
New Jersey Pinelands Commission
Long-Term Economic Monitoring Program
2010 Annual Report



Candace M. Ashmun, Acting Chair

Nancy Wittenberg, Executive Director

August 2011

**NEW JERSEY PINELANDS LONG-TERM ECONOMIC
MONITORING PROGRAM
*2010 ANNUAL REPORT***

August 2011

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Paul W. Tyshchenko, Principal Planner

Michael P. Yaffe, Planner

Pinelands Commission

P.O. Box 359

New Lisbon, NJ 08064

(609) 894-7300

<http://www.nj.gov/pinelands>

Acknowledgments

The 2010 Annual Report of the Pinelands Long-Term Economic Monitoring Program was prepared by Pinelands Commission Planner Michael P. Yaffe.

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:

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New Lisbon, NJ 08064

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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).¹ 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 Area, which covers 53 total municipalities. 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 2009 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 72,980 between 2000 and 2007, an increase of 11.8% (compared to an increase of 5.0% in the Non-Pinelands). Previous population analysis at the census block level revealed that 277,000 people lived within the Pinelands Area 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 Area 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 2009. On average, more building permits continue to be issued in Pinelands municipalities than in all other regions of the state. However, building permit activity in the Pinelands decreased for the sixth consecutive year in 2009. This year's decline in activity was again uniform across the State. 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 2009, following 2007's sharp decline in activity. Real estate transactions

¹ An ongoing issue is how to best apportion data in municipalities split by the Pinelands Area boundary.

dropped by more than 30% across the entire State in 2009, with the Pinelands experiencing a smaller drop than surrounding regions (15%). 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 third consecutive year in 2009. This follows a five-year period from 2001-2006 that saw Pinelands home prices increase by 87%. For the fifth year in a row, the median sales price in the Pinelands was higher than in the Non-Pinelands (by 4.0%). As recently as 2002, Pinelands median sales prices were 5% 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 2009. The unemployment rate rose 3.8% in the Pinelands and 4.1% in the Non-Pinelands in 2009, finishing the year at 10% and 10.1% respectively. Both the Pinelands and the Non-Pinelands are slightly above the national unemployment rate of 9.9%, while statewide (9.1% for 2009) the rate is marginally lower than the national rate. No new municipal data for employment, establishments, and wages were 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 2007 Census of Retail Trade, per capita retail sales increased by 20% in the Pinelands from 1997 to 2007. In contrast, statewide per capita sales increased by only 9.2% over the same period, and the Non-Pinelands increased by only 5.3%.

Assessed farmland acreage declined for the fifth straight year in 2008 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 2% in 2008, while farm acreage decreased in the Non-Pinelands in 2008 by 0.4%. This marked the ninth consecutive year of decline in acreage for the Non-Pinelands, and the fifth 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.

Following favorable growing and economic conditions in previous years, the value in utilized production of cranberries increased for the fourth consecutive year in 2009, rising 12% to \$30.8 million. This increase was due to an increase in both price (+3%) and production (+8.4%) for the year. Cranberry prices finished the year at \$0.56/lb., which marks their highest level since 1997. Meanwhile, blueberry prices decreased by 13.9% in 2009, posting a price of \$1.23/lb. Blueberry production decreased 10% for the year, with the value of utilized production also decreasing 23%. This decrease is trailing the 2005-2007 period where the blueberry

industry set the record for both the highest level of production and the highest utilized value of production over the entire monitoring period.

Monitoring in the municipal finance category indicates that the Pinelands' financial picture remains relatively strong compared to the rest of southern New 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. In 2009, average residential property tax bills in the Pinelands are 58% lower than the statewide average and 16% lower than the Non-Pinelands average. In terms of dollars, average residential property taxes in the Pinelands are now \$741 lower than in the Non-Pinelands and \$2,682 lower than the State as a whole. After 11 consecutive years of increasing property values statewide, all regions experienced a decline in equalized property values in 2009. However, the Pinelands region registered a decrease of just 8.2% compared to a decrease in the Non-Pinelands of 13.3% for the year. As a result of the drop in property values, effective tax rates rose across all regions. Effective tax rates rose 2.1% in the Non-Pinelands (from 2.05% to 2.09%) and rose 6.0% in the Pinelands (from 1.70% to 1.8%). Data on local municipal-purpose revenues indicated that the local municipal budgets of both the Pinelands and Non-Pinelands municipalities decreased by 5% in 2009. This is trailing an approximate 20% increase in total municipal budgets for the Non-Pinelands and Pinelands municipalities the previous year. State aid decreased to all regions in 2008, falling by 4% in the Pinelands and by 6% in the Non-Pinelands. Updated statistics collected for 2009 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.

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, was shared with relevant state agencies, and may ultimately provide a basis for legislation to allocate special aid to the most strained towns. Commission staff is in the process of updating the draft 2008 report.

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 1980 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 included in the CMP and 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 been successful in steering growth away from conservation areas and toward growth areas.²

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 in 1980 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 *2010 Annual Report* is the thirteenth 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 *2010 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**

² 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.

reliable way. The economic monitoring program, in conjunction with an ongoing 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 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 to determine the basis of economic well-being of Pinelands communities and potential cause-and-effect relationships. Data for key variables are collected annually when possible and provide information essential to understanding 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 2010 annual report does not include new supplemental data but this trend will resume with the 2011 annual report. Supplemental variables can 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 prices to decrease. 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 ³	Years Added ⁴	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	2001-2008	2009	Annual	Inside/Outside Pinelands
Building Permits	1980-2008	2009	Annual	Inside/Outside Pinelands
Median Selling Prices of Homes	1988-2008	2009	Annual	Inside/Outside Pinelands
Volume of Real Estate Transactions	1988-2008	2009	Annual	Inside/Outside Pinelands
Retail Sales & Establishments	1992, 1997, 2002	2007	Quintennial	County, Place
Income	1979, 1989, 1999	None	Decennial	Inside/Outside Pinelands
Unemployment	1980-2008	2009	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, 1986-2007	2008	Annual	Inside/Outside Pinelands
Agricultural Census Data	1982, 1987, 1992, 1997, 2002, 2007	None	Quintennial	County
Blueberry and Cranberry Production	1972-2008	2009	Annual	State
Average Residential Property Tax Bill	1983-2008	2009	Annual	Inside/Outside Pinelands
Equalized Property Value	1980-2008	2009	Annual	Inside/Outside Pinelands
Effective Tax Rate	1980-2008	2009	Annual	Inside/Outside

³ 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.

⁴ Refers to addition from previous report and specifies which years of data are new in this update.

Name	Years Collected³	Years Added⁴	Frequency of Collection	Method of Analysis
				Pinelands
Assessment Class Proportions in Municipal Valuation	1980-1994, 2002-2008	2009	Annual	Inside/Outside Pinelands
Local Municipal Purpose Revenues	1995-2008	2009	Annual	Inside/Outside Pinelands

2.3 Supplemental Variables

No new supplemental variables have been added to this year's report. Supplemental variables can 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.

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 six⁵ were classified as outside, joining the remaining 149 municipalities located entirely outside the Pinelands. 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 Area boundary, so activities and phenomena present outside the Pinelands Area boundary are counted as occurring inside the Pinelands Area. In some cases areas inside a Pinelands municipality, but outside the Pinelands Area 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 Area 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 Area boundary. The results of the count showed that approximately 277,000 people lived inside the Pinelands Area boundary, 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

⁵ The six are: Corbin City, North Hanover Township, Springfield Township, Berlin Borough, Vineland City, and Dover Township.

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 Area had practically no residents in the Pinelands Area. Analysis has shown that altering the 10% 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 exist. 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. 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.⁶ 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 five⁷ 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 2009 dollars. This is an update from the 2009 annual report, where variables were keyed to the 2008 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 2009 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 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.

⁶ See “Unit of Analysis” for each variable to ascertain whether municipal averages or regional sums are used.

⁷ 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.

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 2010 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 H. 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. Previous years studies can be found in APPENDIX B.

Continuing Study: Indicators of Municipal Health (Update 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.⁸ 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 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

⁸ 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.

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 courts 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.

It is anticipated that the findings from this study may act as a guideline for more efficiently channeling state aid to those municipalities who may have been shortchanged in the past. It can, and has been used as a guide to provide different CMP standards for distressed municipalities in rulemaking. The municipal fiscal health study is currently being updated with the most current data available.

NJ Pinelands Commission Long-Term Economic Monitoring Program
2010 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.

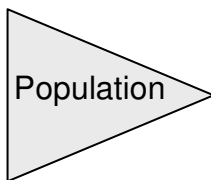
Non-Pinelands: the remaining 155 municipalities in southern New Jersey that have less than 10% of their land in the state-designated Pinelands Area (6 municipalities have between 0.1% and 9% in the Pinelands, the remaining 149 have no land in the Pinelands).

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. 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, but within a municipality that has at least 1% of its land within the state-designated Pinelands Area. Available in limited instances.



1

Population

US Census Bureau 1980, 1990, 2000

Updated

↓
Box checked if Updated for 2010

- 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%
Southern NJ	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 Area 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)

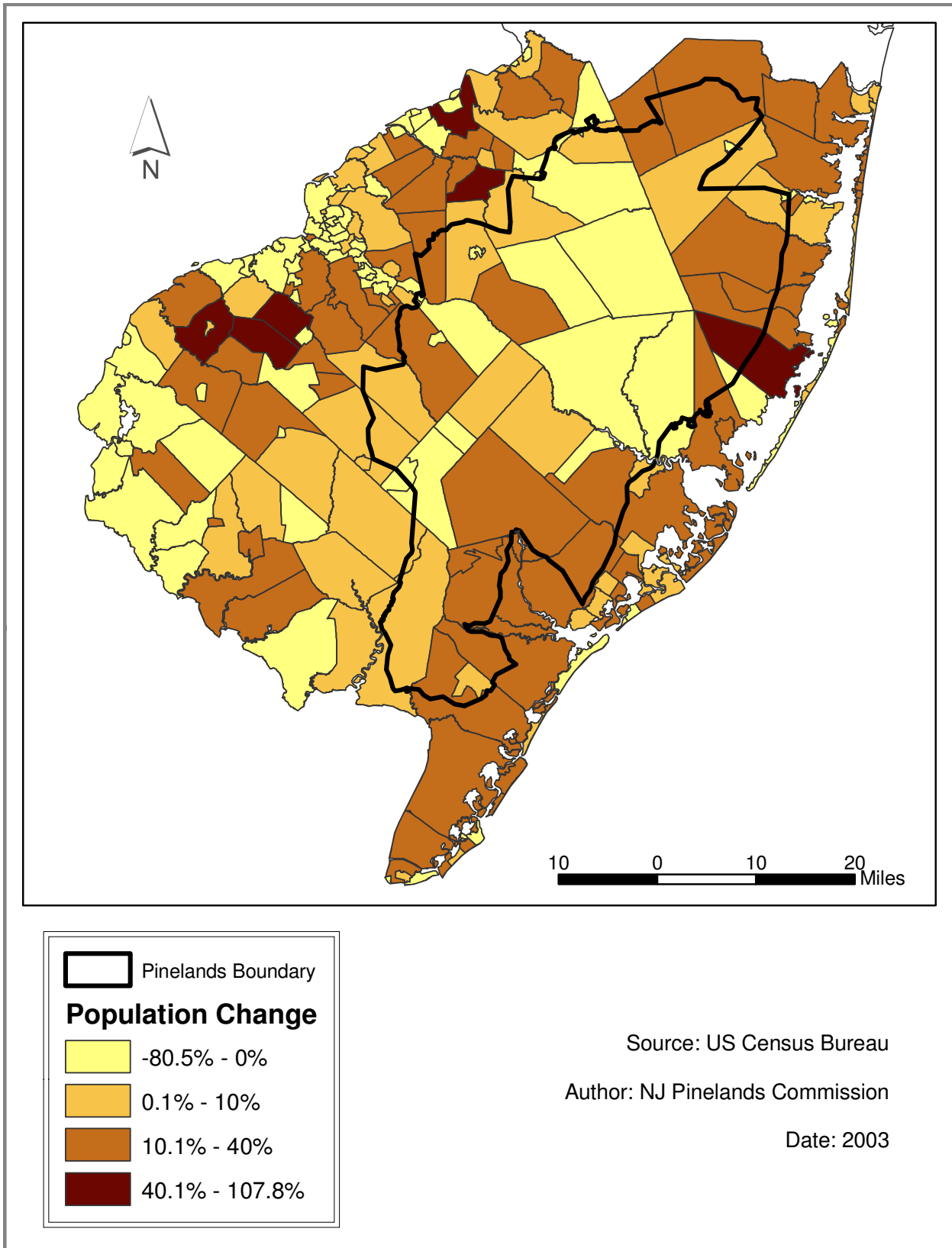


Table P1a Population by Pinelands Municipality

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%
Barneget 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%
<i>"Outside" Municipalities*</i>						
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%

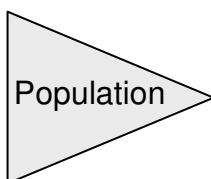
*These five municipalities have land in the Pinelands Area but are counted as Non-Pinelands municipalities because less than ten percent of their land area is in the Pinelands Area. They are displayed for informational purposes in this and subsequent tables.

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%
Barneгат	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%
<i>"Outside" Munis</i>								
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
Barneget	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
<i>“Outside” Munis</i>							
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



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 Area boundary.

Census Block Population

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

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.

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%

Unit of Analysis: Sub-municipal data is aggregated by counting the population of census blocks inside and outside the Pinelands Area 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 Area 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 Area 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 Area boundary are Pemberton Township, Hamilton Township, and Medford Township (Table P2a). Of the fifty-two municipalities with land in the Pinelands Area, 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 Area. Some municipalities have more than 10% of their land in the Pinelands Area, but have extremely few people. For example, Eagleswood has 20% of its land in the Pinelands Area, but has no residents in the Pinelands Area, while Beachwood has 28% of its land in the Pinelands Area 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 Area 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.

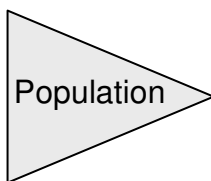
The 52 municipalities with some or all of their land inside the Pinelands were classified according to where their population gain occurred. Municipalities that gained population both inside and outside the boundary accounted for 30.8% of the total municipalities, the largest category by far. Municipalities completely located inside the Pinelands Area 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 municipalities in each category.

**Table P2a 2000 Population Inside and Outside the Pinelands Area 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 Area 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%			
Barneгат	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%



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 Area 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 Area boundary for the year 2000. Based on the block group data, the actual population inside the boundary was approximately 283,600.⁹ 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 Area 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).

⁹ 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	Total¹⁰
# 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%

¹⁰ 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 Area 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
<i>"Outside" Municipalities</i>							
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.

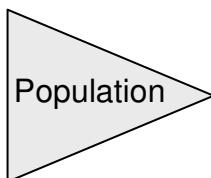
+ Influenced by group quarters population.

Table P3c Population Over 64 Years of Age Inside and Outside the Pinelands Area 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	Barneгат	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
<i>"Outside" Municipalities</i>							
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.



4

Population Estimates

X Updated

US Census Bureau / NJ Dept of Labor 2001 – 2009

- 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

	2008 Estimate	2009 Estimate	Change	% Change
New Jersey	8,663,398	8,707,739	44,341	0.5%
Southern New Jersey	2,411,118	2,419,475	8,357	0.3%
Pinelands	685,851	688,964	3,113	0.5%
Non-Pinelands	1,725,267	1,730,511	5,244	0.3%
100% Land in Pines (11 municipalities)	58,335	58,398	63	0.1%
55-99% Land in Pines (19 municipalities)	330,602	331,664	1,062	0.3%
10-54% Land in Pines (17 municipalities)	296,914	298,902	1,988	0.7%

Description: Population estimates are useful for measuring population during, and calculating per capita values for, intercensal years. Population estimates are particularly important in the latter 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 2008 and 2009 will be updated once the next census data is released (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 southern New 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:

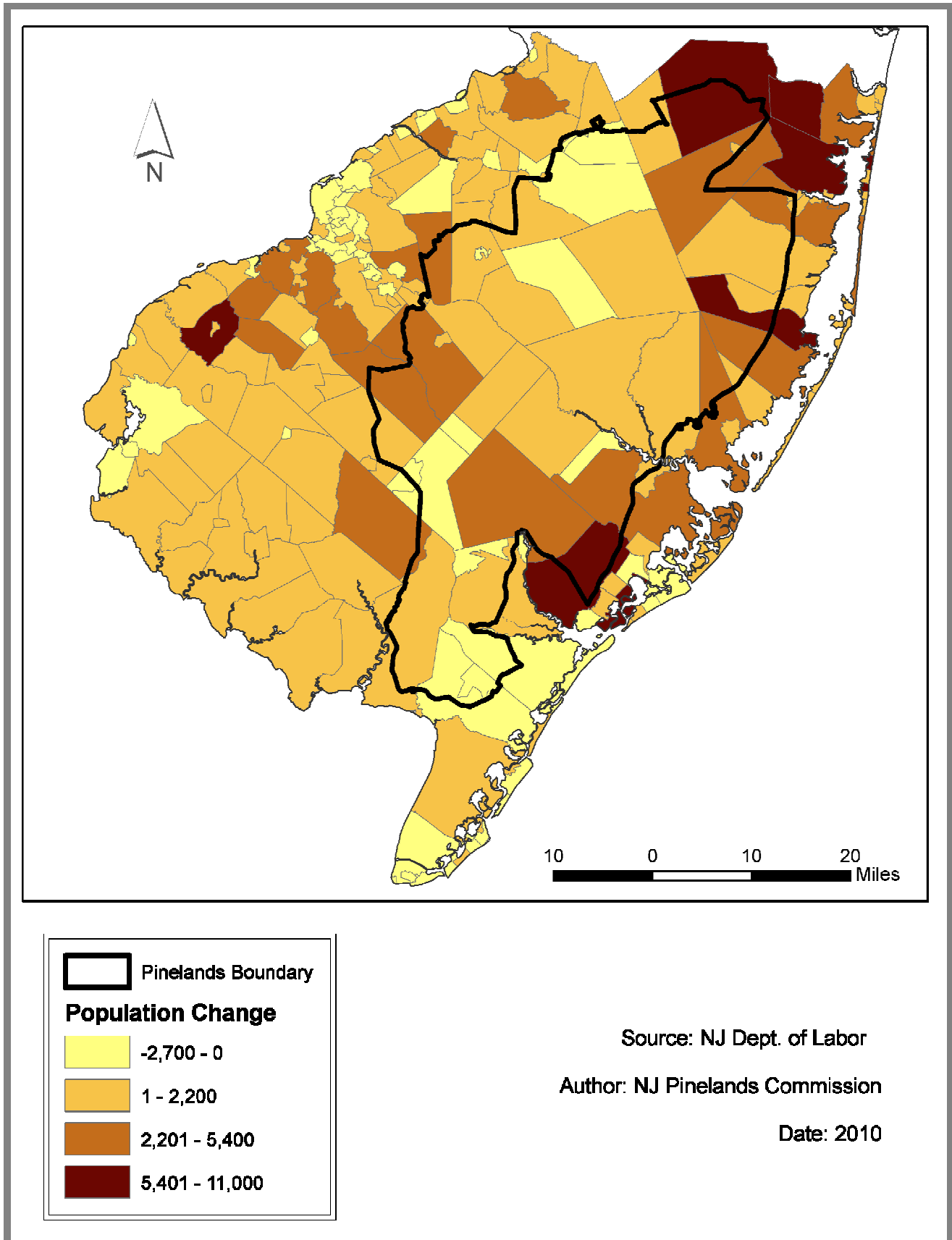
Population growth in New Jersey is posting a 0.5% increase statewide. The Pinelands communities grew at the same rate as the state as a whole and slightly more than the rate of the rest of southern New Jersey for the year (Pines +0.5%, Non-Pines South Jersey +0.3%, and Statewide +0.5%). However, upon 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 Area boundary showed only a 0.1% increase in population in 2009. Those communities that straddle the Pinelands Area boundary showed an increase in growth of 0.7% for the year (see table above). This suggests that much of the growth may in fact be occurring just outside of the Pinelands Area boundary.

The following Pinelands communities ranked in the top 10% of Southern Jersey municipalities in both absolute population growth and percentage population growth: Jackson Township, Barnegat Township, Egg Harbor Township, and Stafford Township (see Table P4). In comparison, six Southern Jersey communities outside the Pinelands achieved such growth: East Greenwich Township (+555, +7.2%), Swedesboro Borough (+121, +5.4%), Woolwich Township (+346, +3.8%), Delanco (+142, +3.1%), Salem City (+163, +2.9%), and Absecon City (+205, +2.4%).

Table P4 Population Estimates

Municipality	County	2008	2009	Change	South Jersey Rank : Change	% Change	South Jersey Rank : % Change
Jackson Township	Ocean County	52,707	53,191	484	4	0.9%	25
Barnegat Township	Ocean County	22,262	22,643	381	7	1.7%	13
Egg Harbor Township	Atlantic County	39,900	40,239	339	9	0.8%	29
Stafford Township	Ocean County	26,491	26,818	327	10	1.2%	19
Winslow Township	Camden County	39,365	39,600	235	13	0.6%	50
Monroe Township	Gloucester County	33,057	33,276	219	15	0.7%	44
Galloway Township	Atlantic County	36,378	36,578	200	19	0.5%	56
Berkeley Township	Ocean County	42,783	42,975	192	21	0.4%	67
Lacey Township	Ocean County	26,402	26,566	164	25	0.6%	46
Ocean Township	Ocean County	8,964	9,121	157	27	1.8%	11
Little Egg Harbor Township	Ocean County	20,677	20,824	147	28	0.7%	40
Evesham Township	Burlington County	45,275	45,370	95	33	0.2%	94
Manchester Township	Ocean County	41,764	41,848	84	35	0.2%	96
Plumsted Township	Ocean County	8,242	8,292	50	43	0.6%	48
Franklin Township	Gloucester County	17,319	17,368	49	44	0.3%	83
Berlin Township	Camden County	5,416	5,457	41	48	0.8%	35
Beachwood Borough	Ocean County	10,845	10,881	36	50	0.3%	78
Waterford Township	Camden County	10,660	10,688	28	55	0.3%	87
Mullica Township	Atlantic County	6,028	6,052	24	60	0.4%	71
Eagleswood Township	Ocean County	1,679	1,703	24	61	1.4%	16
Maurice River Township	Cumberland County	8,176	8,196	20	67	0.2%	90
Chesilhurst Borough	Camden County	1,917	1,936	19	68	1.0%	24
Hammonton Town	Atlantic County	13,420	13,433	13	78	0.1%	109
South Toms River Borough	Ocean County	3,714	3,727	13	80	0.4%	77
Buena Borough	Atlantic County	3,714	3,724	10	90	0.3%	85
Estell Manor City	Atlantic County	1,714	1,724	10	91	0.6%	52
Woodbine Borough	Camden County	2,494	2,500	6	100	0.2%	91
Port Republic City	Atlantic County	1,213	1,216	3	107	0.2%	89
Washington Township	Burlington County	646	649	3	109	0.5%	65
Buena Vista Township	Atlantic County	7,358	7,360	2	111	0.0%	121
Tabernacle Township	Burlington County	7,168	7,170	2	112	0.0%	120
Lakehurst Borough	Ocean County	2,717	2,719	2	117	0.1%	111
Folsom Borough	Atlantic County	1,907	1,908	1	119	0.1%	114
Weymouth Township	Atlantic County	2,253	2,254	1	120	0.0%	115
Wrightstown Borough	Burlington County	736	735	-1	129	-0.1%	153
Southampton Township	Burlington County	10,867	10,865	-2	135	0.0%	129
Woodland Township	Burlington County	1,353	1,351	-2	136	-0.1%	155
Egg Harbor City	Atlantic County	4,381	4,378	-3	140	-0.1%	140
New Hanover Township	Burlington County	9,434	9,429	-5	150	-0.1%	136
Bass River Township	Burlington County	1,547	1,541	-6	154	-0.4%	189
Medford Lakes Borough	Burlington County	4,119	4,110	-9	164	-0.2%	166
Shamong Township	Burlington County	6,736	6,723	-13	169	-0.2%	163
Hamilton Township	Atlantic County	24,340	24,326	-14	171	-0.1%	137
Dennis Township	Camden County	5,783	5,758	-25	183	-0.4%	192
Upper Township	Camden County	11,089	11,030	-59	193	-0.5%	197
Pemberton Township	Burlington County	28,047	27,986	-61	194	-0.2%	165
Medford Township	Burlington County	22,794	22,726	-68	195	-0.3%	179
<i>"Outside" Munis</i>							
Vineland City	Cumberland County	58,797	59,195	398	6	0.7%	43
Berlin Borough	Camden County	7,926	7,943	17	71	0.2%	93
Corbin City	Atlantic County	520	531	11	86	2.1%	10
North Hanover Township	Burlington County	7,371	7,368	-3	142	0.0%	131
Springfield Township	Burlington County	3,466	3,454	-12	168	-0.3%	185

Figure P4 Population Change 2000 – 2009



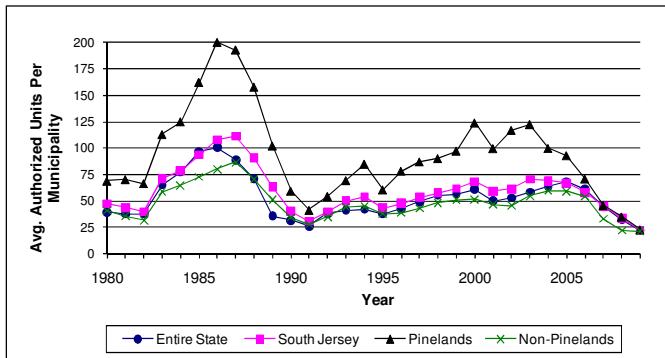
Building Permits for Dwelling Units

New Jersey Department of Labor 1980 – 2009

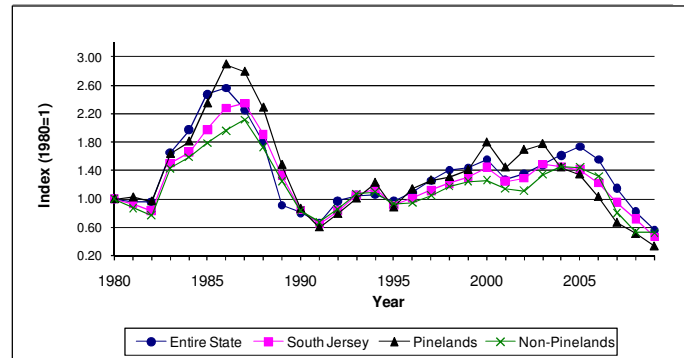
X Updated

- The average number of building permits in the Pinelands has steadily declined each year since 2004. Activity in the region has fallen sharply in the past five years (-75%), with a slightly smaller statewide decrease (-68%).

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 the Pinelands Area boundary, 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 Area 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 Area boundary, others in areas outside the Pinelands Area 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 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 2009. The average number of permits (by municipality) issued in the Pinelands decreased from 35 to 23, a decline of 34%. This is more than 2008's decline, when buildings permits dropped by over 23% in the Pinelands. All of the other regions of the state also experienced a steep decline in permit activity in 2009. The state as a whole saw a decrease in permit activity of 31.3% for the year (from 32 to 22). The Non-Pinelands

municipalities' permits dropped only 2.3% (from 22 to 21). The gap between Pinelands and Non-Pinelands municipalities' average number of permits is the smallest it has been through the entire monitoring period.

As was the case in 2008, the drop in permits in the Pinelands was fairly uniform in 2009. Table R1 illustrates the broad drop overall in the region: only eleven of the 47 Pinelands municipalities issued more permits in 2009 than in 2008, with three of those eleven issuing more than 10 permits than the previous year. Hamilton Township (+75), Evesham Township (+36), and Medford Lakes Borough (+19) showed appreciable increases in activity from 2008 to 2009.

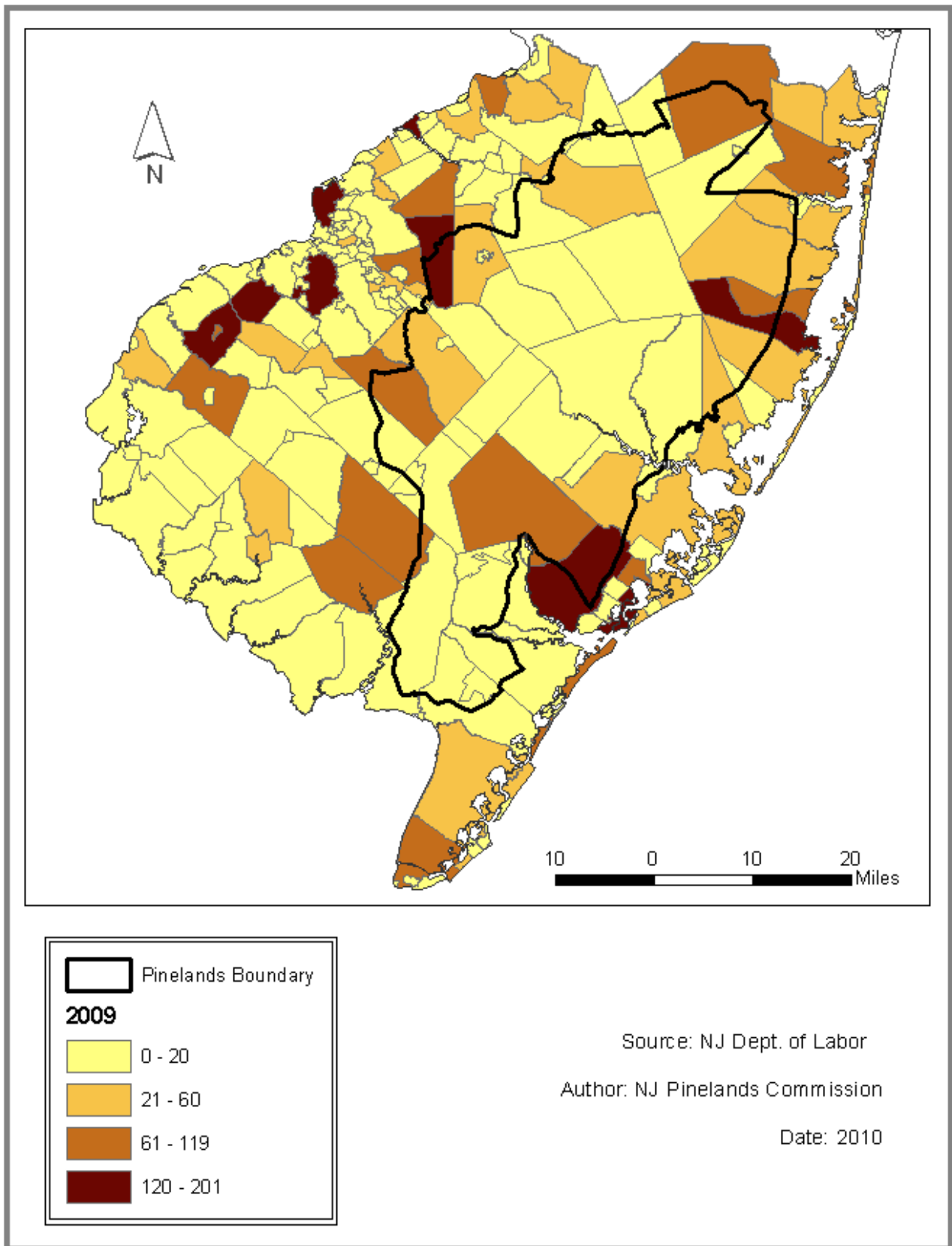
This year's significant drop in permit activity marks the sixth consecutive year that permits have declined in the Pinelands. During that time, building activity has fallen by 77% in the Pinelands (versus a drop of 65% statewide and a drop of 64% in the Non-Pinelands). The only other comparable period 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 Permits¹¹

Municipality	County	Permits Issued		Absolute Change	% Change	2004-2009 Avg	Permits 2004-2009
		2009	2008				
Hamilton	Atlantic	85	10	75	750%	147	880
Evesham	Burlington	131	95	36	38%	77	463
Medford Lakes	Burlington	21	2	19	950%	22	131
Pemberton Township	Burlington	28	19	9	47%	35	207
Buena Vista	Atlantic	14	9	5	56%	15	91
Beachwood	Ocean	11	6	5	83%	16	94
Bass River	Burlington	2	0	2	N.A.	4	26
Little Egg Harbor	Ocean	55	53	2	4%	155	931
Egg Harbor City	Atlantic	9	8	1	13%	12	71
Estell Manor	Atlantic	6	5	1	20%	8	47
New Hanover	Burlington	4	3	1	33%	6	37
Mullica	Atlantic	15	15	0	0%	23	137
Berlin Township	Camden	21	21	0	0%	20	118
Lakehurst	Ocean	0	0	0	N.A.	4	22
South Toms River	Ocean	0	0	0	N.A.	4	22
Weymouth	Atlantic	2	3	-1	-33%	4	21
Washington	Burlington	1	2	-1	-50%	3	15
Wrightstown	Burlington	0	1	-1	-100%	2	13
Dennis	Cape May	8	9	-1	-11%	14	84
Ocean	Ocean	3	4	-1	-25%	35	211
Barnegat	Ocean	142	143	-2	-100%	2	14
Folsom	Atlantic	0	2	-2	-100%	10	57
Port Republic	Atlantic	0	2	-2	-22%	15	91
Shamong	Burlington	7	9	-2	-40%	5	30
Woodland	Burlington	3	5	-2	-22%	10	61
Maurice River	Cumberland	7	9	-2	-18%	17	102
Eagleswood	Ocean	9	11	-2	-13%	23	137
Plumsted	Ocean	13	15	-3	-30%	14	84
Medford	Burlington	7	10	-3	-30%	12	73
Chesilhurst	Camden	7	10	-3	-75%	8	49
Manchester	Ocean	1	4	-4	-21%	66	396
Hammonton	Atlantic	15	19	-4	-24%	21	126
Waterford	Camden	13	17	-4	-29%	27	163
Upper	Cape May	10	14	-1	-1%	276	1,654
Tabernacle	Burlington	5	10	-5	-50%	12	70
Southampton	Burlington	13	19	-6	-32%	39	235
Woodbine	Cape May	13	19	-6	-32%	13	78
Franklin	Gloucester	19	25	-6	-24%	70	421
Buena	Atlantic	1	8	-7	-88%	6	33
Lacey	Ocean	37	47	-10	-21%	49	292
Monroe	Gloucester	89	104	-15	-14%	179	1071
Berkeley	Ocean	41	57	-16	-28%	86	517
Jackson	Ocean	110	141	-31	-22%	141	844
Egg Harbor Township	Atlantic	139	186	-47	-25%	402	2414
Galloway	Atlantic	35	104	-69	-66%	209	1252
Winslow	Camden	41	115	-74	-64%	300	1799
Stafford	Ocean	53	192	-139	-72%	189	1134
<i>"Outside" Munis</i>							
Springfield Township	Burlington	1	0	1	N.A.	6	36
Berlin Borough	Camden	12	13	-1	-8%	36	218
Corbin City	Atlantic	2	6	-4	-67%	4	21
North Hanover Township	Burlington	8	12	-4	-33%	14	84
Vineland City	Cumberland	97	142	-45	-32%	154	923

11 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 2009



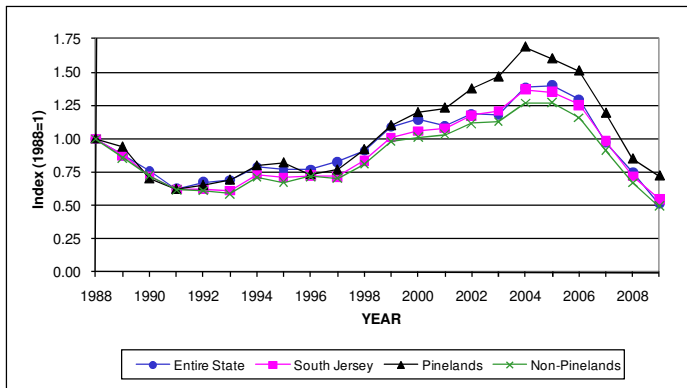
Residential Real Estate Transactions

NJ Dept of Treasury, Div of Taxation 1988 – 2009

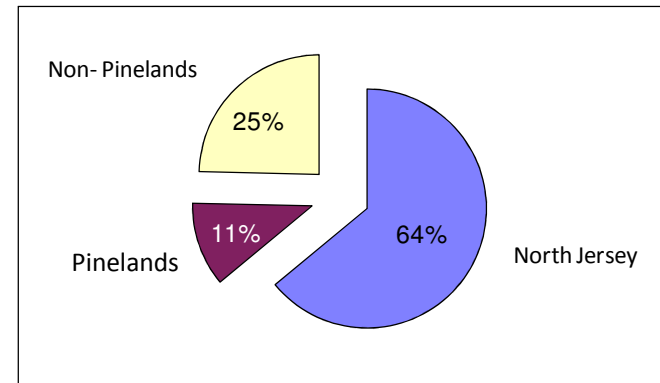
X Updated

- Residential real estate transactions in the Pinelands decreased for the fifth consecutive year in 2009. Activity in the Pinelands fell by 15%, while the Non-Pinelands fell by 26%, and activity decreased by 31.2 % Statewide.

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 1991 and 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 and 2008, the trend in the markets had become clear with uniform decreases in activity of between 20 – 25% across all regions of the state.

Update:

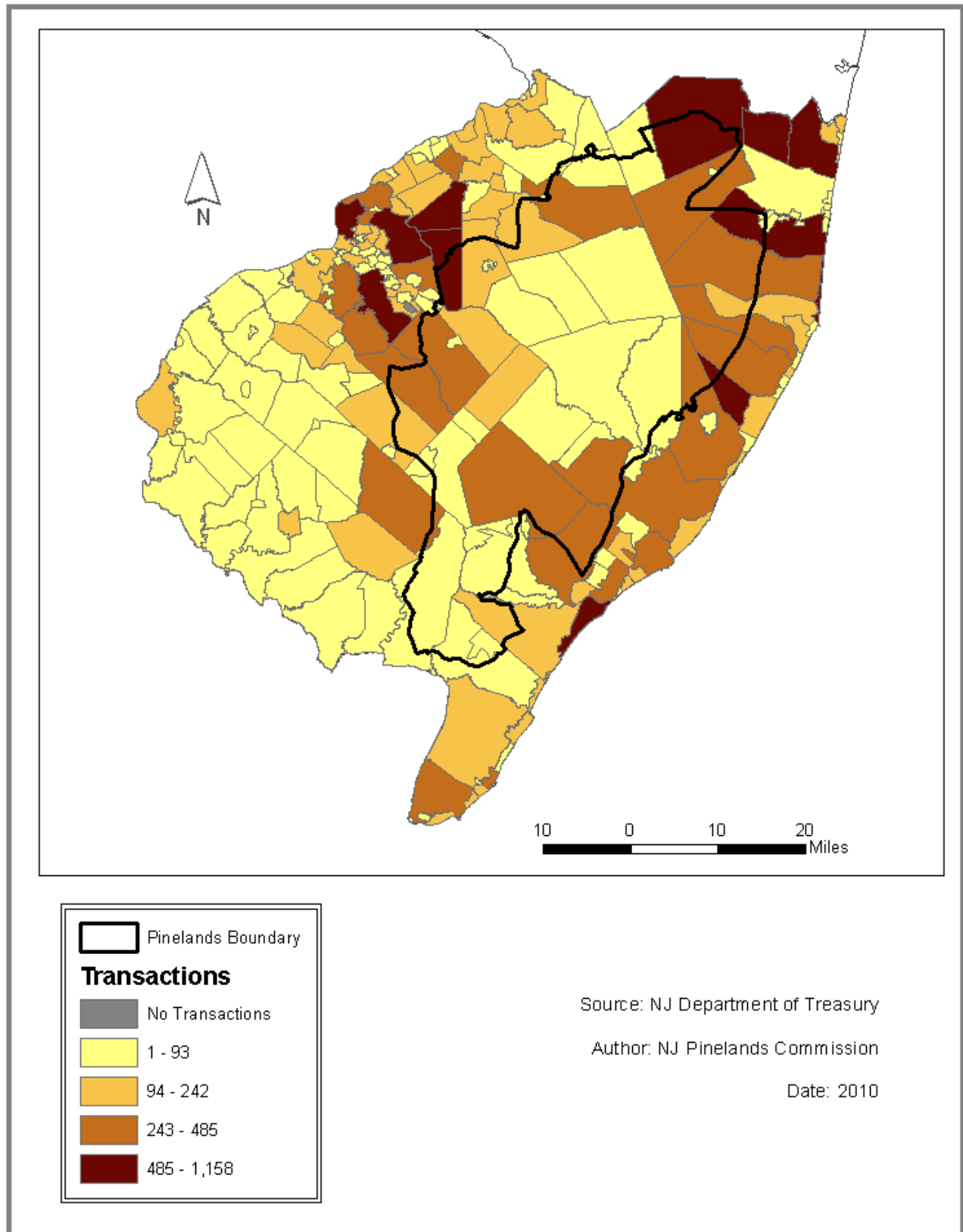
The pace of residential transactions that began a steep decline in 2007 continued to drop precipitously in 2009. For the third consecutive year, all regions of the state experienced a greater than 15% decline in the total number of transactions. Transactions decreased statewide by 31.2% in 2009. In southern New Jersey, the Pinelands (-15%) decreased at a slightly lower rate than the Non-Pinelands (-26.3%). In the period covering 2000-2009, the Pinelands outperformed the Non-Pinelands in seven out of nine years in the percentage increase in transactions.

The geographic pattern of transaction activity in the Pinelands remained relatively the same, with Jackson, Berkeley, Winslow, and Evesham again holding one of the top five spots for the 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 Area (Figure R2). Pinelands Municipalities with the largest absolute decrease were predominantly located in Ocean County, Burlington County, and Atlantic County. Of these municipalities, Galloway Township, Jackson Township, Pemberton Township, Hamilton Township, and Egg Harbor Township together decreased their real estate transaction volume by over 700 (Table R2).

Table R2 Residential Housing Transactions

Municipality	County	2009	2005	Change	% Change	5 Year Avg
Monroe	Gloucester	194	89	105	118%	335
Berkeley	Ocean	496	464	32	7%	692
Buena Vista	Atlantic	26	4	22	550%	14
Barnegat	Ocean	153	133	20	15%	168
Hammonton	Atlantic	94	78	16	21%	112
Maurice River	Cumberland	35	20	15	75%	28
Bass River	Burlington	13	3	10	333%	12
Chesilhurst	Camden	8	0	8	N.A.	12
Dennis	Cape May	46	38	8	21%	38
South Toms River	Ocean	35	27	8	30%	34
Woodbine	Cape May	18	11	7	64%	9
Washington	Burlington	5	1	4	400%	4
Weymouth	Atlantic	10	7	3	43%	5
Woodland	Burlington	11	11	0	0%	13
Wrightstown	Burlington	1	1	0	0%	1
Estell Manor	Atlantic	12	13	-1	-8%	12
Tabernacle	Burlington	46	47	-1	-2%	47
New Hanover	Burlington	4	6	-2	-33%	5
Port Republic	Atlantic	5	9	-4	-44%	8
Eagleswood	Ocean	4	12	-8	-67%	7
Folsom	Atlantic	9	18	-9	-50%	19
Buena	Atlantic	22	33	-11	-33%	29
Mullica	Atlantic	31	42	-11	-26%	53
Egg Harbor City	Atlantic	21	33	-12	-36%	33
Lakehurst	Ocean	8	20	-12	-60%	23
Manchester	Ocean	306	318	-12	-4%	435
Franklin	Gloucester	108	121	-13	-11%	144
Beachwood	Ocean	64	80	-16	-20%	85
Ocean	Ocean	70	89	-19	-21%	117
Berlin Township	Camden	28	48	-20	-42%	49
Shamong	Burlington	22	46	-24	-52%	58
Lacey	Ocean	276	301	-25	-8%	406
Plumsted	Ocean	28	54	-26	-48%	42
Medford Lakes	Burlington	24	51	-27	-53%	56
Upper	Cape May	91	119	-28	-24%	102
Waterford	Camden	71	110	-39	-35%	121
Southampton	Burlington	82	148	-66	-45%	168
Little Egg Harbor	Ocean	192	269	-77	-29%	279
Stafford	Ocean	254	331	-77	-23%	373
Medford	Burlington	123	209	-86	-41%	242
Evesham	Burlington	292	399	-107	-27%	655
Pemberton Township	Burlington	160	277	-117	-42%	334
Hamilton	Atlantic	167	286	-119	-42%	429
Egg Harbor Township	Atlantic	243	383	-140	-37%	494
Winslow	Camden	286	444	-158	-36%	610
Jackson	Ocean	307	513	-206	-40%	570
Galloway	Atlantic	203	416	-213	-51%	562
<i>"Outside" Municipalities</i>						
North Hanover	Burlington	10	22	-12	-55%	16
Corbin City	Atlantic	1	19	-18	-95%	9
Springfield	Burlington	14	1	13	1300%	12
Berlin Borough	Camden	32	63	-31	-49%	73
Vineland	Cumberland	311	342	-31	-9%	477

Figure R2 Residential Housing Transactions 2009



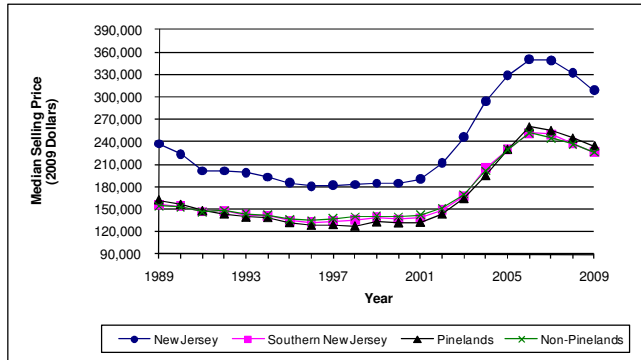
Median Selling Price of Homes

X Updated

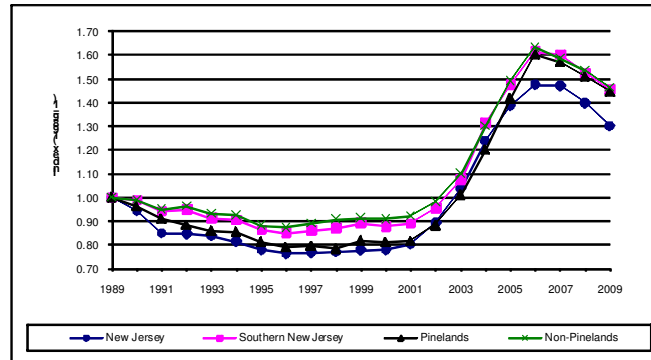
NJ Dept of Treasury, Division of Taxation 1989 – 2009

- In 2009, home prices dropped across all regions as real-estate activity began to feel the effects of the recession. Home prices statewide sharply dropped 7%, while they only fell by 4.2% in the Pinelands, and 4.7% in Southern Jersey.

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 2009 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 Area 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 through 2006 across all regions. 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 2009, the median sales price of homes across all regions continued to decline as activity in the real estate market slowed considerably for the third straight year. The median, inflation-adjusted sales price of a home fell by 4.2% in the Pinelands, 4.8% in the Non-Pinelands, and 7.0% statewide for the year. The median sales price for a home in the Pinelands was \$234,000 in 2009, compared to \$225,000 for the Non-Pinelands.

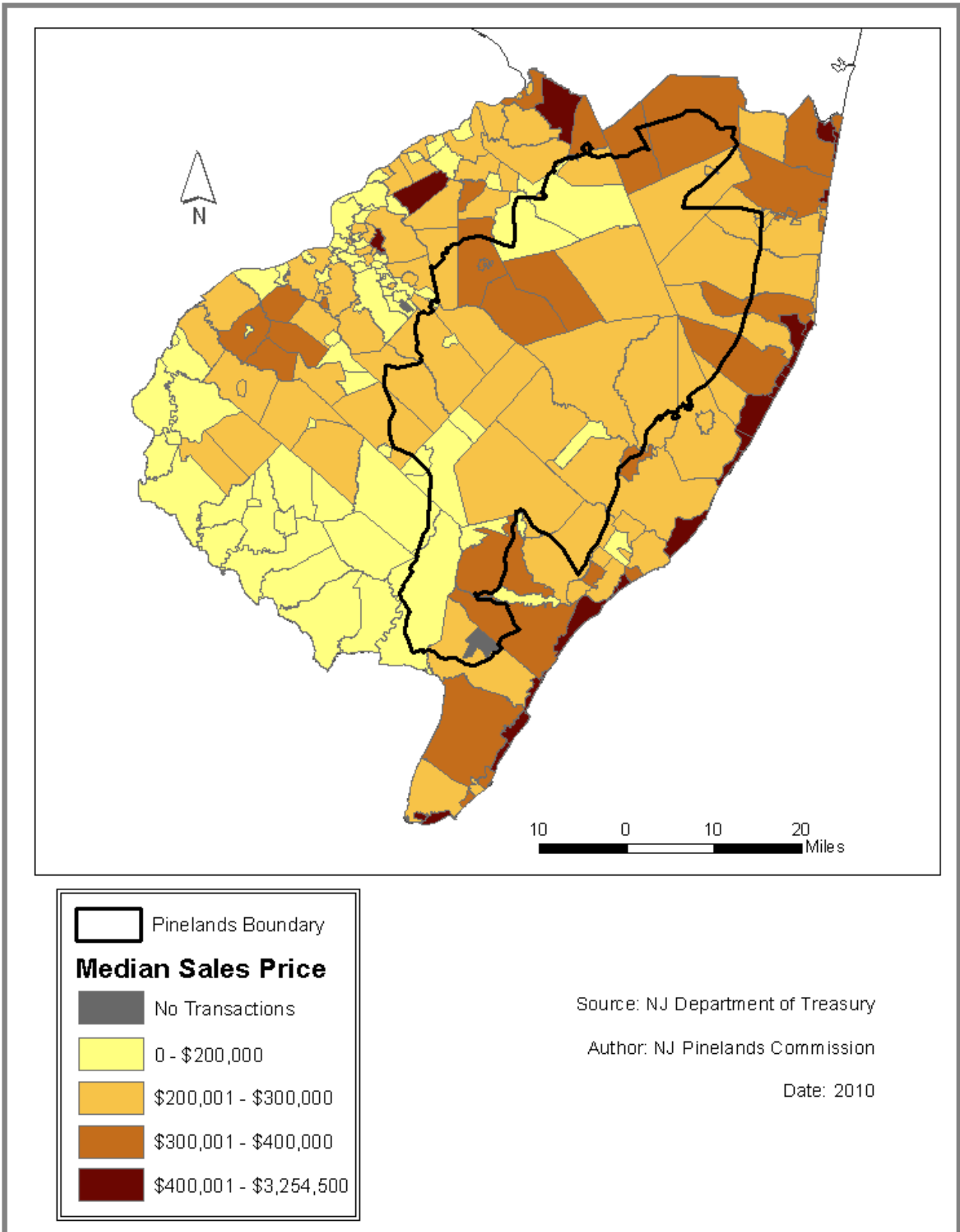
This marks the fifth consecutive year that the median sales price for homes in the Pinelands was higher than for homes in the Non-Pinelands. The median sales price for a Pinelands home in 2009 was 4.0% higher than the Non-Pinelands. As recently as 2002, the median sales price in the Pinelands was 5% lower than in the Non-Pinelands.

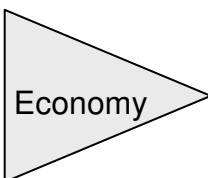
Among Pinelands municipalities, four of the top eight municipalities were located in Burlington County (Shamong Township, Medford Township, Medford Lakes Borough, and Tabernacle Township) and had median sales prices in excess of \$300,000.

Table R3 Median Home Values - 2009

Municipality	County	Median Sales Price	South Jersey Rank
Medford Twp	Burlington County	\$375,648	26
Shamong Twp	Burlington County	\$370,642	28
Upper Twp	Cape May County	\$348,152	30
Tabernacle Twp	Burlington County	\$335,279	37
Medford Lakes Boro	Burlington County	\$316,251	43
Ocean Twp	Ocean County	\$310,915	44
Port Republic City	Atlantic County	\$309,375	46
Stafford Twp	Ocean County	\$306,725	47
Estell Manor City	Atlantic County	\$306,333	49
Jackson Twp	Ocean County	\$304,280	50
Plumsted Twp	Ocean County	\$303,225	52
Bass River Twp	Burlington County	\$295,667	54
Barneget Twp	Ocean County	\$289,581	61
New Hanover Twp	Burlington County	\$281,700	65
Lacey Twp	Ocean County	\$276,184	66
Dennis Twp	Cape May County	\$270,012	70
Evesham Twp	Burlington County	\$266,604	72
Mullica Twp	Atlantic County	\$263,491	77
Beachwood Boro	Ocean County	\$260,451	79
Egg Harbor Twp	Atlantic County	\$252,973	81
Little Egg Harbor Twp	Ocean County	\$247,291	86
Berkeley Twp	Ocean County	\$240,533	89
Washington Twp	Burlington County	\$240,333	90
Eagleswood Twp	Ocean County	\$229,000	96
Monroe Twp	Gloucester County	\$225,935	101
Lakehurst Boro	Ocean County	\$222,875	103
Franklin Twp	Gloucester County	\$220,797	104
Manchester Twp	Ocean County	\$220,543	105
Hammonton Town	Atlantic County	\$217,333	110
South Toms River Boro	Ocean County	\$215,326	113
Waterford Twp	Camden County	\$209,734	117
Galloway Twp	Atlantic County	\$209,323	118
Winslow Twp	Camden County	\$205,074	119
Hamilton Twp	Atlantic County	\$202,618	121
Woodland Twp	Burlington County	\$201,225	125
Berlin Twp	Camden County	\$197,987	127
Southampton Twp	Burlington County	\$195,773	129
Weymouth Twp	Atlantic County	\$194,650	131
Buena Vista Twp	Atlantic County	\$190,972	133
Folsom Boro	Atlantic County	\$188,040	140
Pemberton Twp	Burlington County	\$186,433	142
Egg Harbor City	Atlantic County	\$169,250	158
Maurice River Twp	Cumberland County	\$168,707	160
Buena Boro	Atlantic County	\$167,149	162
Wrightstown Boro	Burlington County	\$160,667	168
Chesilhurst Boro	Camden County	\$140,000	184
Woodbine Boro	Camden County	No Transactions	N/A
<i>"Outside" Municipalities</i>			
North Hanover Twp	Burlington County	\$339,106	35
Springfield Twp	Burlington County	\$261,936	78
Berlin Boro	Camden County	\$250,416	83
Vineland City	Cumberland County	\$180,003	148
Corbin City	Atlantic County	\$102,188	191

Figure R3 Median Home Sales Prices 2009





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.

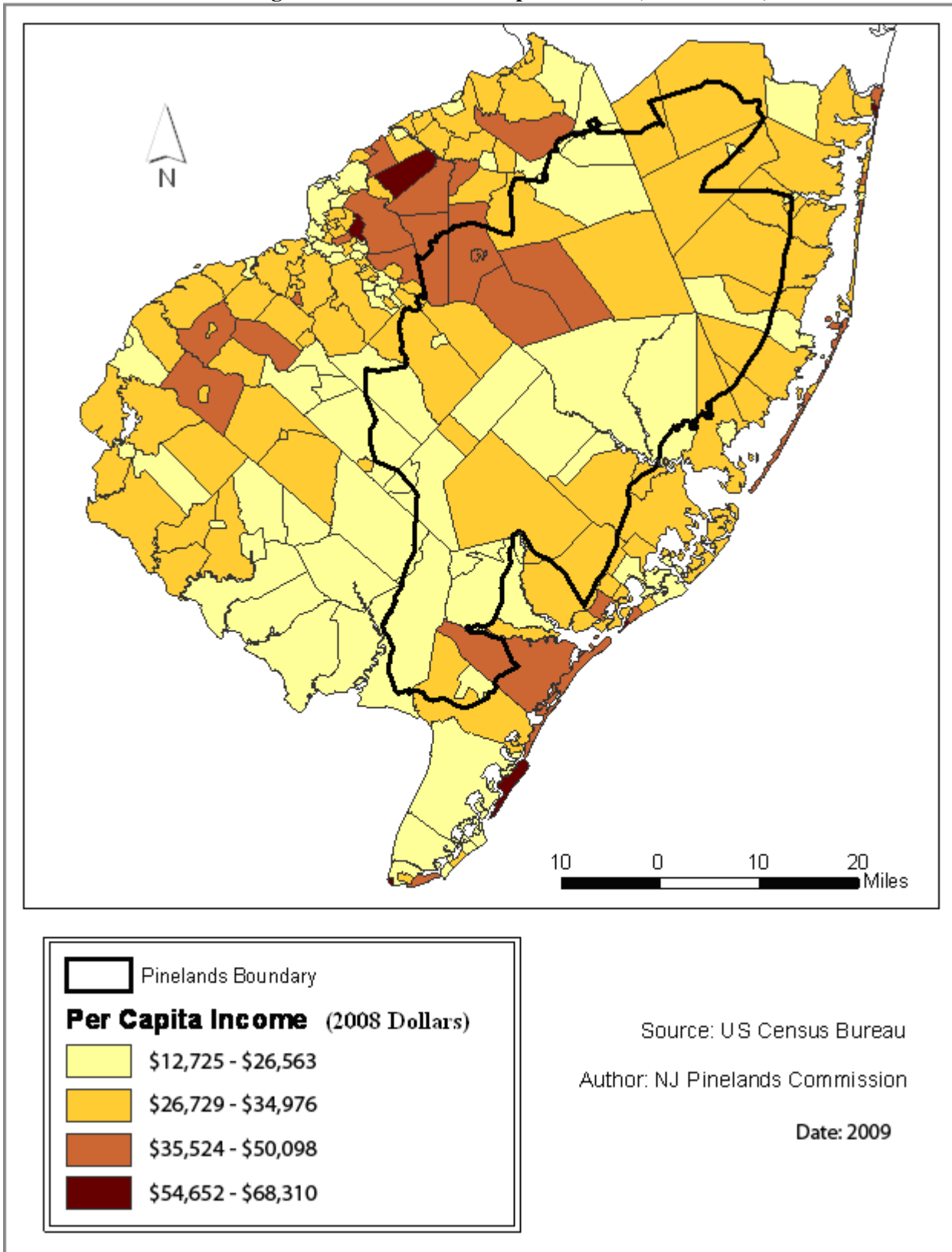
Summary of Previous Findings

Real per capita income increased significantly inside and outside of the Pinelands Area 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 Area boundary.

Figure E1 1999 Per Capita Income (2008 Dollars)



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

Table E1 Per Capita Income by Pinelands Municipality (2004 Dollars)

Municipality	County	1999	1989	1979	Change 1989-1999	Change 1979-1989
Medford Twp.	Burlington	\$43,953	\$37,570	\$24,947	17%	51%
Medford Lakes Boro	Burlington	\$35,696	\$33,879	\$24,824	5%	36%
Shamong Twp.	Burlington	\$35,187	\$28,747	\$19,110	22%	50%
Evesham Twp.	Burlington	\$33,549	\$30,545	\$22,522	10%	36%
Tabernacle Twp.	Burlington	\$31,706	\$31,054	\$18,181	2%	71%
Upper Twp.	Cape May	\$31,278	\$26,923	\$18,802	16%	43%
Southampton Twp.	Burlington	\$30,686	\$25,501	\$20,050	20%	27%
Woodland Twp. *	Burlington	\$29,718	\$17,065	\$10,658	74%	60%
Stafford Twp.	Ocean	\$28,888	\$22,356	\$17,447	29%	28%
Port Republic City	Atlantic	\$27,719	\$26,901	\$21,058	3%	28%
Jackson Twp.	Ocean	\$27,278	\$24,615	\$17,427	11%	41%
Lacey Twp.	Ocean	\$26,317	\$22,738	\$17,262	16%	32%
Ocean Twp.	Ocean	\$25,969	\$20,577	\$18,332	26%	12%
Plumsted Twp.	Ocean	\$25,517	\$22,972	\$16,623	11%	38%
Manchester Twp.	Ocean	\$25,490	\$22,781	\$18,943	12%	20%
Egg Harbor Twp.	Atlantic	\$25,397	\$24,243	\$17,915	5%	35%
Berkeley Twp.	Ocean	\$25,250	\$21,173	\$16,589	19%	28%
Berlin Twp.	Camden	\$25,226	\$20,638	\$16,281	22%	27%
Waterford Twp.	Camden	\$24,656	\$22,321	\$16,325	10%	37%
Dennis Twp.	Cape May	\$24,404	\$23,385	\$16,286	4%	44%
Hamilton Twp.	Atlantic	\$24,238	\$24,373	\$17,672	-1%	38%
Winslow Twp.	Camden	\$24,176	\$21,421	\$16,570	13%	29%
Beachwood Boro	Ocean	\$24,168	\$22,176	\$16,116	9%	38%
Galloway Twp.	Atlantic	\$23,942	\$24,914	\$17,257	-4%	44%
Little Egg Harbor Twp.	Ocean	\$23,454	\$21,766	\$16,717	8%	30%
Eagleswood Twp.	Ocean	\$23,451	\$20,067	\$13,991	17%	43%
Folsom Boro	Atlantic	\$23,451	\$20,259	\$16,688	16%	21%
Monroe Twp.	Gloucester	\$23,305	\$21,003	\$16,531	11%	27%
Bass River Twp.	Burlington	\$23,184	\$19,865	\$16,842	17%	18%
Franklin Twp.	Gloucester	\$23,065	\$20,647	\$16,043	12%	29%
Hammonton town	Atlantic	\$22,623	\$23,903	\$18,557	-5%	29%
Mullica Twp.	Atlantic	\$22,481	\$21,181	\$16,798	6%	26%
Estell Manor City	Atlantic	\$22,145	\$23,933	\$16,865	-7%	42%
Barnegat Twp.	Ocean	\$21,961	\$20,044	\$14,996	10%	34%
Pemberton Twp.	Burlington	\$21,883	\$19,272	\$14,764	14%	31%
Weymouth Twp.	Atlantic	\$21,597	\$20,707	\$15,753	4%	31%
Lakehurst Boro	Ocean	\$20,918	\$16,040	\$13,676	30%	17%
Buena Vista Twp.	Atlantic	\$20,909	\$19,278	\$14,751	8%	31%
Maurice River Twp.	Cumberland	\$19,497	\$15,572	\$12,658	25%	23%
Buena Boro	Atlantic	\$19,015	\$18,222	\$16,905	4%	8%
South Toms River Boro	Ocean	\$18,532	\$15,329	\$12,791	21%	20%
Chesilhurst Boro	Camden	\$17,349	\$17,111	\$13,655	1%	25%
Egg Harbor City	Atlantic	\$17,234	\$19,090	\$18,097	-10%	5%
Wrightstown Boro	Burlington	\$16,481	\$13,099	\$10,086	26%	30%
Washington Twp. +	Burlington	\$15,898	\$26,357	\$14,516	-40%	82%
Woodbine Boro	Cape May	\$15,168	\$11,505	\$9,637	32%	19%
New Hanover Twp.	Burlington	\$13,809	\$13,866	\$13,592	0%	2%
<i>"Outside" Municipalities</i>						
Springfield Twp.	Burlington	\$33,353	\$28,361	\$19,330	18%	47%
Dover Twp.	Ocean	\$28,448	\$26,447	\$19,048	8%	39%
Berlin Boro	Camden	\$28,067	\$24,112	\$20,551	16%	17%
Corbin City	Atlantic	\$24,252	\$23,097	\$18,142	5%	27%
Vineland City	Cumberland	\$21,381	\$19,811	\$16,061	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

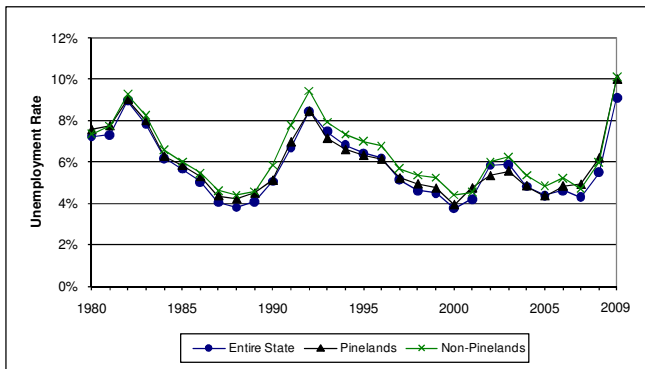
Unemployment



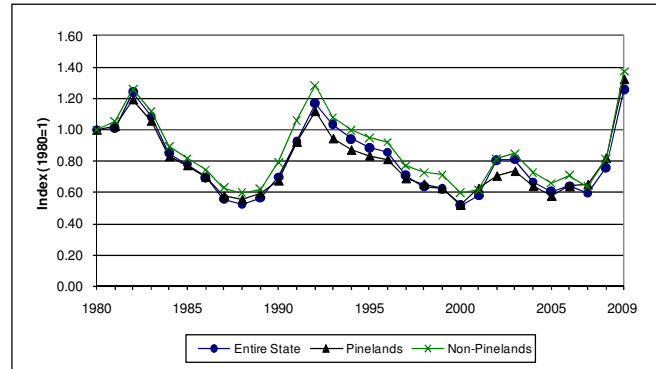
New Jersey Department of Labor 1980 – 2009

- Unemployment rates rose dramatically in 2009 in response to the national recession. Southern New Jersey was particularly hard hit in 2009. The unemployment rate increased by 3.8% in the Pinelands (to 10.0%) and by 4.1% in the Non-Pinelands (to 10.1%).

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 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 2009. According to the US Bureau of Labor statistics, approximately 15.2 million Americans were unemployed in 2009, compared to 11.3 million in 2008. The national unemployment rate increased to 9.9% in 2009 from 7.3% in 2008.

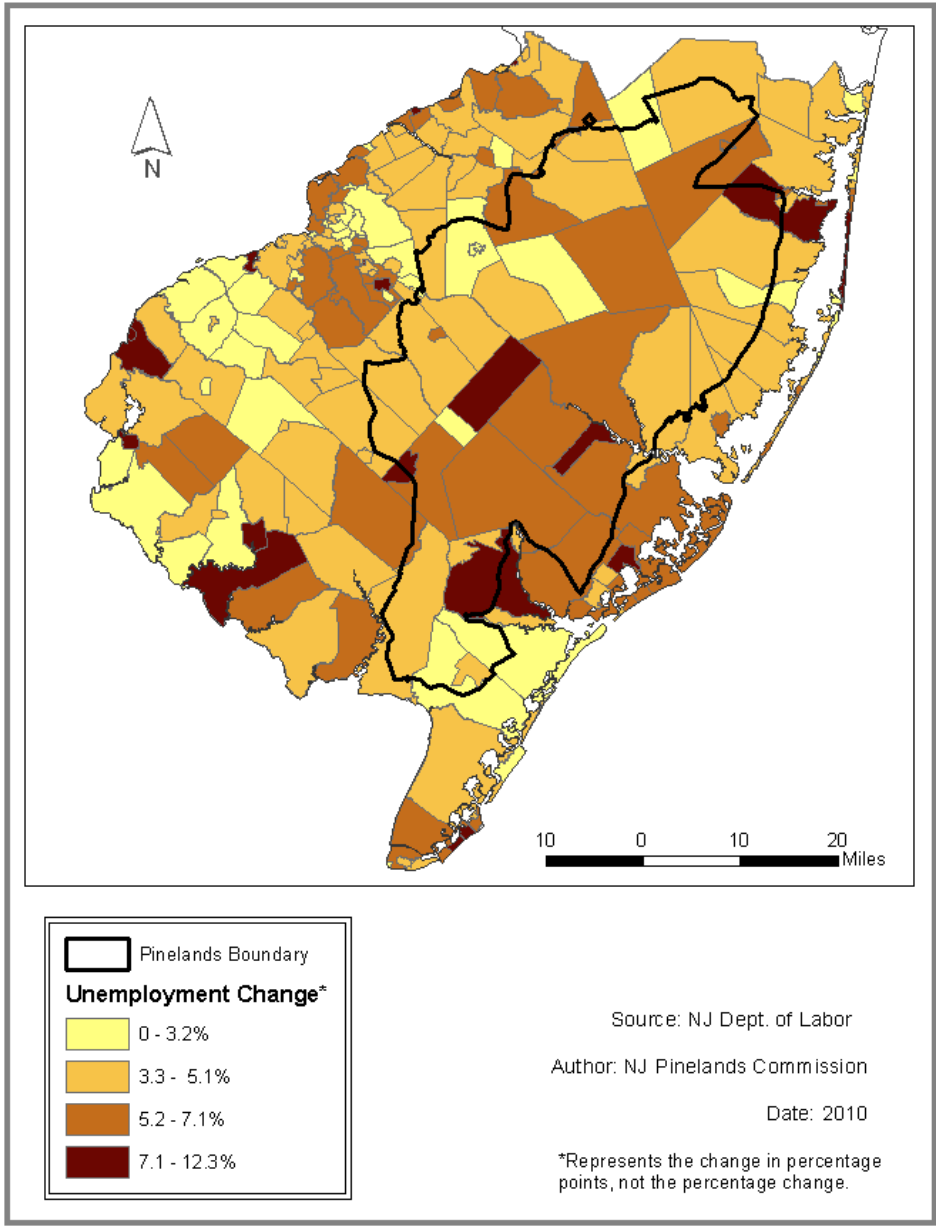
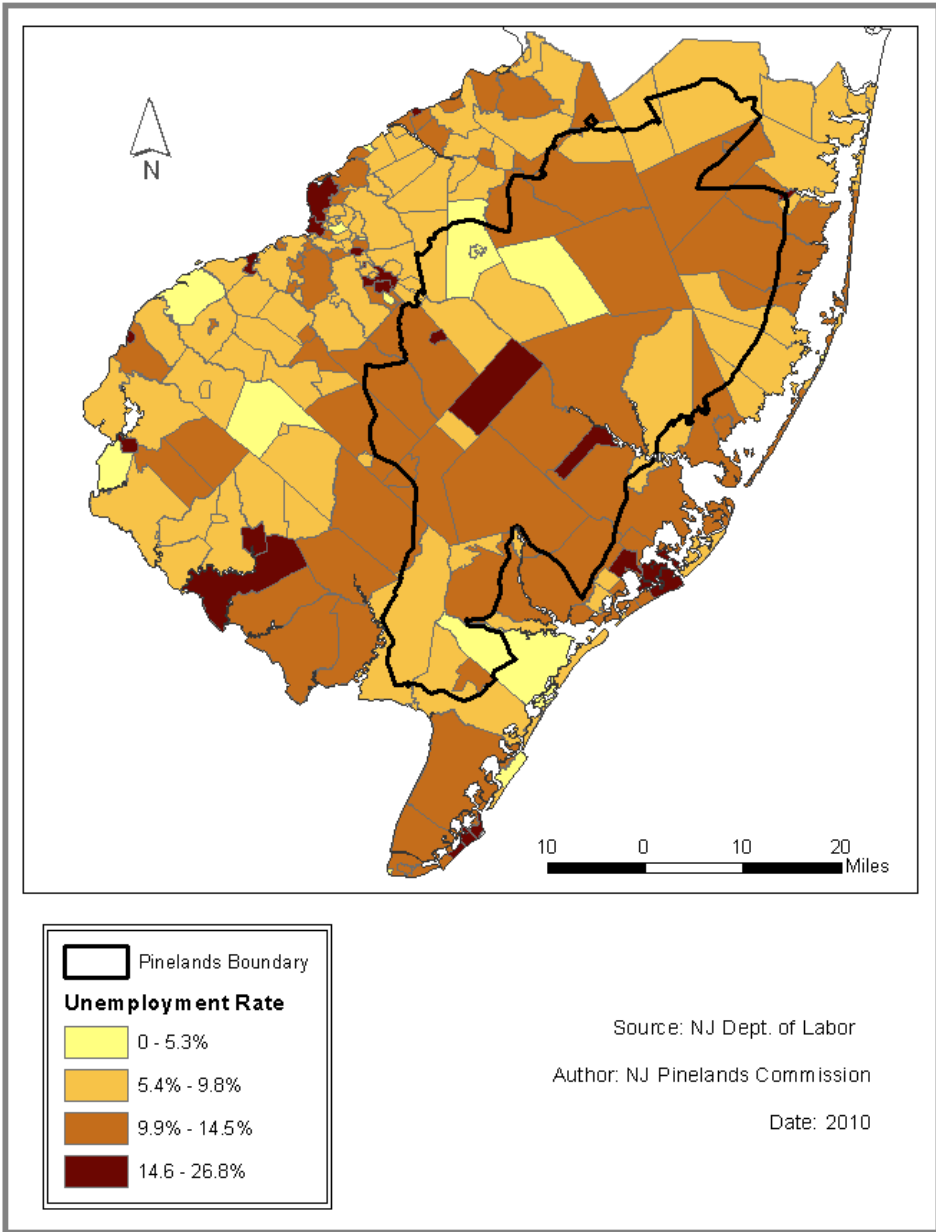
In comparison to the national average, unemployment rates in New Jersey fared slightly better, with the statewide unemployment rate increasing 3.6% from 5.5% in 2008 to 9.1% in 2009. Unfortunately, the southern New Jersey job market seemed to be hit much harder than the northern New Jersey job market in 2009. In the Pinelands, the unemployment rate increased 3.8% for the year, going from 6.2% in 2008 to 10.0% in 2009. The Non-Pinelands experienced a similar increase in unemployment during the year (+4.1%), finishing with an average rate of 10.1% for the year. In the 28 years of data that is covered in the monitoring period (1980 - 2009), 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 southern New Jersey are found in Cumberland and Atlantic counties. Although the Pinelands communities generally exhibit lower unemployment rates than the rest of southern New Jersey, some of the central and southern municipalities in the Pinelands have been more negatively affected over the past three years, with rates increasing by more than 5% in the period between 2006-2009 (Figure E2). Of the 21 Pinelands municipalities with unemployment increases of greater than 5% over that time, ten are located in Ocean and Burlington counties (Berkeley Township, Manchester Township, South Toms River Borough, Washington Township, Wrightstown Borough, Lakehurst Borough, Southampton Township, Ocean Township, Woodland Township, and Lacey Township).

Table E2 Unemployment 2006 – 2009

Municipality	County	2009	2008	2007	2006	Three Year Change 2006 - 2009
Egg Harbor City	Atlantic	18.4%	10.7%	8.7%	8.7%	9.7%
Hammonton	Atlantic	15.6%	8.9%	7.2%	7.2%	8.4%
Berkeley Township	Ocean	14.0%	6.8%	5.3%	6.0%	8.0%
Buena Borough	Atlantic	14.0%	7.9%	6.4%	6.4%	7.6%
Estell Manor City	Atlantic	13.8%	7.8%	6.3%	6.3%	7.5%
Manchester Township	Ocean	13.9%	7.1%	5.9%	6.5%	7.4%
South Toms River Borough	Ocean	15.4%	9.5%	7.4%	8.4%	7.0%
Washington Township	Burlington	13.3%	7.9%	5.8%	6.4%	6.9%
Chesilhurst Borough	Camden	15.1%	9.9%	7.5%	8.2%	6.9%
Mullica Township	Atlantic	12.6%	7.1%	5.7%	5.7%	6.9%
Wrightstown Borough	Burlington	12.6%	7.4%	5.5%	6.0%	6.6%
Egg Harbor Township	Atlantic	11.0%	6.2%	5.1%	4.8%	6.2%
Lakehurst Borough	Ocean	13.4%	8.2%	6.4%	7.2%	6.2%
Hamilton Township	Atlantic	10.7%	6.0%	4.8%	4.8%	5.9%
Southampton Township	Burlington	11.1%	6.5%	4.8%	5.3%	5.8%
Buena Vista Township	Atlantic	10.3%	5.7%	4.6%	4.6%	5.7%
Ocean Township	Ocean	12.0%	7.3%	5.6%	6.4%	5.6%
Galloway Township	Atlantic	10.7%	6.6%	5.4%	5.2%	5.5%
Woodland Township	Burlington	10.3%	6.0%	4.4%	4.9%	5.4%
Monroe Township	Gloucester	10.8%	6.4%	5.4%	5.4%	5.4%
Lacey Township	Ocean	10.1%	6.3%	4.5%	4.9%	5.2%
Franklin Township	Gloucester	12.0%	8.2%	6.4%	7.0%	5.0%
Little Egg Harbor Township	Ocean	10.7%	6.5%	5.0%	5.7%	5.0%
Jackson Township	Ocean	9.2%	5.4%	4.0%	4.4%	4.8%
Pemberton Township	Burlington	10.5%	6.9%	5.5%	5.8%	4.7%
Woodbine Borough	Cape May	11.8%	8.3%	6.8%	7.1%	4.7%
Bass River Township	Burlington	8.7%	5.1%	3.7%	4.1%	4.6%
Waterford Township	Camden	9.7%	6.2%	4.7%	5.1%	4.6%
Beachwood Borough	Ocean	9.8%	5.9%	4.6%	5.2%	4.6%
Stafford Township	Ocean	8.8%	5.3%	3.9%	4.3%	4.5%
Weymouth Township	Atlantic	7.7%	4.2%	3.4%	3.4%	4.3%
Winslow Township	Camden	10.5%	7.1%	5.8%	6.3%	4.2%
Port Republic City	Atlantic	7.4%	4.1%	3.3%	3.3%	4.1%
Barnegat Township	Ocean	8.6%	5.2%	4.0%	4.5%	4.1%
New Hanover Township	Burlington	7.7%	4.4%	3.2%	3.6%	4.1%
Eagleswood Township	Ocean	8.4%	5.1%	3.9%	4.4%	4.0%
Maurice River Township	Cumberland	8.2%	4.6%	3.8%	4.2%	4.0%
Evesham Township	Burlington	6.9%	4.0%	2.9%	3.0%	3.9%
Shamong Township	Burlington	6.6%	3.8%	2.7%	3.0%	3.6%
Folsom Borough	Atlantic	5.9%	3.2%	2.6%	2.6%	3.3%
Plumsted Township	Ocean	6.4%	3.8%	2.9%	3.3%	3.1%
Medford Township	Burlington	5.3%	3.0%	1.7%	2.4%	2.9%
Berlin Township	Camden	6.0%	3.8%	2.8%	3.1%	2.9%
Dennis Township	Cape May	6.9%	4.8%	3.8%	4.0%	2.9%
Tabernacle Township	Burlington	4.8%	2.7%	2.0%	2.2%	2.6%
Medford Lakes Borough	Burlington	4.1%	2.3%	2.2%	1.9%	2.2%
Upper Township	Cape May	3.5%	2.4%	1.9%	2.0%	1.5%
<i>"Outside Municipalities"</i>						
Vineland City	Cumberland	12.7%	8.0%	6.2%	6.5%	6.2%
North Hanover Township	Burlington	10.7%	6.3%	4.6%	5.1%	5.6%
Corbin City	Atlantic	9.1%	5.0%	4.0%	4.0%	5.1%
Springfield Township	Burlington	8.3%	4.8%	3.5%	3.9%	4.4%
Berlin Borough	Camden	8.3%	5.3%	4.0%	4.3%	4.0%

Figure E2 Unemployment Rate 2009 and Change in Unemployment Rate 2006- 2009



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	2 nd Largest Sector	3 rd 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.¹² 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.¹³ 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

¹² 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.

¹³ 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.

region. The largest sectors of employment in the Pinelands are retail, health care, and construction, 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 are 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 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 southern New 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)

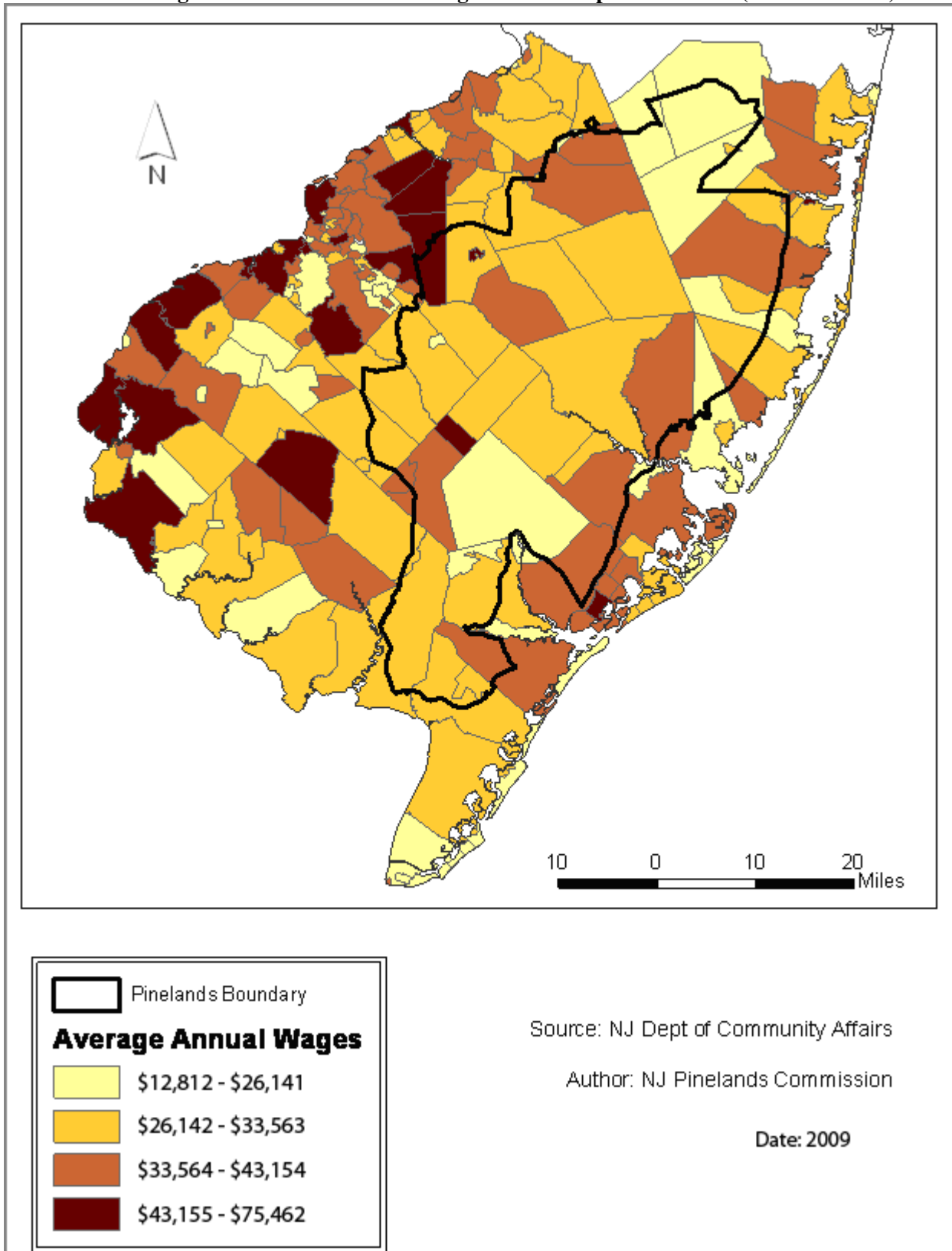


Table E3a County Private Sector Employment

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%

Retail Sales / Establishments

Census of Retail Trade 1992, 1997, 2002, 2007

X Updated

- From 1997 - 2007, per capita retail sales growth was much stronger in the Pinelands than in all other regions of the state.

Per Capita Retail Sales

COUNTY	1997 Per Capita Sales	2002 Per Capita Sales	2007 Per Capita Sales	5 Year Change 2002 - 2007	10 Year Change 1997 - 2007
Atlantic	\$13,782	\$14,733	\$16,368	11.1%	18.8%
Burlington	\$13,661	\$19,933	\$15,724	-21.1%	15.1%
Camden	\$11,842	\$10,806	\$9,540	-11.7%	-19.4%
Cape May	\$12,715	\$15,666	\$16,429	4.9%	29.2%
Cumberland	\$11,275	\$11,838	\$12,455	5.2%	10.5%
Gloucester	\$12,866	\$14,550	\$15,104	3.8%	17.4%
Ocean	\$12,703	\$12,400	\$12,828	3.5%	1.0%
Salem	\$7,971	\$9,669	\$10,113	4.6%	26.9%
South Jersey	\$12,853	\$13,729	\$14,407	4.9%	12.1%
State	\$12,590	\$14,003	\$13,753	-1.8%	9.2%
Pinelands ¹⁴	\$9,588	\$11,577	\$11,501	-0.7%	20.0%
Non-Pinelands	\$14,385	\$14,407	\$15,150	5.2%	5.3%

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.¹⁵ 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 southern New 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%.

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 southern New 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.

¹⁴ 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.

¹⁵ 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.

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, in 2002, there were 1,598 retail establishments in the Pinelands (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.

Update

The 2007 Census of Retail Trade shows the Pinelands region struggling to keep pace with the Non-Pinelands per capita retail sales following the stunning growth during the period of 1992-2002. Statewide growth in per capita retail sales decreased 1.8% from 2002-2007, which marked a slowdown from the 6.8% growth statewide for the period 1997-2002. Per capita retail sales in the Non-Pinelands portion of Southern New Jersey increased 5.2% from 2002-2007. In contrast, the Pinelands communities followed their 20.7% gain in per capita retail sales from 1997-2002, with a 0.7% decrease in the period from 2002-2007. From 2002 – 2007, the most drastic loss in per capita sales occurred in Burlington County (-21.1%), followed by Camden County (11.7%). From 1997 – 2007, Camden County lost 19.4% in per capita retail sales, the single largest and only decline for any county in Southern New Jersey.

Tracking the ten-year change of per capita retail across Southern New Jersey, the Pinelands have the largest increase with 20% growth. The Non-Pinelands region has the smallest gains in retail during this same time with only 5.2% growth. The entire southern New Jersey region, during the same time, gained 12.5% in per capita retail sales, while the entire state gained 9.2%.

Assessed Farmland Acreage

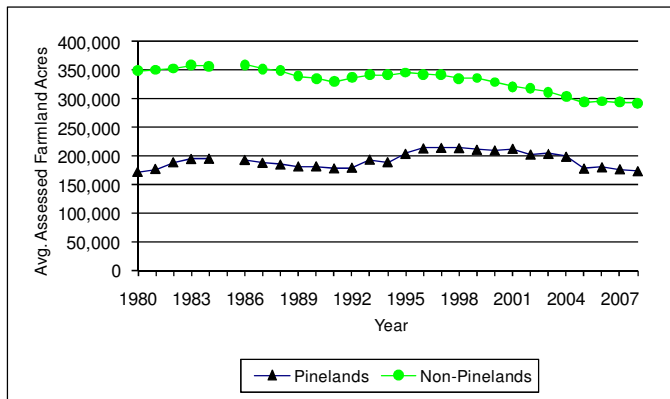
X Updated

New Jersey Agricultural Statistics Service 1980 – 2008*

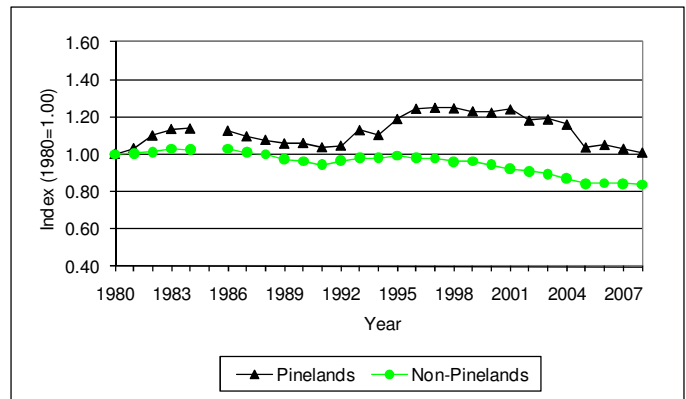
* Data from 1985 is not available.

- Assessed acres in farmland dropped 2.0% in the Pinelands in 2008, which brought the amount of assessed acres in the Pinelands down to the same levels as they were in 1980.

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 southern New 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 southern New Jersey farm acreage has increased from 33% in 1980 to 37% in 2008.

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

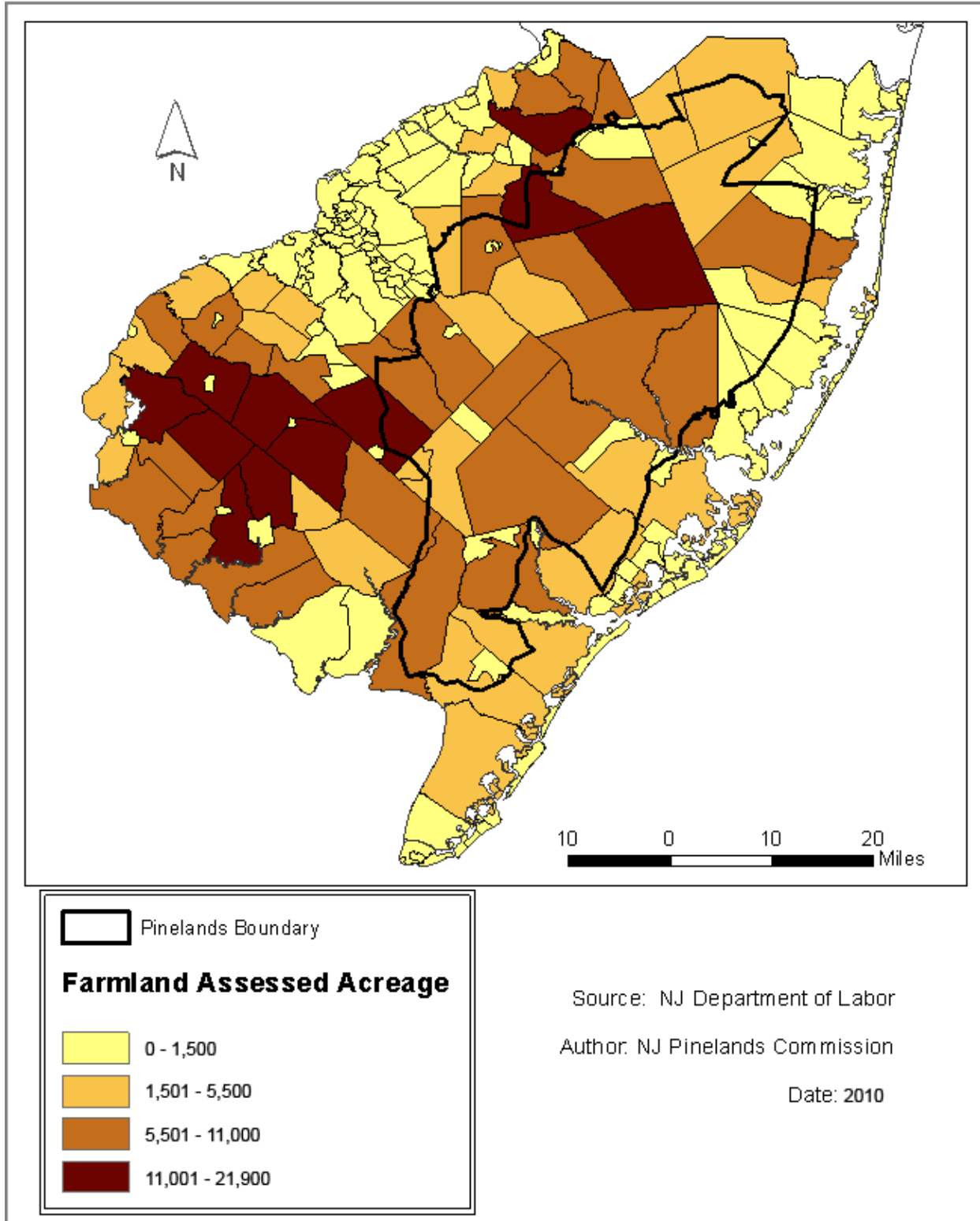
After a 1.3% decrease in acres farmed in 2007, the Pinelands region experienced a slightly larger 2.0% decrease in acres farmed in 2008. For the year, there were 172,619 farmland acres in the Pinelands. The Non-Pinelands farmland acreage decreased for the ninth consecutive year in 2008, falling 0.4% to a total of 292,894 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 trend of assessed acreage in farmland for southern New Jersey through 5-year intervals. 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%

Figure E5 Farmland Assessed Acreage 2008



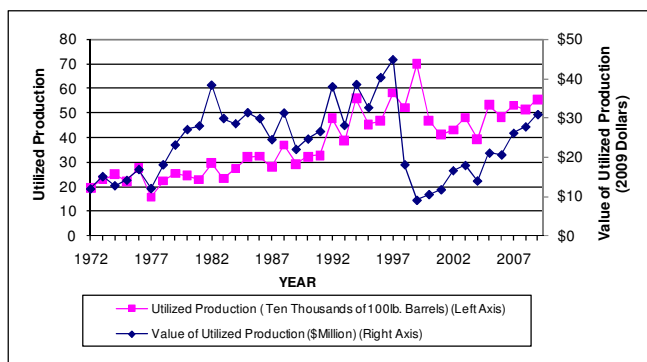
Cranberry and Blueberry Production

NJ Agricultural Statistics Service 1972 - 2009

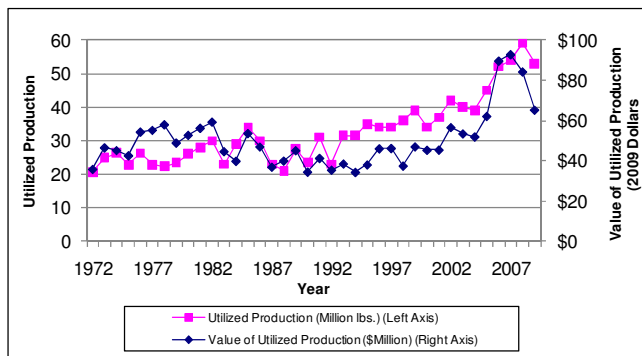
X Updated

- In 2009, prices of cranberries increased by 3.1% and utilized production rose 11.7%. The prices of blueberries declined by 13.9% and utilized production fell 22.5%.

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 2009 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 \$22.48 per 100 lbs in 2000 to \$53.9 per 100 lbs in 2008, an increase of 139%. Despite this increase, prices remain well below their peak of \$86.22 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 36% between 2004 and 2008. The value of production increased dramatically over this four-year period, rising by 51%, while the sale price improved by 7.2%. (Figure E6). In both 2005, 2006 and 2007, 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

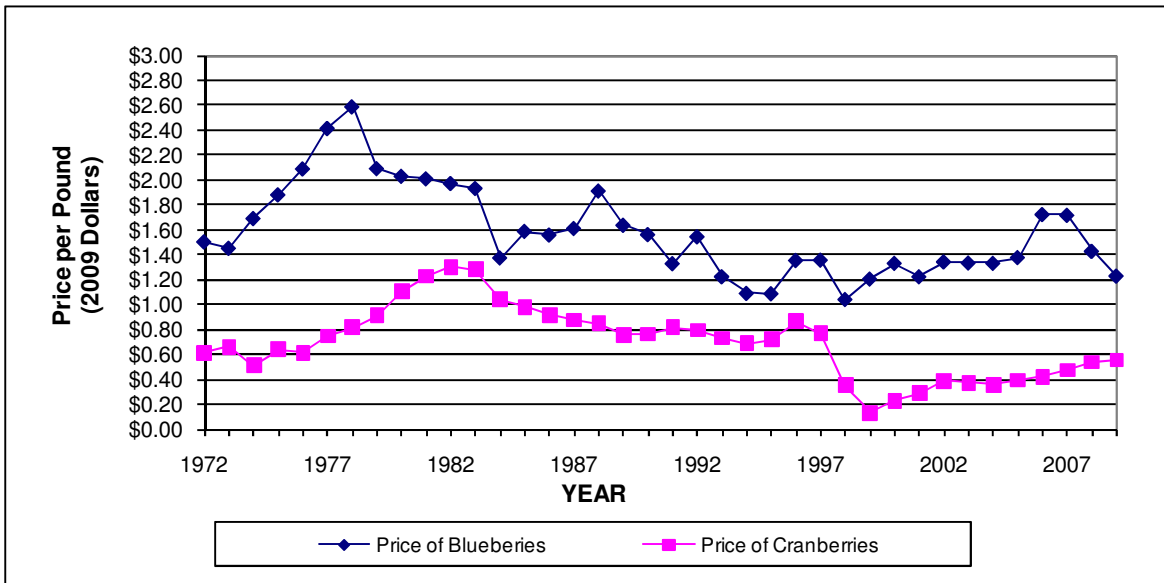
The value in utilized production of cranberries increased for the fourth consecutive year in 2009, rising 12% to \$30.8 million. This increase was due to an increase in both price (+3%) and production (+8.4%) for the year. Cranberry prices finished the year at \$0.56/lb., which marks their highest level since 1997.

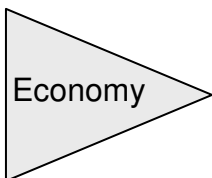
Blueberry prices decreased by 13.9% in 2009, posting a price of \$1.23/lb. Blueberry production also decreased 10% for the year, with the value of utilized production decreasing 23%. This decrease is trailing the 2005-2007 period where the blueberry industry set the record for both the highest level of production and the highest utilized value of production over the entire monitoring period.

Table E6 Sales of New Jersey Farm Products

Year	Sales (In \$1,000 Dollars)			Annual % Change		
	Cranberry	Blueberry	New Jersey	Cranberry	Blueberry	New Jersey
1992	35,498	33,207	1,004,750			
1993	26,985	37,036	1,069,518	-24.0%	11.5%	6.4%
1994	28,855	33,474	1,125,893	6.9%	-9.6%	5.3%
1995	31,935	37,281	1,093,708	10.7%	11.4%	-2.9%
1996	39,297	44,946	1,106,536	23.1%	20.6%	1.2%
1997	44,102	45,493	1,069,150	12.2%	1.2%	-3.4%
1998	18,053	37,366	1,065,791	-59.1%	-17.9%	-0.3%
1999	9,072	46,949	950,072	-49.8%	25.6%	-10.9%
2000	10,419	44,803	1,010,130	14.9%	-4.6%	6.3%
2001	11,631	44,889	982,459	11.6%	0.2%	-2.7%
2002	16,375	55,855	1,006,566	40.8%	24.4%	2.5%
2003	17,941	53,536	998,883	9.6%	-4.2%	-0.8%
2004	13,950	51,780	987,500	-22.2%	-3.3%	-1.1%
2005	19,885	60,867	997,469	42.5%	17.5%	1.0%
2006	20,135	89,590	1,047,521	1.3%	47.2%	5.0%
2007	25,168	92,780	1,108,512	25.0%	3.6%	5.8%
2008	27,874	84,221	1,131,788	10.8%	-9.2%	2.1%
2009	29,970	65,260	1,000,458	7.5%	-22.5%	-11.6%

Figure E6 Cranberry and Blueberry Prices





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 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 decreases 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 contributed 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 agriculture 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 or down 22.9%, and Gloucester -4,091 acres or 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

County	Land in Farming (acres)				Percentage Change			
	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%

County	Number of Farms				Percentage Change			
	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%

County	Average Farm Size (acres)				Percentage Change			
	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)**

County	Agricultural Sales (\$1,000s)				Percentage Change				Agricultural Sales as % of New Jersey			
	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%	-	-	-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)**

County	Total Net Cash Return (1,000's)			Percentage Change			Total Net Cash Return as Pct. of NJ		
	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)**

County	Net Cash Return per Farm			Percentage Change		
	1992	1997	2002	'92-'97	'97-'02	'92-'02
Atlantic	\$35,610	\$41,568	\$61,485	16.7%	47.9%	72.7%
Burlington	\$17,412	\$32,650	\$25,685	87.5%	-21.3%	47.5%
Camden	\$13,650	\$44,321	\$18,495	224.7%	-58.3%	35.5%
Cape May	\$8,136	\$15,347	\$28,325	88.6%	84.6%	248.1%
Cumberland	\$37,734	\$60,414	\$55,441	60.1%	-8.2%	46.9%
Gloucester	\$20,108	\$37,388	\$15,775	85.9%	-57.8%	-21.6%
Ocean	\$4,400	\$13,197	\$7,584	199.9%	-42.5%	72.4%
Pinelands Counties	\$22,621	\$38,480	\$32,620	70.1%	-15.2%	44.2%
Non-Pinelands Counties	\$9,888	\$14,761	\$7,530	49.3%	-49.0%	-23.9%
New Jersey	\$14,243	\$22,839	\$15,879	60.4%	-30.5%	11.5%

Table E7e Farms with Net Losses

County	Farms with Net Losses			Percentage of All Farms with Net Losses		
	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%

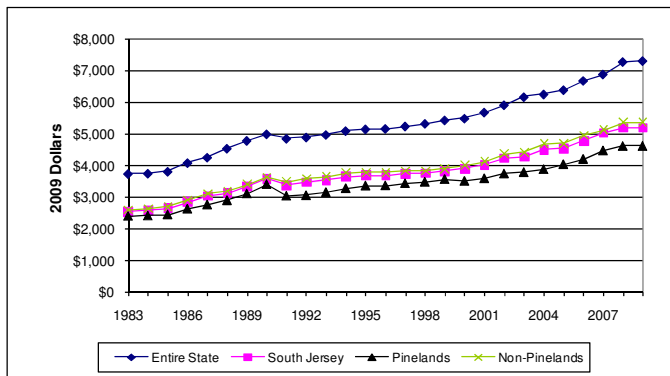
Avg Residential Property Tax Bill X Updated

NJ Dept of Treasury, Division of Taxation 1983 - 1999

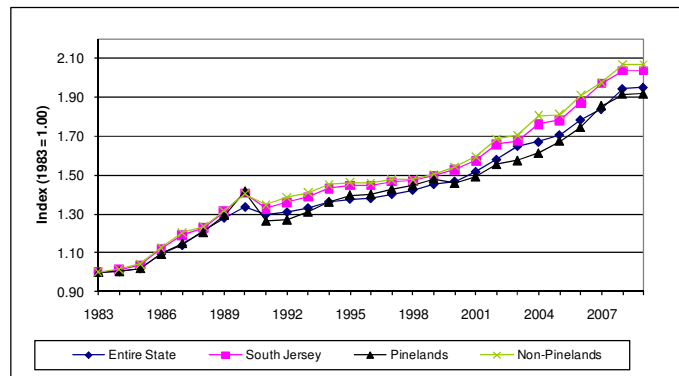
NJ Dept of Community Affairs, Div LGS 2000 - 2009

- Average residential property tax bills in the Pinelands are 58% lower than the statewide average and 16% lower than the Non-Pinelands municipal average.

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 2009 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 1992-2008. 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 2008, real tax rates increased by 40% for the Non-Pinelands versus just 33% for the Pinelands.

Update

The rate of growth for the average residential property tax bill slowed considerably across all regions in 2009. Statewide, average residential property taxes rose just 0.4%, while in Southern New Jersey there was a slight increase of less than 0.02% for the year. Pinelands communities registered a 0.04% increase in average residential property taxes versus a 0.02% increase in the Non-Pinelands. Average residential property taxes in the Pinelands are now \$741 lower than in the Non-Pinelands and \$2,682 lower than the state as a whole. As a result, the gap between the taxes paid in the Pinelands and other regions remains steady in 2009.

The average residential property tax bill in New Jersey, adjusted for inflation, has increased by 52% between 1989 and 2009, from \$4,793 to \$7,308. Within Southern New Jersey, the average Pinelands bill increased by 48% (from \$3,121 to \$4,626) while the average Non-Pinelands bill increased by 57% (from \$3,414 to \$5,368).

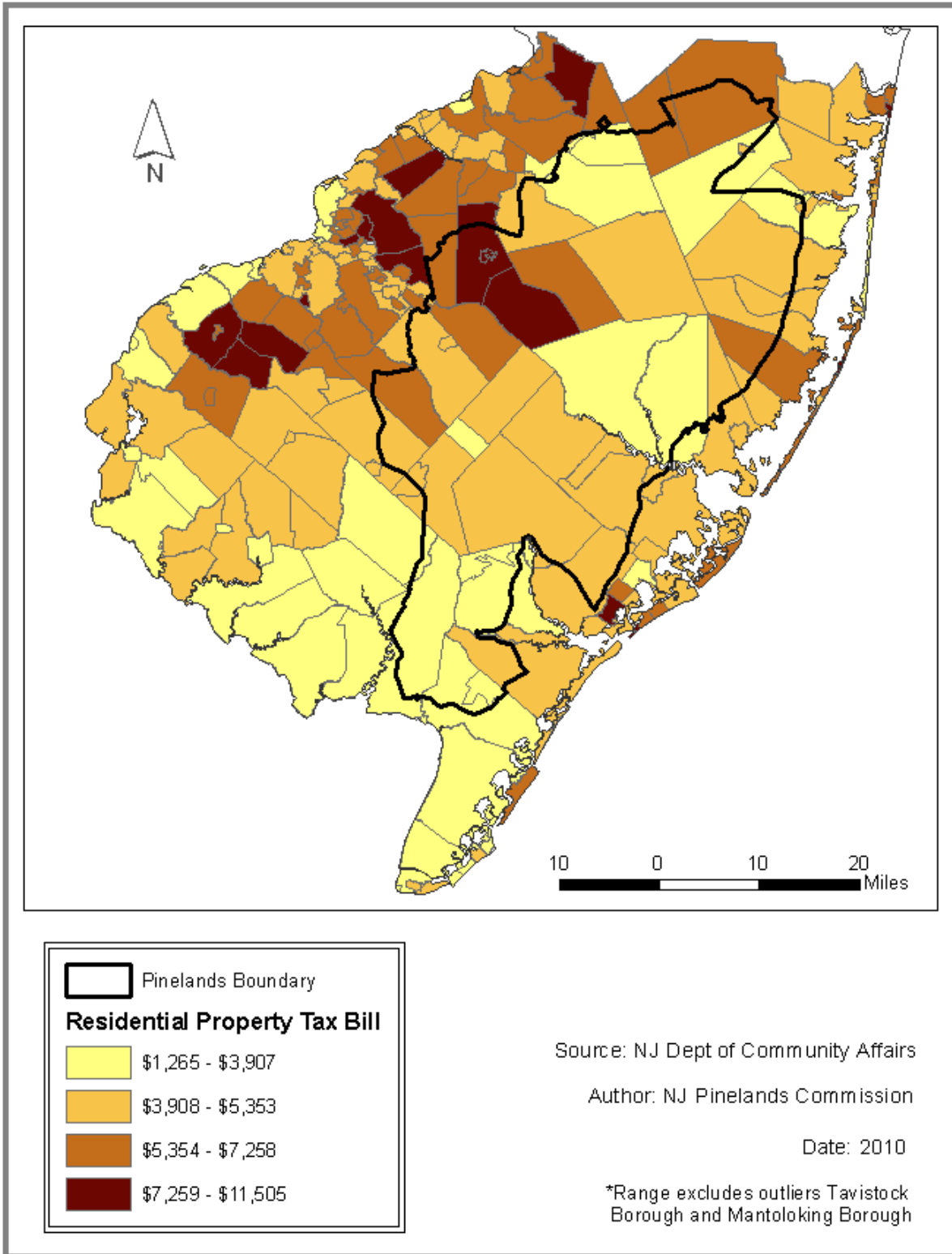
The rapidly growing second ring of suburbs surrounding the Philadelphia metropolitan area experienced the highest increases in average residential property taxes over the past 20 years. Smaller concentrations of increasing tax bills exist in Ocean County and along the shore. The southern, rural municipalities had the smallest increases in property taxes from 1988-2009.

From 2008 to 2009, 7 of the 47 Pinelands municipalities (15%) experienced real tax decreases (Table F1). In the remaining 155 municipalities that comprise the Non-Pinelands, 21 had real tax decreases from 2008 to 2008 (14%).

Table F1 Average Residential Property Tax Bill in the Pinelands

Municipality	County	Avg. Property Tax Bill 2009	Actual Change from 2008	% Change from 2008	South Jersey Rank 2009
Wrightstown Borough	Burlington	\$3,321	\$1,376	70.7%	189
Monroe Township	Gloucester	\$6,113	\$326	5.6%	48
Chesilhurst Borough	Camden	\$4,009	\$318	8.6%	152
Weymouth Township	Atlantic	\$3,669	\$269	7.9%	171
Hamilton Township	Atlantic	\$4,158	\$232	5.9%	141
Mullica Township	Atlantic	\$4,406	\$213	5.1%	133
Buena Vista Township	Atlantic	\$3,952	\$210	5.6%	159
Waterford Township	Camden	\$5,694	\$199	3.6%	65
Lakehurst Borough	Ocean	\$3,958	\$197	5.2%	158
Beachwood Borough	Ocean	\$4,021	\$188	4.9%	150
Plumsted Township	Ocean	\$5,389	\$180	3.5%	75
South Toms River	Ocean	\$3,768	\$176	4.9%	167
Ocean Township	Ocean	\$4,459	\$168	3.9%	131
Egg Harbor Township	Atlantic	\$5,353	\$167	3.2%	78
Estell Manor City	Atlantic	\$3,424	\$145	4.4%	183
Port Republic City	Atlantic	\$4,931	\$143	3.0%	97
Franklin Township	Gloucester	\$4,917	\$135	2.8%	98
Berlin Township	Camden	\$4,838	\$124	2.6%	104
Eagleswood Township	Ocean	\$4,943	\$120	2.5%	96
Little Egg Harbor	Ocean	\$4,259	\$114	2.8%	139
Folsom Borough	Atlantic	\$3,167	\$109	3.6%	194
Stafford Township	Ocean	\$5,384	\$109	2.1%	76
Berkeley Township	Ocean	\$3,655	\$105	3.0%	172
Maurice River Township	Cumberland	\$3,451	\$102	3.1%	180
Hammonton Township	Atlantic	\$4,536	\$90	2.0%	125
Southampton Township	Burlington	\$4,900	\$86	1.8%	101
Dennis Township	Cape May	\$2,635	\$76	3.0%	196
Medford Lakes Borough	Burlington	\$7,806	\$75	1.0%	13
Winslow Township	Camden	\$5,025	\$73	1.5%	91
Shamong Township	Burlington	\$7,386	\$67	0.9%	19
Woodbine Borough	Cape May	\$1,422	\$65	4.8%	201
Medford Township	Burlington	\$8,694	\$64	0.7%	7
Lacey Township	Ocean	\$4,501	\$63	1.4%	128
Pemberton Township	Burlington	\$3,359	\$63	1.9%	188
Egg Harbor City	Atlantic	\$4,960	\$48	1.0%	95
Bass River Township	Burlington	\$3,817	\$41	1.1%	165
Upper Township	Cape May	\$4,017	\$40	1.0%	151
Tabernacle Township	Burlington	\$6,763	\$12	0.2%	26
Jackson Township	Ocean	\$5,892	\$7	0.1%	55
Barnegat Township	Ocean	\$5,107	\$0	0.0%	86
Buena Borough	Atlantic	\$4,197	-\$17	-0.4%	140
Evesham Township	Burlington	\$6,602	-\$33	-0.5%	31
Galloway Township	Atlantic	\$4,268	-\$45	-1.1%	138
New Hanover Township	Burlington	\$3,897	-\$52	-1.3%	161
Manchester Township	Ocean	\$3,246	-\$108	-3.2%	191
Washington Township	Burlington	\$3,428	-\$110	-3.1%	182
Woodland Township	Burlington	\$4,531	-\$134	-2.9%	126
<i>“Outside Municipalities”</i>					
North Hanover	Burlington	\$5,914	\$612	11.5%	54
Berlin Borough	Camden	\$6,081	\$322	5.6%	51
Vineland City	Cumberland	\$3,829	\$58	1.5%	164
Springfield Township	Burlington	\$7,082	-\$15	-0.2%	22
Corbin City	Atlantic	\$3,988	-\$294	-6.9%	156

Figure F1 Average Residential Property Tax Bill in 2009*



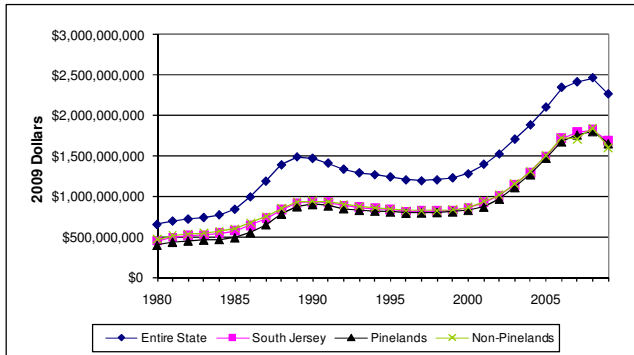
State Equalized Valuation

NJ Dept of Community Affairs, Div LGS 1980 - 1993

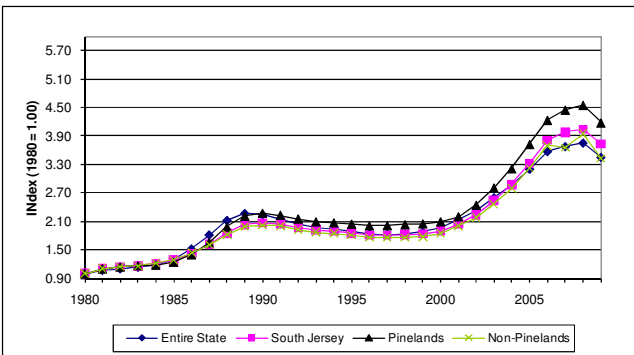
NJ Dept of Treasury, Division of Taxation 1994 – 2009

- In 2009, the average equalized property value decreased by more than 7% in all regions (Pinelands -8.2%, Non-Pinelands -13.3%, Statewide -8.1%).

Average State Equalized Valuation (2009 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 2009 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 2008 in all regions.

Update

After 11 consecutive years of increasing property values statewide, all regions experienced a decline in equalized property values in 2009. The decline in valuation for the average Non-Pinelands municipality was slightly more than in the Pinelands (-13.3% versus -8.2%). Statewide, equalized property values mirrored the 8.2% 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 \$1.65 billion in 2009, compared to an average of \$1.60 billion for the average Non-Pinelands municipality. This marks the second time in the program's entire monitoring period that the valuation for the average Pinelands municipality is greater than the average Non-Pinelands municipalities, with the first being in 2007.

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 2009 equalized values were divided by 2009 population estimates for each region. The results show that the state has a higher equalized value per capita than Southern New Jersey (\$147,109 versus \$140,785), while the Pinelands region has a much lower per capita value compared to the Non-Pinelands region (\$113,088 versus \$151,730). The Pinelands municipalities exhibit a great deal of variation, with per capita values ranging from a high of \$198,028 in Upper Township to a low of \$10,123 in New Hanover (Table F2).

Table F2 Equalized Value and Equalized Value Per Capita 2009

Municipality	County	Pop Est 2009	Equalized Value 2009*	Eq Value Per Capita*
Upper Twp	Cape May County	11030	\$2,184,000,000	\$198,028
Stafford Twp	Ocean County	26818	\$4,844,000,000	\$180,627
Dennis Twp	Cape May County	5758	\$969,000,000	\$168,304
Washington Twp	Burlington County	649	\$106,000,000	\$162,650
Lacey Twp	Ocean County	26566	\$4,247,000,000	\$159,852
Ocean Twp	Ocean County	9121	\$1,441,000,000	\$157,943
Eagleswood Twp	Ocean County	1703	\$264,000,000	\$154,991
Medford Twp	Burlington County	22726	\$3,269,000,000	\$143,865
Little Egg Harbor Twp	Ocean County	20824	\$2,877,000,000	\$138,137
Berkeley Twp	Ocean County	42975	\$5,900,000,000	\$137,285
Jackson Twp	Ocean County	53191	\$6,926,000,000	\$130,218
Evesham Twp	Burlington County	45370	\$5,644,000,000	\$124,403
Bass River Twp	Burlington County	1541	\$191,000,000	\$124,075
Egg Harbor Twp	Atlantic County	40239	\$4,753,000,000	\$118,116
Port Republic City	Atlantic County	1216	\$144,000,000	\$118,099
Woodland Twp	Burlington County	1351	\$159,000,000	\$118,001
Medford Lakes Boro	Burlington County	4110	\$483,000,000	\$117,508
Southampton Twp	Burlington County	10865	\$1,275,000,000	\$117,332
Plumsted Twp	Ocean County	8292	\$966,000,000	\$116,475
Hammonton Town	Atlantic County	13433	\$1,526,000,000	\$113,622
Shamong Twp	Burlington County	6723	\$758,000,000	\$112,753
Barneгат Twp	Ocean County	22643	\$2,537,000,000	\$112,025
Estell Manor City	Atlantic County	1724	\$191,000,000	\$110,704
Tabernacle Twp	Burlington County	7170	\$792,000,000	\$110,477
Berlin Twp	Camden County	5457	\$589,000,000	\$107,922
Hamilton Twp	Atlantic County	24326	\$2,594,000,000	\$106,625
Manchester Twp	Ocean County	41848	\$4,298,000,000	\$102,696
Folsom Boro	Atlantic County	1908	\$188,000,000	\$98,827
Galloway Twp	Atlantic County	36578	\$3,615,000,000	\$98,762
Mullica Twp	Atlantic County	6052	\$590,000,000	\$97,428
Beachwood Boro	Ocean County	10881	\$1,009,000,000	\$92,703
Monroe Twp	Gloucester County	33276	\$2,896,000,000	\$87,043
Buena Vista Twp	Atlantic County	7360	\$637,000,000	\$86,584
Waterford Twp	Camden County	10688	\$905,000,000	\$84,638
Franklin Twp	Gloucester County	17368	\$1,463,000,000	\$84,214
Weymouth Twp	Atlantic County	2254	\$180,000,000	\$79,891
Buena Boro	Atlantic County	3724	\$296,000,000	\$79,604
Winslow Twp	Camden County	39600	\$3,024,000,000	\$76,362
South Toms River Boro	Ocean County	3727	\$279,000,000	\$74,982
Woodbine Boro	Cape May County	2500	\$180,000,000	\$72,157
Lakehurst Boro	Ocean County	2719	\$192,000,000	\$70,513
Wrightstown Boro	Burlington County	735	\$51,000,000	\$69,477
Egg Harbor City	Atlantic County	4378	\$299,000,000	\$68,278
Pemberton Twp	Burlington County	27986	\$1,636,000,000	\$58,448
Chesilhurst Boro	Camden County	1936	\$88,000,000	\$45,421
Maurice River Twp	Cumberland County	8196	\$365,000,000	\$44,521
New Hanover Twp	Burlington County	9429	\$95,000,000	\$10,123
<i>"Outside" Municipalities</i>				
Springfield Twp	Burlington County	3454	\$460,000,000	\$133,062
Berlin Boro	Camden County	7943	\$783,000,000	\$98,610
Corbin City	Atlantic County	531	\$46,000,000	\$86,429
Vineland City	Cumberland County	59195	\$3,878,000,000	\$65,511
No Hanover Twp	Burlington County	7368	\$458,000,000	\$62,198

* Values have been rounded. Shown in 2009 dollars.

Effective Tax Rate

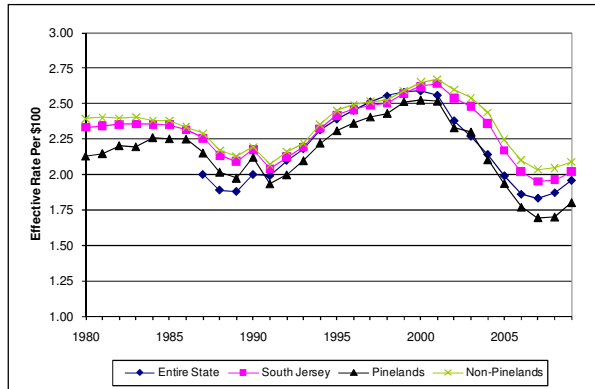
X Updated

NJ Dept of Treasury, Division of Taxation 1994 - 2001

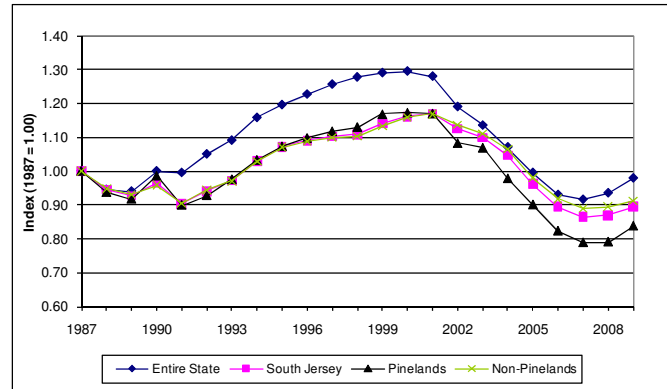
NJ Dept of Community Affairs, Div LGS 1980 - 93, 2002 - 09

- In 2009, effective tax rates increased across all regions and the Pinelands region continues the trend of having the lowest effective tax rate. (Pinelands 1.8, Non-Pinelands 2.09)

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 began to slowly rise in 2008.

Update

In 2009, effective tax rates rose across all regions. Statewide, New Jersey posted an increase of 4.7% in effective tax rates, rising from 1.87 in 2008 to 1.95 in 2009. In Southern New Jersey, effective tax rates rose 2.1% in the Non-Pinelands (from 2.05 to 2.09) and rose 6.0% in the Pinelands (from 1.70 to 1.8). 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, no Pinelands municipalities have a rate higher than 3.00. By contrast, in the Non-Pinelands, 15 municipalities have effective tax rates above 3.00, which represents 10% of the Non-Pinelands municipalities. The majority of municipalities with rates above 3.00 are clustered in Camden County (Figure F3).

Figure F3 Effective Tax Rates 2009

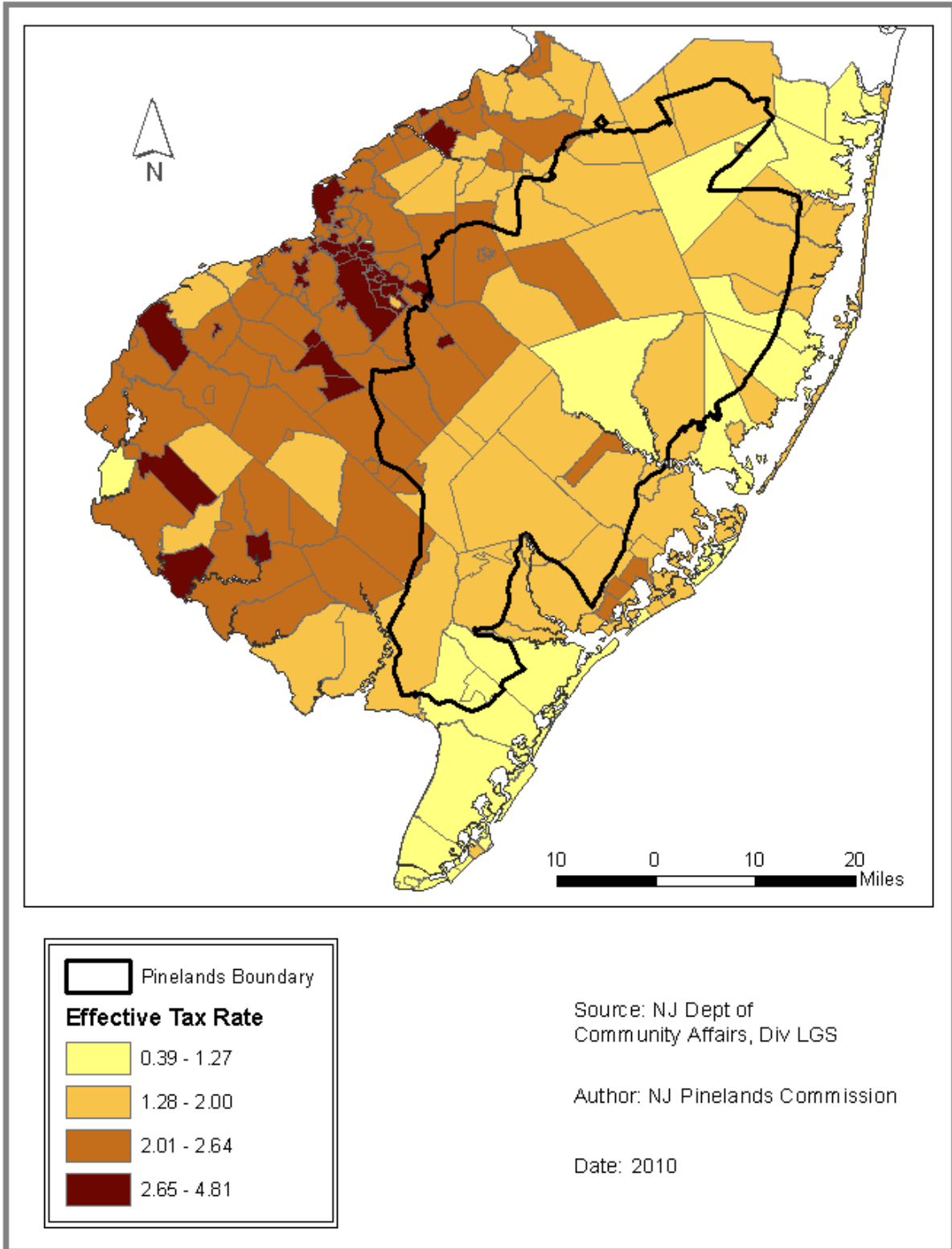


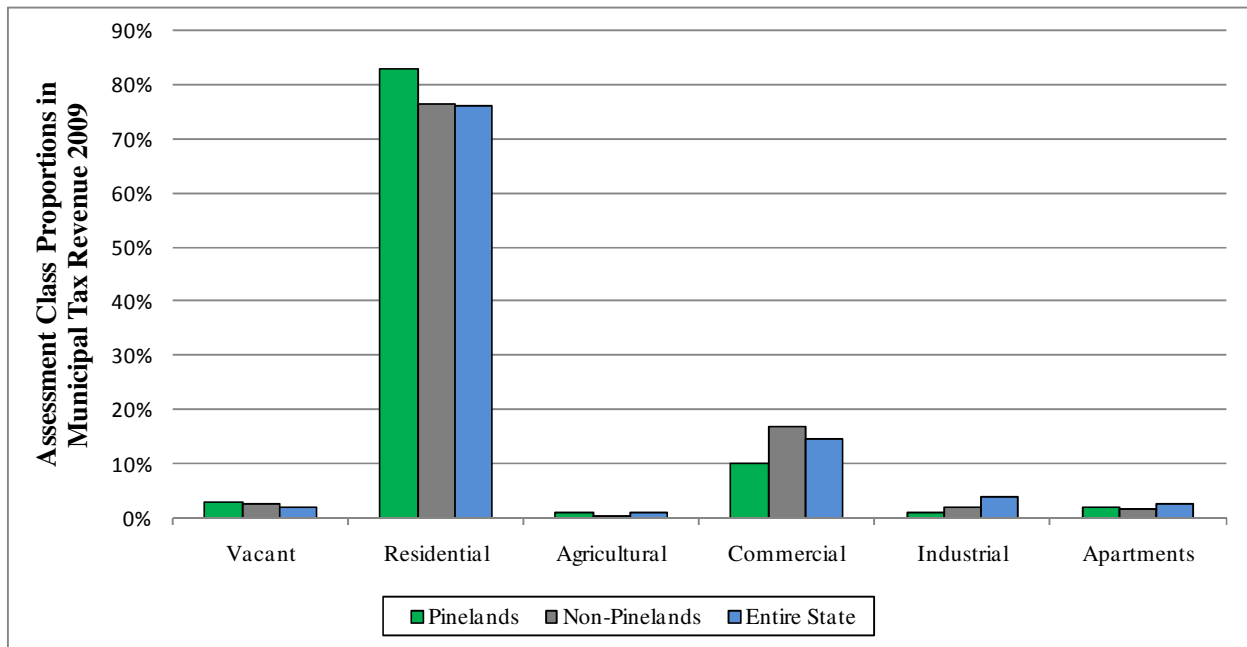
Table F3 Effective Tax Rates 2009

Municipality	County	Effective Tax Rate	South Jersey Rank
Chesilhurst Borough	Camden	2.78	28
Berlin Township	Camden	2.73	33
Monroe Township	Gloucester	2.56	43
Egg Harbor City	Atlantic	2.54	47
Medford Lakes Borough	Burlington	2.50	50
Waterford Township	Camden	2.50	52
Winslow Township	Camden	2.40	60
Buena Borough	Atlantic	2.27	77
Medford Township	Burlington	2.24	81
Evesham Township	Burlington	2.22	85
Franklin Township	Gloucester	2.18	88
Wrightstown Borough	Burlington	2.06	100
Tabernacle Township	Burlington	2.05	101
Maurice River Township	Cumberland	2.01	108
Shamong Township	Burlington	1.99	113
Hamilton Township	Atlantic	1.97	115
Egg Harbor Township	Atlantic	1.95	117
Hammonton Township	Atlantic	1.92	118
Southampton Township	Burlington	1.87	125
Galloway Township	Atlantic	1.84	127
Buena Vista Township	Atlantic	1.82	129
Pemberton Township	Burlington	1.81	130
Mullica Township	Atlantic	1.75	135
Eagleswood Township	Ocean	1.69	141
South Toms River Borough	Ocean	1.68	142
Jackson Township	Ocean	1.68	143
Lakehurst Borough	Ocean	1.68	144
Woodland Township	Burlington	1.66	145
Weymouth Township	Atlantic	1.63	146
Port Republic City	Atlantic	1.62	147
Little Egg Harbor Township	Ocean	1.58	150
Stafford Township	Ocean	1.56	152
Manchester Township	Ocean	1.51	153
Beachwood Borough	Ocean	1.51	154
Plumsted Township	Ocean	1.50	155
Berkeley Township	Ocean	1.46	157
New Hanover Township	Burlington	1.45	158
Lacey Township	Ocean	1.42	161
Estell Manor City	Atlantic	1.41	163
Ocean Township	Ocean	1.39	164
Folsom Borough	Atlantic	1.36	166
Bass River Township	Burlington	1.34	168
Washington Township	Burlington	1.21	173
Upper Township	Cape May	1.19	175
Dennis Township	Cape May	1.17	176
Woodbine Borough	Cape May	1.15	178
Barnegat	Ocean	0.72	190
<i>"Outside" Municipalities</i>			
Berlin Borough	Camden	2.33	69
Vineland City	Cumberland	2.11	99
Springfield Township	Burlington	2.05	102
Corbin City	Atlantic	1.84	126
North Hanover Township	Burlington	1.58	151

Assessment Class Proportions in Municipal Tax Revenues

NJ Dept of Community Affairs, Div LGS 1980 – 1994, 2002 - 2009

- The vacant land category in the Pinelands has declined 6.7% from 1989 to 2009. Over the same period, the residential category has increased 12.3%.



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 1989, 1999, and 2009. 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 10.1% of total Pinelands assessed value in 1989, but dropped to 5.1% in 1999 and declined even further to 3.3% in 2009. 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 70.7% in 1989, to 79.6% in 1999, to

83.0% in 2009. The percentage of assessment in apartments and commercial land has remained relatively steady between 1989 and 2009, while the percentage of industrial and agricultural assessed value has decreased.

As of 2009, the Pinelands municipalities of Medford Lakes Borough, Beachwood Borough, Tabernacle Township, Ocean Township, Berkeley Township, Shamong Township, and Port Republic City have the highest percentage of assessed value in the residential category (above 90%) in the Pinelands. Wrightstown Borough and Berlin Township have the lowest percentage of assessed value in the residential category (below 60%).

Table F4a Assessment Class Proportions in Municipal Valuations

	1989	1999	2009	Change from 1989- 2009
Pinelands				
Vacant	10.10%	5.10%	3.3%	-6.79%
Residential	70.70%	79.60%	83.0%	12.30%
Agricultural	3.30%	1.30%	0.9%	-2.40%
Commercial	10.60%	10.80%	9.8%	-0.81%
Industrial	2.10%	1.30%	1.0%	-1.10%
Apartments	2.00%	2.00%	1.9%	-0.10%
Non-Pinelands				
Vacant	4.10%	2.70%	2.7%	-1.40%
Residential	69.00%	72.40%	76.5%	7.50%
Agricultural	4.30%	0.70%	0.5%	-3.80%
Commercial	14.00%	18.70%	17%	3.00%
Industrial	4.60%	3.20%	2%	-2.60%
Apartments	3.20%	2.20%	1.6%	-1.60%
State				
Vacant	4.00%	2.70%	2.0%	-1.96%
Residential	66.80%	72.30%	76.0%	9.22%
Agricultural	1.10%	0.90%	1.0%	-0.06%
Commercial	15.90%	15.40%	14.6%	-1.34%
Industrial	8.40%	5.90%	3.8%	-4.56%
Apartments	3.90%	2.90%	2.7%	-1.18%

Table F4b Assessment Class Proportions for Pinelands Municipalities - 2009

Municipality	County	Vacant	Residential	Agricultural	Commercial	Industrial	Apartments
Medford Lakes Borough	Burlington	0.2%	97.9%	0.0%	1.9%	0.0%	0.0%
Ocean Township	Ocean	1.4%	96.4%	0.0%	1.8%	0.0%	0.5%
Beachwood Borough	Ocean	1.9%	94.7%	0.0%	3.3%	0.0%	0.2%
Tabernacle Township	Burlington	1.3%	93.0%	2.7%	2.9%	0.1%	0.0%
Shamong Township	Burlington	1.2%	92.6%	3.9%	2.0%	0.3%	0.0%
Berkeley Township	Ocean	1.7%	92.2%	0.0%	4.8%	0.4%	0.9%
Port Republic City	Atlantic	3.0%	92.1%	1.6%	3.3%	0.0%	0.0%
Little Egg Harbor Township	Ocean	4.7%	89.7%	0.1%	5.4%	0.0%	0.1%
Winslow Township	Camden	2.2%	87.1%	1.7%	6.1%	1.2%	1.8%
Pemberton Township	Burlington	2.0%	87.0%	2.0%	6.3%	0.5%	2.1%
Medford Township	Burlington	1.0%	87.0%	1.3%	8.4%	0.5%	1.7%
Barneгат Township	Ocean	5.5%	86.9%	0.1%	5.7%	0.2%	1.5%
Waterford Township	Camden	2.3%	86.6%	2.9%	7.4%	0.3%	0.5%
Stafford Township	Ocean	3.3%	86.1%	0.0%	10.4%	0.0%	0.1%
Mullica Township	Atlantic	4.8%	85.8%	3.0%	5.2%	0.9%	0.2%
Jackson Township	Ocean	3.7%	85.3%	0.4%	8.5%	0.7%	1.4%
Plumsted Township	Ocean	2.8%	85.1%	5.0%	5.8%	0.8%	0.4%
Chesilhurst Borough	Camden	8.4%	85.0%	0.0%	5.2%	0.9%	0.5%
Upper Township	Cape May	4.4%	85.0%	0.6%	8.8%	1.1%	0.1%
Southampton Township	Burlington	1.5%	84.7%	6.3%	6.7%	0.8%	0.0%
Franklin Township	Gloucester	3.1%	84.2%	4.8%	7.7%	0.0%	0.2%
Lacey Township	Ocean	3.4%	84.1%	0.1%	7.1%	5.2%	0.1%
Monroe Township	Gloucester	3.1%	83.9%	1.1%	10.3%	0.5%	1.2%
Estell Manor City	Atlantic	7.6%	83.7%	3.9%	2.9%	1.3%	0.6%
South Toms River Borough	Ocean	2.1%	83.7%	0.0%	14.0%	0.1%	0.0%
Lakehurst Borough	Ocean	1.8%	82.6%	0.0%	15.3%	0.0%	0.3%
Weymouth Township	Atlantic	5.6%	82.6%	0.2%	10.0%	0.2%	1.5%
Galloway Township	Atlantic	3.8%	81.0%	0.9%	11.8%	0.5%	1.9%
Maurice River Township	Cumberland	4.8%	79.1%	3.5%	5.6%	6.7%	0.3%
Buena Vista Township	Atlantic	5.9%	78.9%	5.1%	7.8%	2.2%	0.0%
Egg Harbor City	Atlantic	2.3%	78.6%	0.0%	14.2%	2.7%	2.3%
Dennis Township	Cape May	6.0%	77.7%	1.6%	14.7%	0.0%	0.0%
Evesham Township	Burlington	0.7%	77.3%	0.3%	15.7%	0.9%	5.2%
Egg Harbor Township	Atlantic	4.9%	77.0%	0.2%	16.5%	1.1%	0.3%
Buena Borough	Atlantic	3.3%	75.5%	6.6%	9.9%	1.8%	2.9%
Woodland Township	Burlington	5.4%	75.0%	10.7%	3.3%	5.5%	0.0%
Bass River Township	Burlington	5.9%	74.4%	3.4%	16.2%	0.0%	0.0%
Folsom Borough	Atlantic	4.2%	74.3%	1.8%	8.1%	11.6%	0.0%
Manchester Township	Ocean	5.2%	74.3%	0.1%	9.0%	0.7%	10.7%
Washington Township	Burlington	3.5%	74.2%	8.3%	12.1%	1.9%	0.0%
Woodbine Borough	Cape May	4.7%	73.9%	2.5%	13.4%	2.7%	2.8%
Eagleswood Township	Ocean	13.3%	73.2%	0.1%	11.8%	1.4%	0.2%
Hammonton Town	Atlantic	2.2%	73.1%	3.5%	17.9%	2.4%	0.9%
New Hanover Township	Burlington	3.2%	68.6%	7.3%	20.7%	0.1%	0.0%
Hamilton Township	Atlantic	5.2%	67.1%	0.7%	21.5%	1.2%	4.3%
Berlin Township	Camden	3.3%	51.5%	0.1%	34.3%	9.7%	1.2%
Wrightstown Borough	Burlington	3.6%	48.6%	0.0%	34.8%	0.9%	12.0%
"Outside" Munis							
Corbin City	Atlantic	5.4%	83.5%	1.0%	10.1%	0.0%	0.0%
Berlin Borough	Camden	2.4%	81.2%	0.1%	14.0%	1.6%	0.7%
Springfield Township	Burlington	1.7%	72.8%	14.8%	10.8%	0.0%	0.0%
North Hanover Township	Burlington	1.9%	72.3%	10.3%	12.5%	0.0%	3.0%
Vineland City	Cumberland	1.5%	70.0%	1.9%	17.9%	6.3%	2.4%

Local Municipal Purpose Revenues

NJ Dept of Community Affairs, Div LGS 1998 - 2009
Individual SJ County Tax Divisions 1995 - 1997

X Updated

- In 2009, municipal budgets decreased at a 5% rate in the Pinelands and Non-Pinelands region. Total municipal state aid decreased 4% in the Pinelands while falling by 6% in the Non-Pinelands.

	Local Municipal Budget*	Budget Per Capita	Population Estimate	State Aid	State Aid Per Capita
Pinelands 1999	\$468,826,747	\$768	610,785	\$127,238,705	\$208
Pinelands 2009	\$566,075,873	\$822	688,964	\$102,487,815	\$149
Change	21%	7%	13%	-19%	-28%
Non-Pinelands 1999	\$1,852,750,703	\$1,130	1,639,053	\$362,963,502	\$221
Non-Pinelands 2009	\$2,180,454,474	\$1,260	1,730,511	\$273,262,714	\$158
Change	18%	12%	6%	-25%	-29%

* = 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 2009.

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 Non-Pinelands and Pinelands municipalities both decreased by 5% in 2009. This is trailing an approximately 20% increase in total municipal budgets for Non-Pinelands and Pinelands municipalities the previous year. When examined on a per capita basis, the Non-Pinelands municipal budgets are 53% higher than those in the Pinelands (\$1,260 in the Non-Pinelands versus \$822 in the Pinelands).

Total municipal state aid decreased 4% in the Pinelands while falling by 6% in the Non-Pinelands in 2009. Since 2000, municipal budgets in the Pinelands have increased by 20% while budgets in the Non-Pinelands have increased by 17%. Over the same period, state aid has been cut by 17% for the Pinelands municipalities and by 23% for the Non-Pinelands municipalities. (Table F5a)

Among Pinelands municipalities, there were six who have budgets per capita over \$1,500: Woodland Township, Woodbine Township, Egg Harbor City, Chesilhurst Borough, Washington Township, and Wrightstown Borough. In contrast, five Pinelands municipalities have budgets per capita less than \$500: New Hanover Township, Shamong Township, Plumsted Township, Maurice River Township, and Tabernacle Township. (Table F5b)

Table F5a Local Municipal Purpose Revenues and State Aid for Pinelands and Non-Pinelands Regions (2009\$)

Region	Year	Local Municipal Purposes	Misc Revenues	Total Municipal Budget	Budget Per Capita	Population Estimate	State Aid	Aid Per Capita
Pines	1995	\$154,481,522.44	\$300,996,082.75	\$455,477,606.28	\$780	584,232		
Pines	1996	\$159,328,302.42	\$298,483,938.59	\$457,812,242.11	\$774	591,420		
Pines	1997	\$164,368,803.36	\$298,272,623.50	\$462,641,426.86	\$774	597,454		
Pines	1998	\$170,089,573.28	\$297,459,651.23	\$467,549,225.61	\$773	604,928		
Pines	1999	\$177,901,001.65	\$290,925,745.54	\$468,826,747.19	\$768	610,785	\$127,238,705.68	\$208
Pines	2000	\$181,336,767.80	\$288,969,079.71	\$470,305,845.31	\$764	615,984	\$123,899,637.06	\$201
Pines	2001	\$194,937,151.33	\$295,312,368.71	\$490,249,518.94	\$777	630,550	\$127,234,402.06	\$202
Pines	2002	\$203,283,835.85	\$299,127,954.91	\$502,411,790.76	\$780	643,787	\$119,877,300.54	\$186
Pines	2003	\$216,510,479.47	\$294,613,688.10	\$511,124,166.48	\$777	657,971	\$123,976,009.27	\$188
Pines	2004	\$230,841,804.28	\$295,352,186.50	\$526,193,990.78	\$785	670,666	\$118,189,915.87	\$176
Pines	2005	\$244,273,376.70	\$308,216,243.19	\$552,489,617.69	\$817	675,977	\$119,510,312.33	\$177
Pines	2006	\$256,998,210.35	\$303,926,031.90	\$560,924,242.25	\$830	675,977	\$112,905,659.03	\$167
Pines	2007	\$281,057,291.41	\$212,740,412.16	\$493,797,702.54	\$723	683,374	\$114,761,739.56	\$168
Pines	2008	\$299,925,606.00	\$297,543,227.15	\$597,468,833.15	\$874	683,374	\$107,203,075.13	\$157
Pines	2009	\$296,028,669.00	\$270,047,204.00	\$566,075,873.00	\$822	688,964	\$102,487,815.00	\$149
NonPines	1995	\$831,837,358.55	\$993,969,564.51	\$1,825,806,921.96	\$1,140	1,601,776		
NonPines	1996	\$832,339,676.99	\$982,426,045.83	\$1,814,765,722.82	\$1,125	1,612,610		
NonPines	1997	\$834,274,800.59	\$986,008,076.82	\$1,820,282,877.41	\$1,122	1,622,388		
NonPines	1998	\$847,500,057.22	\$1,009,245,568.53	\$1,856,745,625.75	\$1,139	1,630,733		
NonPines	1999	\$865,100,617.26	\$987,650,086.96	\$1,852,750,703.12	\$1,130	1,639,053	\$362,963,502.00	\$221
NonPines	2000	\$864,259,381.78	\$996,163,905.91	\$1,860,423,287.70	\$1,129	1,647,532	\$355,341,370.26	\$216
NonPines	2001	\$859,947,191.89	\$995,120,924.92	\$1,855,068,116.80	\$1,117	1,660,123	\$358,644,914.83	\$216
NonPines	2002	\$908,223,153.75	\$1,014,935,457.09	\$1,923,158,611.94	\$1,146	1,678,078	\$359,355,419.96	\$214
NonPines	2003	\$945,729,807.02	\$1,008,457,128.64	\$1,954,186,935.66	\$1,154	1,692,777	\$347,538,101.43	\$205
NonPines	2004	\$986,736,740.10	\$1,060,615,028.35	\$2,047,351,767.36	\$1,200	1,706,338	\$343,718,780.01	\$201
NonPines	2005	\$1,046,706,683.78	\$1,103,857,152.09	\$2,150,563,836.97	\$1,256	1,711,841	\$340,536,108.73	\$199
NonPines	2006	\$1,074,136,052.18	\$1,027,164,757.26	\$2,101,300,809.44	\$1,226	1,714,539	\$324,149,130.32	\$189
NonPines	2007	\$1,146,154,922.99	\$770,756,857.98	\$1,916,911,779.94	\$1,116	1,717,084	\$327,182,112.59	\$191
NonPines	2008	\$1,226,306,640.66	\$1,072,302,743.00	\$2,298,609,383.66	\$1,339	1,717,084	\$289,477,525.63	\$169
NonPines	2009	\$1,250,588,988.00	\$929,865,486.00	\$2,180,454,474.00	\$1,260	1,730,511	\$273,262,714.00	\$158

Table F5b Local Municipal Purpose Revenues and State Aid for Pinelands Municipalities in 2009

Municipality	County	Pop Est 2009	Municipal Budget*	State Aid	Budget Per Capita	Aid Per Capita
Wrightstown Borough	Burlington	735	\$2,056,937	\$489,060	\$2,799	\$665
Washington Township	Burlington	649	\$1,462,931	\$1,267,597	\$2,254	\$1,953
Chesilhurst Borough	Camden	1,936	\$3,183,577	\$804,871	\$1,644	\$416
Egg Harbor City	Atlantic	4,378	\$6,965,935	\$553,538	\$1,591	\$126
Woodbine Borough	Cape May	2,500	\$3,958,502	\$377,890	\$1,583	\$151
Woodland Township	Burlington	1,351	\$2,039,084	\$1,376,813	\$1,509	\$1,019
Lakehurst Borough	Ocean	2,719	\$3,873,348	\$353,270	\$1,425	\$130
Berlin Township	Camden	5,457	\$7,691,852	\$1,554,441	\$1,410	\$285
Stafford Township	Ocean	26,818	\$37,722,647	\$3,405,915	\$1,407	\$127
Medford Lakes Borough	Burlington	4,110	\$4,820,492	\$373,383	\$1,173	\$91
Eagleswood Township	Ocean	1,703	\$1,902,450	\$268,321	\$1,117	\$158
Upper Township	Cape May	11,030	\$11,803,698	\$6,771,173	\$1,070	\$614
Estell Manor City	Atlantic	1,724	\$1,840,016	\$473,988	\$1,067	\$275
Hamilton Township	Atlantic	24,326	\$25,475,510	\$3,784,876	\$1,047	\$156
Ocean Township	Ocean	9,121	\$9,458,521	\$793,308	\$1,037	\$86.98
Medford Township	Burlington	22,726	\$23,390,100	\$2,637,430	\$1,029	\$116
Monroe Township	Gloucester	33,276	\$34,003,037	\$5,407,080	\$1,022	\$162
Little Egg Harbor Township	Ocean	20,824	\$20,374,296	\$1,862,506	\$978	\$89
Lacey Township	Ocean	26,566	\$25,758,626	\$12,295,373	\$970	\$463
Waterford Township	Camden	10,688	\$10,190,434	\$1,732,261	\$953	\$162
South Toms River Borough	Ocean	3,727	\$3,535,129	\$395,786	\$949	\$106
Buena Borough	Atlantic	3,724	\$3,466,161	\$540,569	\$931	\$145
Bass River Township	Burlington	1,541	\$1,429,500	\$394,683	\$928	\$256
Mullica Township	Atlantic	6,052	\$5,547,004	\$655,012	\$917	\$108
Hammonton Town	Atlantic	13,433	\$12,226,759	\$1,649,628	\$910	\$123
Berkeley Township	Ocean	42,975	\$38,016,579	\$5,576,090	\$885	\$130
Dennis Township	Cape May	5,758	\$4,992,382	\$1,939,277	\$867	\$337
Barneгат Township	Ocean	22,643	\$19,480,131	\$460,316	\$860	\$20
Pemberton Township	Burlington	27,986	\$24,033,500	\$3,605,825	\$859	\$129
Port Republic City	Atlantic	1,216	\$1,034,388	\$220,602	\$851	\$181
Egg Harbor Township	Atlantic	40,239	\$33,352,115	\$6,965,260	\$829	\$173
Beachwood Borough	Ocean	10,881	\$8,945,093	\$857,772	\$822	\$79
Jackson Township	Ocean	53,191	\$40,575,652	\$4,415,616	\$763	\$83
Winslow Township	Camden	39,600	\$28,516,605	\$7,849,598	\$720	\$198
Evesham Township	Burlington	45,370	\$32,473,792	\$4,149,298	\$716	\$91
Manchester Township	Ocean	41,848	\$29,476,331	\$4,191,101	\$704	\$100
Galloway Township	Atlantic	36,578	\$23,835,926	\$3,465,784	\$652	\$95
Franklin Township	Gloucester	17,368	\$11,184,458	\$1,879,749	\$644	\$108
Folsom Borough	Atlantic	1,908	\$1,228,447	\$241,530	\$644	\$127
Weymouth Township	Atlantic	2,254	\$1,443,368	\$367,172	\$640	\$163
Southampton Township	Burlington	10,865	\$6,763,551	\$1,618,089	\$623	\$149
Buena Vista Township	Atlantic	7,360	\$4,220,467	\$932,747	\$573	\$127
Tabernacle Township	Burlington	7,170	\$3,421,419	\$868,915	\$477	\$121
Maurice River Township	Cumberland	8,196	\$3,664,293	\$1,188,461	\$447	\$145
Plumsted Township	Ocean	8,292	\$3,615,149	\$617,617	\$436	\$74
Shamong Township	Burlington	6,723	\$2,730,742	\$811,017	\$406	\$121
New Hanover Township	Burlington	9,429	\$2,216,870	\$1,013,321	\$235	\$107
<i>"Outside" Municipalities</i>						
Corbin City	Atlantic	531	\$670,736	\$155,320	\$1,263	\$293
North Hanover Township	Burlington	7,368	\$3,281,215	\$1,014,011	\$445	\$138
Springfield Township	Burlington	3,454	\$3,406,729	\$550,259	\$986	\$159
Berlin Borough	Camden	5,457	\$6,866,340	\$898,255	\$1,258	\$165
Vineland City	Cumberland	59,195	\$64,891,395	\$7,803,219	\$1,096	\$132

* Municipal budget = Local Municipal Purpose Revenues + Miscellaneous Revenue

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Appendix B. Previous Special Studies

Value-Added Blueberry Products Study

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.

Housing Task Force Study

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.

Pinelands Development Credit Supply & Demand Study

In the fall of 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 2009; the mean sales price for a development right in 2009 was just over \$15,000.

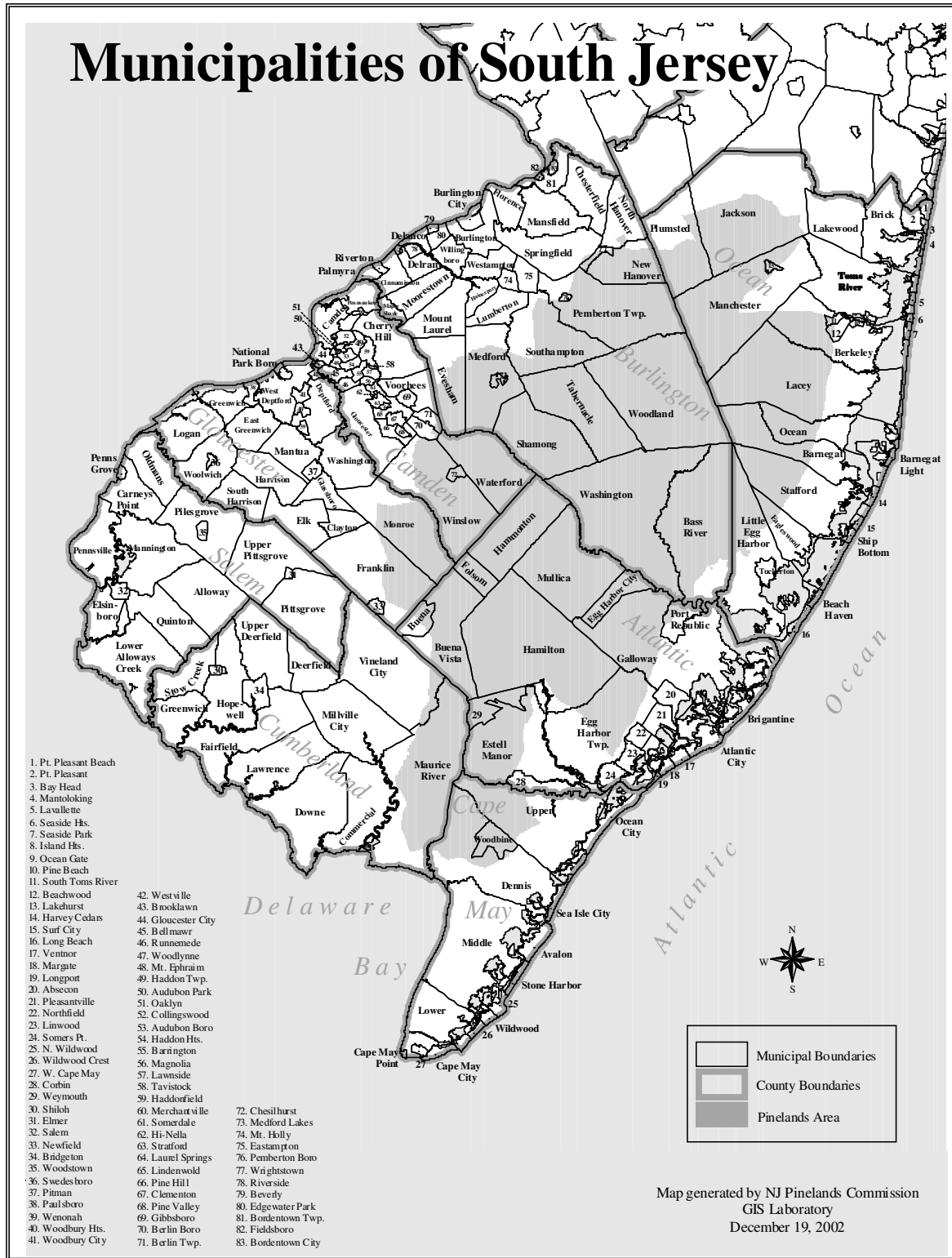
This study is a comprehensive review of what has worked well to this point, in addition to examining new ideas on how further to stimulate use of PDCs in the coming years. A preliminary package of recommendations was submitted to the Policy and Implementation Committee in the summer of 2007. Further review of a final set of policies and rules has been delayed, but the Commission will likely be re-examining these in FY 2012.

Appendix C. 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

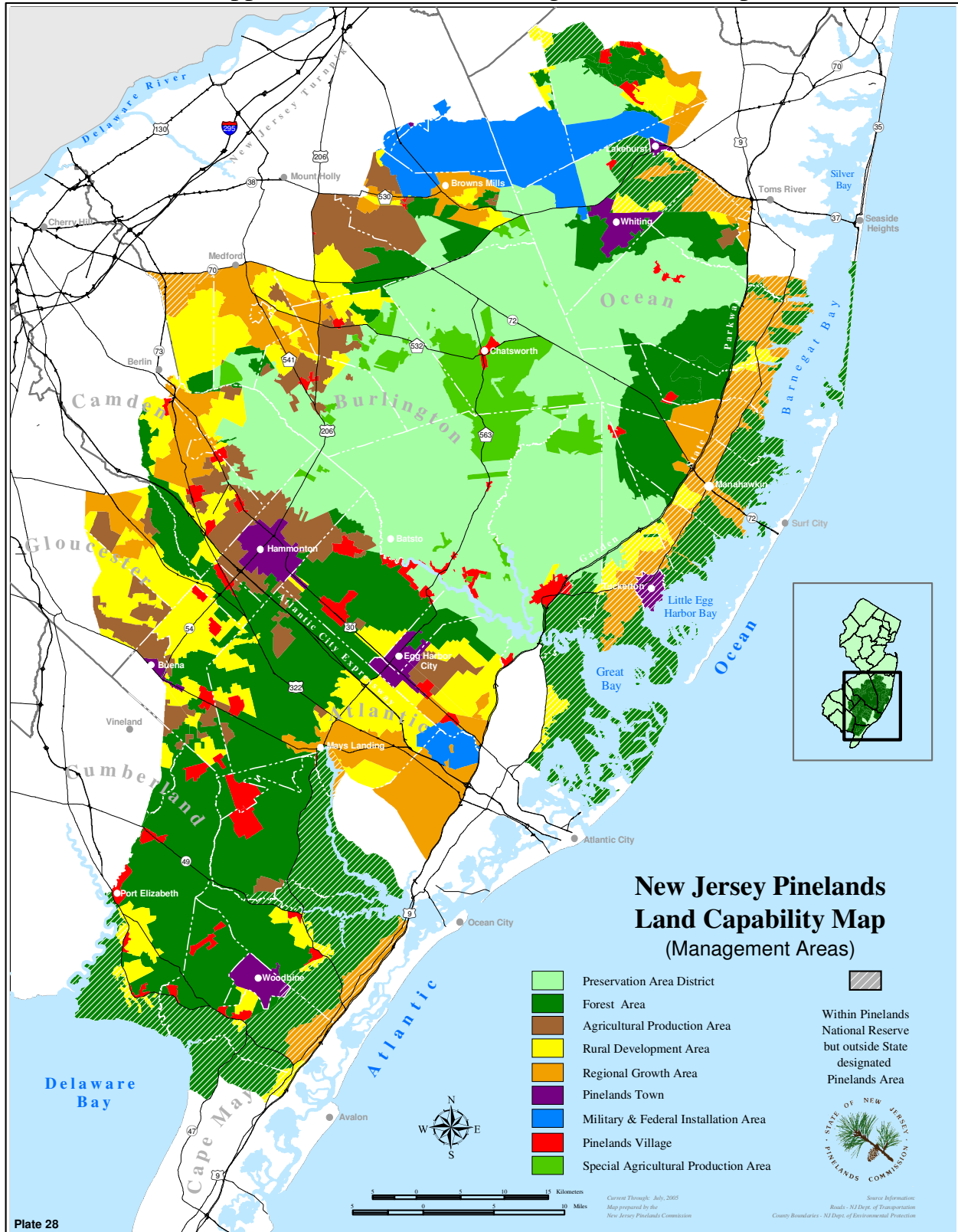
Appendix D. Municipalities of South Jersey



Appendix E. 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

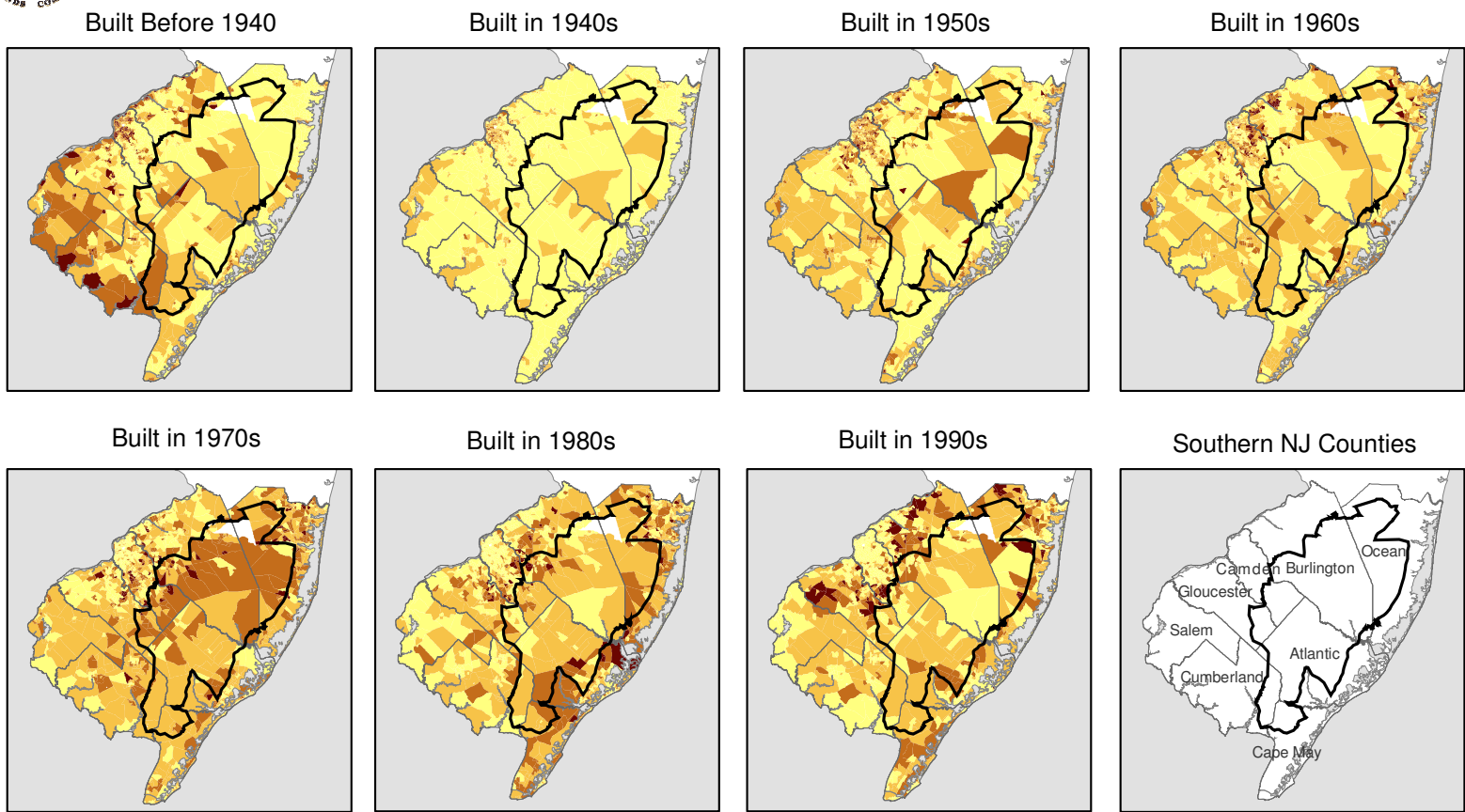
Appendix F. Pinelands Management Area Map



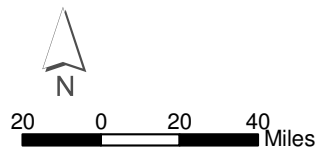
Appendix G.



Southern New Jersey Housing Unit Construction Percentage of Total Housing in 2000 Built in Each Decade



	Pinelands Boundary	Percentage of Total Units
	County Boundary	
	0% - 10%	
	10.1% - 25%	
	25.1% - 50%	
	50.1% - 100%	



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