucester	Franklin	90.5%	1.8%	4.7%	1.5%	1.6%
Burlington	Tabernacle	91.1%	1.2%	6.1%	0.7%	0.9%
Ocean	Manchester	91.4%	4.9%	1.6%	1.1%	1.1%
Burlington	Shamong	91.4%	2.0%	0.6%	0.4%	5.5%
Burlington	Medford	91.7%	1.1%	5.0%	1.4%	0.9%
Cape May	Upper	91.9%	5.7%	1.1%	0.6%	0.6%
Burlington	Evesham	92.3%	2.3%	3.3%	1.9%	0.3%
Atlantic	Port Republic	92.4%	4.7%	1.4%	0.9%	0.5%
Atlantic	Mullica	92.6%	4.6%	1.3%	0.7%	0.8%
Ocean	Beachwood	92.7%	5.5%	0.8%	0.3%	0.8%
Ocean	South Toms River	92.9%	3.6%	1.9%	1.2%	0.4%
Ocean	Barnegat	93.2%	3.7%	2.2%	0.2%	0.7%
Gloucester	Monroe	93.5%	1.7%	2.8%	1.7%	0.3%
Ocean	Jackson	93.6%	2.8%	2.9%	0.4%	0.3%
Ocean	Stafford	93.8%	3.0%	1.6%	0.4%	1.2%
Atlantic	Weymouth	93.8%	2.3%	2.4%	0.6%	0.8%
Ocean	Lacey	94.1%	2.3%	2.0%	0.7%	0.9%
Ocean	Ocean	94.2%	3.6%	1.0%	0.4%	0.8%
Ocean	Little Egg Harbor	94.5%	2.8%	1.3%	0.5%	0.9%
Atlantic	Folsom	94.7%	2.2%	1.6%	0.9%	0.6%
Camden	Berlin Township	94.8%	2.3%	1.6%	1.0%	0.3%
Burlington	Medford Lakes	96.7%	0.8%	1.4%	0.6%	0.5%
Burlington	Southampton	97.2%	0.9%	0.0%	1.2%	0.7%
"Outside" Municipalities						
Burlington	North Hanover	74.0%	22.6%	1.8%	1.1%	0.5%
Cumberland	Vineland	81.4%	5.9%	4.3%	1.5%	6.8%
Atlantic	Corbin City	82.7%	3.1%	6.0%	0.5%	7.7%
Camden	Berlin Borough	89.4%	1.3%	0.8%	4.7%	3.8%
Burlington	Springfield	93.7%	1.3%	0.7%	1.3%	3.1%

Figure F6 Percentage of Tax Exempt Land 2008



Appendix A. Selected References

Anderson, Robert C. and Roger C. Dower. 1980. Land Price Impacts of the Adirondack Park Land Use and Development Plan. *American Journal of Agricultural Economics*, 62(3).

Beaton, W. Patrick. 1991. The Impact of Regional Land Use Controls on Property Values: The Case of the New Jersey Pinelands. *Land Economics*, 67(2):172-194.

Beaton, W. Patrick. 1988. The Cost of Government Regulations: Vol. I. Impact of Open Space Zoning on Property Values in N.J. Pinelands.

Case, Bradford, Henry O. Pollakowski, and Susan M. Wacter. 1991. On Choosing Among House Price Methodologies. *Journal of the American Real Estate & Urban Economics Association*, 19(3): 286-307.

Center for Urban Policy Research, Rutgers University. 1992. *The Impact Assessment of the New Jersey Interim State Redevelopment Plan*. Prepared for the New Jersey Office of State Planning.

Coleman, Henry A. 2002. The Property Tax Trouble Zone Moves Beyond the Big Cities. *New Jersey Municipalities*. December, p. 66-69.

Christian, Gloria L., James C. Nicholas, and Joan E. Towles. 1980. *Economic Analysis of Pinelands Comprehensive Management Plan*. Prepared for the New Jersey Pinelands Commission.

Coughlin, Robert E. 1984. *The Effects of Agricultural Zoning on the Ability of Farmers to Borrow Money*. Philadelphia: University of Pennsylvania.

Derr, Donn A., William R. Preston, Margaret Brennan, Fang Du. 1996. *An Assessment of the Economic Effect of the Pinelands Comprehensive Management Plan.* New Brunswick: Department of Agricultural Economics and Marketing, New Jersey Agricultural Experiment Station, Cook College, Rutgers, the State University of New Jersey.

Frech, H. E., III and Ronald N. Lafferty. 1976. The Economic Impact of the California Costal Commission: Land Use and Land Values. *The California Coastal Plan: A Critique*. San Francisco: Institute for Contemporary Studies.

Government Finance Associates. 1982. *An Analysis of the Fiscal Impact of the Pinelands Comprehensive Management Plan on Selected Municipalities*. Report to the New Jersey Pinelands Commission.

Groves, Sanford M. and Maureen Godsey Valente. 1986. *Evaluating Financial Condition: A Handbook for Local Government*. Washington, D.C.: International City Management Association.

Haurin, Donald R., and Patric H. Hendershott. 1991. House Price Indexes: Issues and Results. *Journal of the American Real Estate & Urban Economics Association*, 19(3): 259-269.

Knaap, Gerrit J. 1985. The Price Effects of Urban Growth Boundaries in Metropolitan Portland Oregon. *Land Economics*. 61(1):26-35.

Manning, Edward W. And Sandra S. Eddy. 1978. *The Agricultural Land Reserves of British Columbia: An Impact Analysis*. Ottawa Lands Directorate of Environment Canada.

Muth, Richard C., and Allen C. Goodman. 1989. *The Economics of Housing Markets*. Chur, Switzerland: Harwood Academic Publishers, GmbH.

Nelson, Arthur C. 1988. An Empirical Note on How Regional Urban Containment Policy Influences as Interaction Between Greenbelt and Exurban Land Markets. *Journal of the American Planning Association*. 54(2):178-84.

Neuman, James E. 1987. *The Land Market in New Jersey's Pinelands: Past and Present Trends in Land Use and Transfer*. Association of New Jersey Environmental Commissions.

New Jersey Pinelands Commission. 1980. Comprehensive Management Plan for the Pinelands National Reserve and Pinelands Area.

New Jersey Pinelands Commission. 1983. Economic & Fiscal Impacts of the Pinelands Comprehensive Management Plan.

New Jersey Pinelands Commission. 1983. *New Jersey Pinelands Comprehensive Management Plan: A Progress Report*.

New Jersey Pinelands Commission. 1985. Economic & Fiscal Impacts of the Pinelands Comprehensive Management Plan.

New Jersey Pinelands Commission. 1991. New Jersey Pinelands Comprehensive Management Plan: The Second Progress Report on Plan Implementation.

New Jersey Pinelands Commission. 1992. “Agriculture in the Pinelands: Report on Technical Panel Meeting,” Plan Review Workshop Reports (on ten major topics).

New Jersey Pinelands Commission. 1992. “Economic Impacts of the Pinelands Plan: Report on Technical Panel Meeting,” Plan Review Workshop Reports (on ten major topics).

New Jersey Pinelands Commission. 1996. “Detail Design of the Long-Term Economic Monitoring Program.”

New Jersey Pinelands Commission. 1997. “Long-Term Economic Monitoring Program First Annual Report.”

New Jersey Pinelands Commission. 1998. “Long-Term Economic Monitoring Program 1998 Annual Report.”

New Jersey Pinelands Commission. 1999. “Long-Term Economic Monitoring Program 1999 Annual Report.”

New Jersey Pinelands Commission. 2000. “Long-Term Economic Monitoring Program 2000 Annual Report.”

New Jersey Pinelands Commission. 2001. “Long-Term Economic Monitoring Program 2001 Annual Report.”

New Jersey Pinelands Commission. 2002. “Long-Term Economic Monitoring Program 2002 Annual Report.”

New Jersey Pinelands Commission. 2003. “Long-Term Economic Monitoring Program 2003 Annual Report.”

New Jersey Pinelands Commission. 2004. “Long-Term Economic Monitoring Program 2004 Annual Report.”

New Jersey Pinelands Commission. 2005. “Long-Term Economic Monitoring Program 2005 Annual Report.”

New Jersey Pinelands Commission. 2006. “Long-Term Economic Monitoring Program 2006 Annual Report.”

New Jersey Pinelands Commission. 2007. “Long-Term Economic Monitoring Program 2007 Annual Report.”

New Jersey Pinelands Commission. 2008. “Long-Term Economic Monitoring Program 2008 Annual Report.”

Pollakowski, Henry O., and Susan M. Wachter. 1990. The Effects of Land-Use Constraints on Housing Prices. *Land Economics*, 66(3):315-324.

Reock, Ernest C. 1994. Long Range Property Tax Rate Trends in New Jersey: 1954-1993. *Occasional Paper Series #2*. Center for Government Services at Rutgers, The State University.

Resource Management Consultants, Inc. 1991. The Effects of Agricultural Zoning on the Value of Farmland. Report to The State of Maryland, Office of Planning.

Rose, Karen B. and Donn Derr. 1986. A Comparative Analysis of the Economic Characteristics of Grain, Tree Fruit and Vegetable Farms Located Inside and Outside the New Jersey Pinelands Comprehensive Management Plan Areas. Department of Agricultural Economics and Marketing, New Jersey Agricultural Experiment Station, Cook College, Rutgers, the State University of New Jersey.

Vaillancourt, Francois and Luc Monty. 1985. The Effect of Agricultural Zoning on Land Prices. *Land Economics*. 61(1).

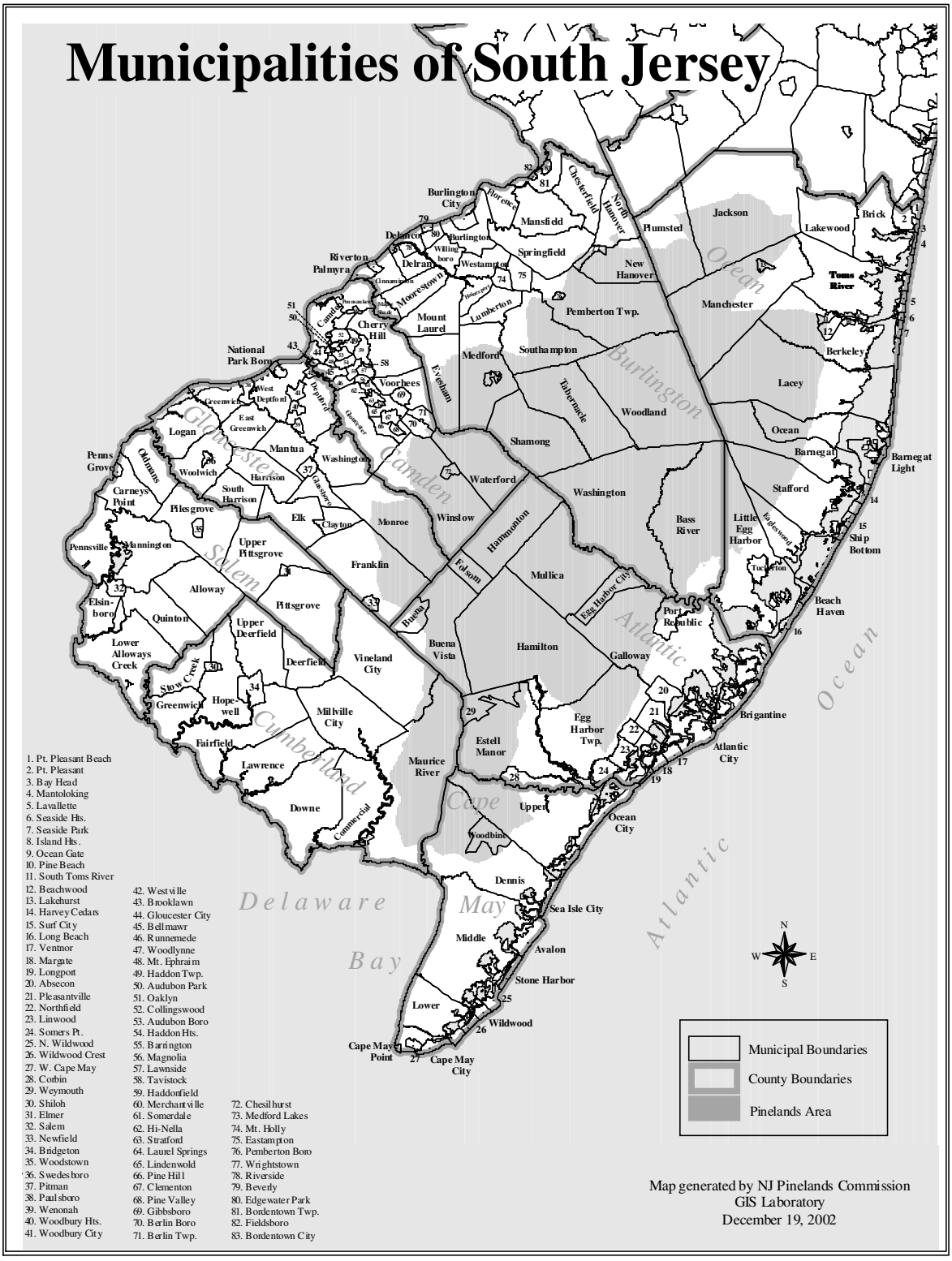
Walker, Robert T. and William D. Solecki. 1999. Managing Land Use and Land-Cover Change: The New Jersey Pinelands Biosphere Reserve. *Annals of the Association of American Geographers*, 89(2): 220-237.

Appendix B. Pinelands and Non-Pinelands Acreage by County

County	Total Acreage	Acreage Inside the Pinelands	Acreage Outside the Pinelands	Proportion in the Pinelands	County Pinelands Acreage as a % of Total Pinelands Acreage	County Acreage as a Share of Total South Jersey Acreage
Atlantic	391,134	247,877	143,257	63.4%	26.4%	17.3%
Burlington	524,166	334,187	189,979	63.8%	35.6%	23.1%
Camden	145,593	54,915	90,678	37.7%	5.9%	6.4%
Cape May	182,633	34,807	147,826	19.1%	3.7%	8.1%
Cumberland	321,645	45,356	276,289	14.1%	4.8%	14.2%
Gloucester	215,616	33,580	182,036	15.6%	3.6%	9.5%
Ocean	485,569	187,490	298,079	38.6%	20.0%	21.4%
Total	2,266,357	938,212	1,328,145	41.4%	100.0%	100.0%

Source: NJ DEP Land Use / Land Cover data 1995/97

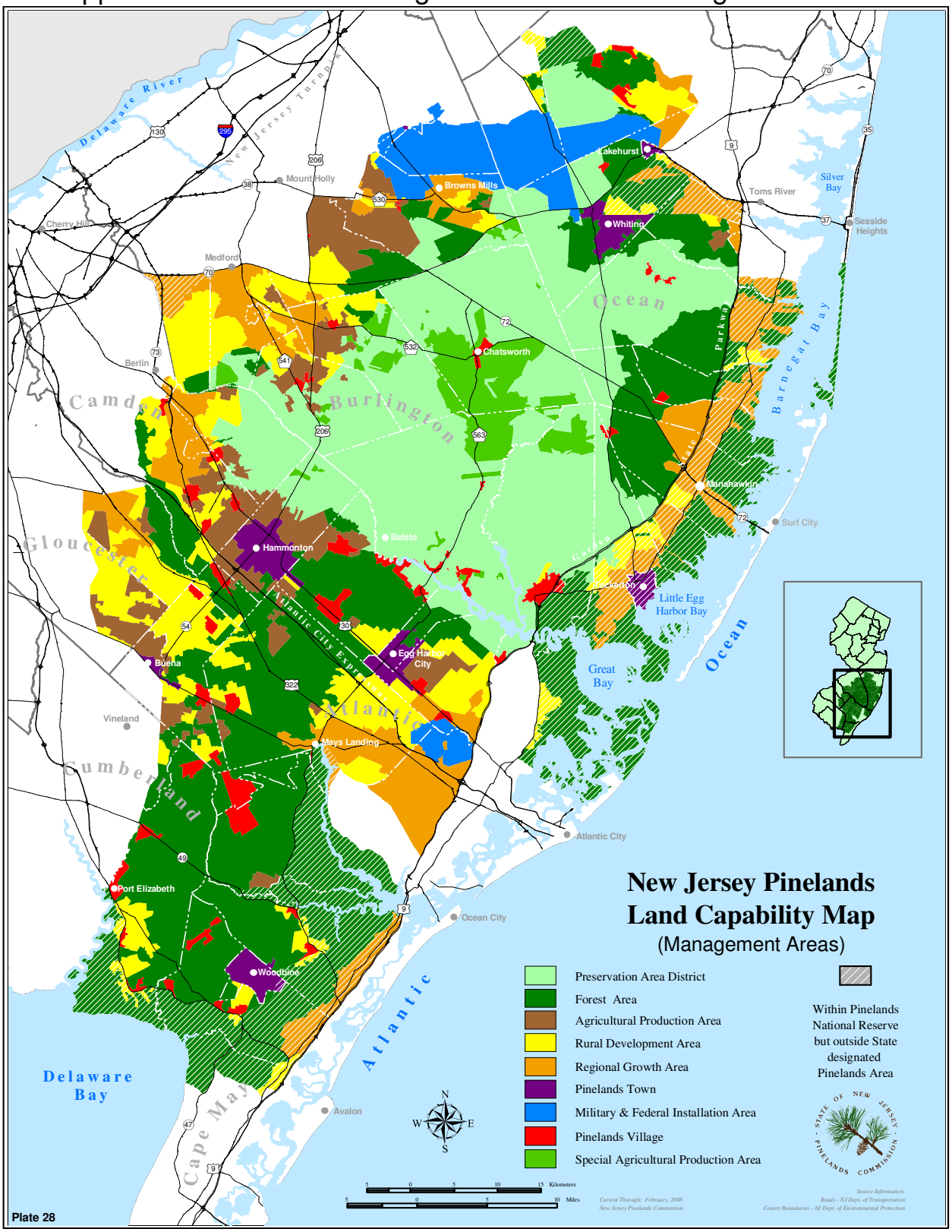
Appendix C. Municipalities of South Jersey



Appendix D Pinelands Management Areas

Management Areas	Description	Permitted Uses	
		Residential	Non-residential
Preservation Area District	Core of the Pinelands environment and the most critical ecological region; a large, contiguous wilderness area of forest which supports diverse plant and animal communities, many of which are threatened and endangered species.	None except 1 acre lots in designated infill areas	Limited commercial uses in designated infill areas
Special Agricultural Production Area	Discrete areas within the Preservation Area primarily used for berry agriculture and horticulture of native Pinelands plants.	Farm-related housing on 40 acres	Expansion of existing uses only
Forest Area	Similar to the Preservation Area District in terms of ecological value; a largely undeveloped area which is an essential element of the Pinelands environment, contains high quality water resources and wetlands and provides suitable habitat for many threatened and endangered species.	5 acre minimum. Historical development average has been 1 unit per 28 acres	Roadside retail within 300 feet of pre-existing use
Agricultural Production Area	Areas of active agricultural use, generally upland field agriculture and row crops, together with adjacent areas with soils suitable for expansion of agricultural operations.	Farm-related housing on 10 acres, non-farm housing on 40 acres	Agricultural commercial; roadside retail within 300 feet of pre-existing use
Rural Development Area	Areas which are slightly modified and suitable for limited future development; represents a balance of environmental and development values that is intermediate between Forest Areas and existing growth areas.	Historical development average has been 1 unit per 5 acres	Small scale community commercial and light industrial uses on septic systems
Pinelands Village	Small, existing, spatially discrete settlements which are appropriate for infill residential, commercial, and industrial development compatible with their existing character.	1 to 5 acre lots if not sewered	Commercial and industrial uses compatible with existing character
Pinelands Town	Large, existing spatially discrete settlements.	2 to 4 homes per acre with sewers	Commercial and industrial uses
Regional Growth Area	Areas of existing growth and adjacent lands capable of accommodating regional growth influences while protecting the essential character and environment of the Pinelands	2 to 4 homes per acre with sewers	Commercial and industrial uses
Military and Federal Installation Area	Federal enclaves within the Pinelands.	Not Applicable	Uses associated with function of the installation or other public purpose uses

Appendix E. State-Designated Pinelands Management Areas

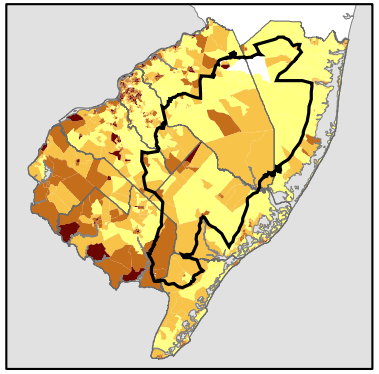


Appendix F

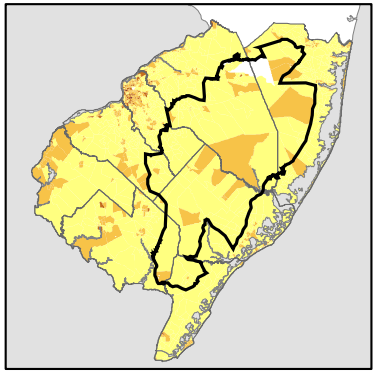
Southern New Jersey Housing Unit Construction

Percentage of Total Housing in 2000 Built in Each Decade

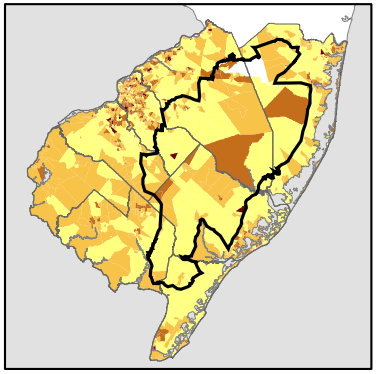
Built Before 1940



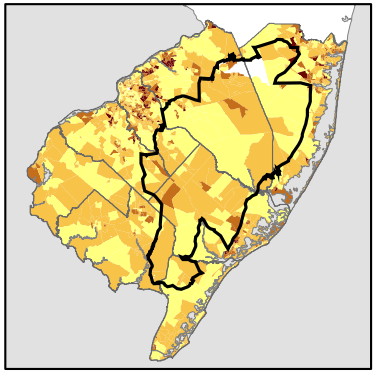
Built in 1940s



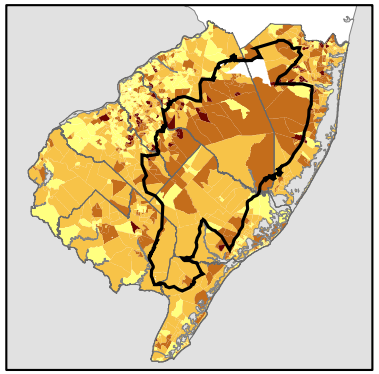
Built in 1950s



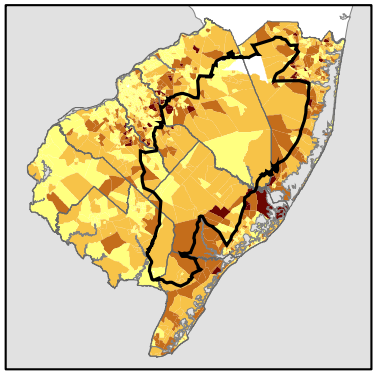
Built in 1960s



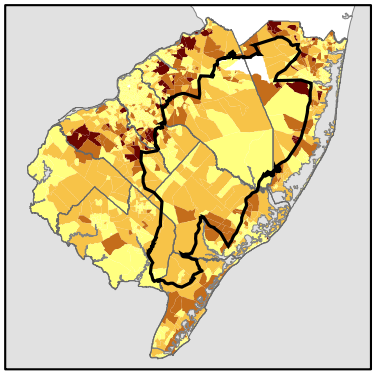
Built in 1970s



Built in 1980s



Built in 1990s



Southern NJ Counties

Pinelands Boundary
County Boundary

Percentage of Total Units

0% - 10%
10.1% - 25%
25.1% - 50%
50.1% - 100%

N

20 0 20 40 Miles

Source: US Census Bureau Summary File 3
(Data based on 1 in 6 sample)
Geographic Unit: Census Block Group
Author: NJ Pinelands Commission
Date: 2004