New Jersey Pinelands Commission
Long-Term Economic Monitoring Program

2005 Annual Report

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NEW JERSEY PINELANDS LONG-TERM ECONOMIC MONITORING PROGRAM
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Acknowledgments

The 2005 Annual Report of the Pinelands Long-Term Economic Monitoring Program was prepared by Pinelands Commission economist Tony O'Donnell.

The Pinelands Commission gratefully acknowledges the help of its technical advisors in guiding the Long-Term Economic Monitoring Program. The technical advisory committee currently includes the following:

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The report will be available for review on the Pinelands Commission's web site at http://www.state.nj.us/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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Requests can also be made via phone at (609) 894-7300 or email at economist@njpines.state.nj.us

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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 1980. The plan establishes minimum standards for land use throughout the region, which are implemented at the local level through municipal ordinances.

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

Supplemental population estimate data for 2001 through 2003 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 42,000 between 2000 and 2003, an increase of 6.8% (compared to an increase of 2.7% in the Non-Pinelands). Previous population analysis at the census block level revealed that 277,000 people lived within the actual Pinelands boundary in 2000, a 5.5% increase over the 1990 population of 262,510. By contrast, the population in the portion of the Pinelands municipalities that lie outside of the Pinelands boundary grew by 14.3%, from 361,009 in 1990 to 412,557 in 2000. Additional analysis of population demographics demonstrated that a number of Pinelands municipalities have a high concentration of senior residents. A census block group level analysis determined that a somewhat higher percentage of senior citizens live in the portion of Pinelands municipalities that lies outside the boundary compared to the portion inside the boundary.

Results in the area of property values and residential development reflect the healthy, national real estate market in 2004. On average, more building permits continue to be issued in Pinelands municipalities than all other regions of the state. However, building permit activity decreased in the Pinelands in 2004 while increasing in the Non-Pinelands for the year. This marked the first time in the monitoring period that such a pattern emerged. Closer examination of the data reveals that this decline in activity was not uniform across the region, but rather the result of large decreases in a few big contributors (specifically Jackson, Hamilton, Egg Harbor Township, and Barnegat). 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 increased dramatically in 2004, posting double-digit percentage gains in all regions for the year. Transactions in the Pinelands again increased at a higher rate than the Non-

Pinelands, and the Pinelands share of Southern New Jersey's total transactions has increased by three percent since 1999. 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 increased substantially again this year, with the Pinelands recording its highest percent change in the monitoring period (since 1989). The median sales price was only slightly (2%) lower in the Pinelands than in the Non-Pinelands, with prices in the Pinelands rising at a somewhat faster rate. As recently as 2001, Pinelands median sales prices were 7% lower than in the Non-Pinelands. Supplemental census block group data from the 2000 Census of Housing indicates that historically the area within the Pinelands boundary experienced a significant drop in housing construction from the 1970s to the 1980s, while the portion of the Pinelands municipalities that lie outside the boundary had the same level of home construction in the 1980s as in the 1970s. Both regions had an equal percentage of homes built during the 1990's. Four new supplemental variables were added to this year's report to examine the real estate trends in the non-residential markets of Southern New Jersey. The average Pinelands community outperformed the average Non-Pinelands municipality of Southern New Jersey by adding 17% more new retail space from 1996 to 2003. The Pinelands fared less well in the category of new office space added over the same period, trailing the Non-Pinelands by only 4% on average. However, if the office space numbers for Mount Laurel are not included (it had 13% of all the new space in South Jersey over the eight-year period), the Pinelands municipalities actually significantly outperformed the Non-Pinelands on average by 15% with respect to new office space. Other supplemental data shows the effect of the population increases of the past decade on the Pinelands region – from 1996 to 2003 the average Pinelands municipality built 60% more new school space in square feet than their Non-Pinelands counterpart.

Findings in the area of economic growth revealed a number of trends. After three consecutive years of modest increases in all regions of New Jersey from 2001 to 2003, unemployment decreased in 2004. The unemployment rate dropped 0.8% in both the Pinelands and the Non-Pinelands in 2004, finishing the year at 4.8% and 5.4% respectively. Both regions, as well as the state as a whole (4.8% for 2004) are below the national unemployment rate of 5.5%. New municipal data for employment, establishments, and wages once again became available this year, and 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 & food service. In addition, the US Census Bureau released its quintennial Census of Retail Trade for 2002 after publication of last year's annual report. Per capita retail sales increased by 20% in the Pinelands from 1997 to 2002. In contrast, statewide per capita sales increased only 6.8% over the same period and the Non-Pinelands essentially remained the same (+0.2%).

Assessed farmland acreage for the most recently available year could become of some concern, however. Assessed acres in the Pinelands decreased by 4.9% in 2002, marking the largest one-year decrease in the monitoring period. Farm acreage also decreased in the Non-Pinelands in 2002, falling 1.1%. 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 came from the recently released Census of Agriculture. According to the 2002 census, the seven Pinelands counties for the first time now account for more than half of the agricultural sales statewide. They continue to be relatively more efficient than the rest of the state, achieving this level of sales while comprising only 36% of

acres farmed statewide. In addition, over the five-year period from 1997 to 2002, Pinelands counties increased their acres in farming by 2.3% while the remainder of the state experienced a 10.2% decline in farm acreage. Prices for cranberries and blueberries, important cultural and economic resources of the Pinelands, were unchanged in 2003. Utilized value for cranberries did increase as production jumped 11% in 2003, but the blueberry industry suffered a 5% decline in volume for the year.

Monitoring in the municipal finance category indicates a continuation of previous trends. Historically, average residential tax bills and effective property tax rates have been lower in the Pinelands than the remainder of the State, and new data reinforces the increasing gap between property taxes in the Pinelands region versus other regions. The average residential property tax bill grew at a slower rate compared to the Non-Pinelands during the period 1983 to 2003, and this trend continued in 2004. Equalized property values rose in all regions of the state for the seventh consecutive year in 2004, with the Pinelands region registering an increase of 15.2% in comparison to an increase in the Non-Pinelands of 13.8% for the year. Fueled by surging home values, effective tax rates fell for the fourth consecutive year in 2004 across all regions. However, the Pinelands experienced the steepest decline of any region with effective tax rates dropping 8.5% for the year. Data on local municipal purpose revenues indicated that the local municipal budgets of Pinelands municipalities increased at a smaller rate than the Non-Pinelands municipalities in 2004, and that per capita revenues remain much lower in the Pinelands. State aid to both regions decreased in 2004, with the Pinelands experiencing a steeper decline in funding. New data for the years 2003 and 2004 became available that allowed for an updated analysis of assessment class proportions in municipal valuations. The findings 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, the program's second special study focuses on characterizing and identifying municipalities that are experiencing poor health. Although difficult to define, poor 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. The final report for the project may provide a basis for legislation to allocate special aid to the most strained towns. Another study is focusing on changes in the sale price and value of vacant developable land within the Pinelands. A large database of transactions covering the years 1989 through 2002 has been assembled and analysis is ready to begin.

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 that 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 towards growth areas.[1]

Of major interest to landowners, residents, and businesses in the region is the economic impact of the regulations on land values, real estate markets, local government finances, and the economic performance of farms and businesses. A number of studies have been conducted since the inception of the CMP 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 *2005 Annual Report* is the ninth 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 *2005 Annual Report* is available on CD-ROM by writing to the Pinelands Commission at P.O. Box 7, New Lisbon, NJ, 08064. The report will be available on the Pinelands Commission World Wide Web site at http://www.state.nj.us/pinelands.

1.2 Program Goal and Objectives

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

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

Pinelands Commission as it seeks to meet the mandates set forth in the federal and state Pinelands legislation.

The program was designed to accomplish several principal objectives:

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

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

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

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

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

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

1.3 Program Administration

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

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

A technical advisory committee was created by the Pinelands Commission to provide informed and objective input on an ongoing basis. Committee members have helped to ensure that the program meets appropriate technical standards by assisting in identifying and specifying variables to be monitored, developing the detailed design, implementing appropriate methodologies, interpreting results, and reviewing draft documents. Current members of the expert advisory committee are:

John E. Petersen, Ph.D., Professor of Public Policy and Finance, George Mason University
Henry O. Pollakowski, Ph.D., Professor, Center for Real Estate, Massachusetts Institute of Technology

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 an understanding of the character of the Pinelands economy. In general, these data are collected from secondary sources. The annually updated data are considered to be the core variables of the report.

The first annual report included a provision for adding supplemental data, and this provision was used for the first time in the 2003 annual report. The 2005 annual report continues this trend with the introduction of some new supplements. Supplemental variables provide valuable information and insight into the Pinelands and regional economy, but are not considered core variables because they are not updated regularly. For instance, the US Census data is extremely valuable but since it is only updated every ten 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

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

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

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

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: retail sales per capita; per capita income; unemployment; employment, establishments, and wages; and agriculture (including farmland assessed acreage, census of agriculture data, and 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. Updates for the assessment class proportions variable were received for 2003 and 2004, so this variable will continue to be included as a core

variable in subsequent reports (dropping it had been considered this year until the updates were received; however, data is still unavailable for the period from 1995-2001).

Table 2.2 Summary of Core Variables in Annual Report

Name	Years Collected[2]	Years Added[3]	Frequency of Collection	Method of Analysis
Municipal Population	1980, 1990, 2000	None	Decennial	Inside/Outside Pinelands
Census Block Population	1990, 2000	None	Decennial	Census Block, Inside/Outside Pinelands Boundary
Age Demographics	1980, 1990, 2000	None	Decennial	Inside/Outside Pinelands, Census Block Group (2000)
Population Estimates	2001-2003	2003	Annual	Inside/Outside Pinelands
Building Permits	1980-2004	2004	Annual	Inside/Outside Pinelands
Median Selling Prices of Homes	1988-2004	2004	Annual	Inside/Outside Pinelands
Volume of Real Estate Transactions	1988-2004	2004	Annual	Inside/Outside Pinelands
Retail Sales & Establishments	1992, 1997, 2002	2002	Quintennial	County, Place
Income	1979, 1989, 1999	None	Decennial	Inside/Outside Pinelands
Unemployment	1980-2004	2004	Annual	Inside/Outside Pinelands
Employment	1993-1999, 2003 (municipal level)	1991-2003 (county level)	Annual	Inside/Outside Pinelands (93-99), County (91-02)
Number of Establishments	1993-1999, 2003 (municipal level)	1991-2003 (county level)	Annual	Inside/Outside Pinelands (93-99), County (91-02)
Payroll by Major Industry Sector	1993-1999, 2003 (municipal level)	1991-2003 (county level)	Annual	Inside/Outside Pinelands (93-99), County (91-02)
Farmland Assessed Acreage	1980-1984, 1986-2002	2002	Annual	Inside/Outside Pinelands
Agricultural Census Data	1982, 1987, 1992, 1997, 2002	2002	Quintennial	County
Blueberry and Cranberry Production	1972-2003	2003	Annual	State

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

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

Table 2.2 (continued) Summary of Core Variables in Annual Report

Name	Years Collected[2]	Years Added[3]	Frequency of Collection	Method of Analysis
Average Residential Property Tax Bill	1983-2004	2004	Annual	Inside/Outside Pinelands
Equalized Property Value	1980-2004	2004	Annual	Inside/Outside Pinelands
Effective Tax Rate	1980-2004	2004	Annual	Inside/Outside Pinelands
Assessment Class Proportions in Municipal Valuation	1980-1994, 2002-2004	2003, 2004	Annual	Inside/Outside Pinelands
Local Municipal Purpose Revenues	1995-2004	2004	Annual	Inside/Outside Pinelands

2.3 Supplemental Variables

Four supplemental variables have been added to the annual report this year, all of them in the Property Values and Residential Development section (Table 2.3a). Supplemental variables provide valuable information and insight into the Pinelands and regional economy, but are not tracked annually as core variables because they are not updated regularly. If the data is viable and a sufficient time series can be obtained, supplements could become core.

The first three of the new supplements listed below attempt to measure the non-residential real estate development market in Southern New Jersey. There has been much talk of the burden that rapid new residential growth has placed on some municipalities in the Pinelands. However, absent from this discussion has been data that categorize the new ratables (new office and retail space) that help finance the new municipal costs that these new residents bring. Also included as a supplement this year is the data for new school space. A large percentage of municipal property taxes in recent years has been devoted to the costs associated with new schools, and this has been of particular interest to those Pinelands municipalities that are experiencing rapid growth in their school aged population. Two of the previous supplemental variables (Population Estimates and Local Municipal Purpose Revenues) have been upgraded to core variables this year. Please refer to the 2003 Annual Report for information regarding the previous supplements.

Table 2.3a Summary of Supplemental Variables in the 2005 Annual Report

Name	Source	Years Collected	Method of Analysis
New Retail Space in Square Feet	NJ DCA Division of Codes and Standards	1996-2003	Inside / Outside Pinelands
New Office Space in Square Feet	NJ DCA Division of Codes and Standards	1996-2003	Inside / Outside Pinelands
New School Space in Square Feet	NJ DCA Division of Codes and Standards	1996-2003	Inside / Outside Pinelands
Certificates of Occupancy	NJ DCA Division of Codes and Standards	1996-2003	Inside / Outside Pinelands

Table 2.3b Summary of Supplemental Variables in the Previous (2004) Annual Report

Name	Source	Years Collected	Method of Analysis
Population Estimates	NJ Dept Labor	2001, 2002	Inside / Outside Pinelands
Census of Housing Year Structure Built (By Decade)	US Census Bureau	2000	Inside / Outside Pinelands, Census Block Group
Visitor Attendance for NJ State Forests	NJ DEP Division of Parks and Forestry	1992 - 2002	Inside / Outside Pinelands
Local Municipal Purpose Revenues	NJ DCA Div Local Govt Services	1995 - 2003	Inside / Outside Pinelands

2.4 Geographic Scale: Defining the Pinelands

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

the variables monitored in the report are obtained at the municipal level, since this is typically the most precise level of geography available. Municipal values are aggregated into Pinelands and Non-Pinelands regions, based on a "10% rule." Any municipality with at least 10% of its land in the Pinelands area is considered to be in the Pinelands region, and all remaining municipalities in southern New Jersey (those located in the seven counties mentioned above, plus Salem County) are considered to be Non-Pinelands municipalities. Of the 53 municipalities completely or partially located in the Pinelands Area, 47 were classified as inside, while six[4] were classified as outside, joining the remaining 149 municipalities located entirely outside the Pinelands. In summary, the term "Pinelands," as used in this report, refers to 47 municipalities that have at least 10% of their land in the state-designated Pinelands Area, while the term "Non-Pinelands" refers to the remaining 155 municipalities of Southern New Jersey.

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

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

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

Municipal level data is unavailable in certain cases. The Agricultural Census and Retail Census are restricted to county level data. For the Agricultural Census data, Pinelands counties (Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, and Ocean) are compared to Non-Pinelands counties (Salem plus the thirteen counties of North Jersey). For the Retail Census and Covered Employment data (employment, establishment, and wages), information is

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

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

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

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

Variables in the Annual Report that describe monetary amounts are adjusted for inflation using the Consumer Price Index (CPI-U) from the U.S. Bureau of Labor Statistics, shown in 2004 dollars. This is an update from the 2003 annual report, where variables were keyed to the 2003 CPI. Even sections that did not receive a substantial update this year (as indicated by a check mark in the upper right hand corner "Update" box) have been adjusted to the 2004 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 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

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

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.

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 2005 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 again in this year's report. The county sheets use the same format as the municipal sheets, with county values displayed beside the average Southern New Jersey County value and the county's rank among the eight counties.

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

3. Special Studies

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

First Study: Value-Added Blueberry Products (Complete)

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

Second Study: Indicators of Municipal Health (Underway)

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

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

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

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

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, the following eight variables are being examined: unemployment rate, per capita income, poverty rate, population change, effective tax rate, tax to income ratio, effective school tax rate, and the percentage of ratables that are commercial and industrial. The analysis will calculate percentiles and use statistical tests to identify fiscal issues unique to Pinelands municipalities. A series of other comparisons will also be made, examining urban towns versus rural towns, comparing rural Pinelands towns versus rural Non-Pinelands towns, and comparing Pinelands growth towns to Non-Pinelands growth towns. Variables for this part of the study have been updated, and preliminary tests have been performed.

The second part of the study will identify Pinelands towns that are most in need of fiscal assistance, and will design a corresponding funding model. Municipalities with at least 30% of their land in the Pinelands will be included. Variables that may be used in these models include: effective school tax rate, per capita income, tax to income ratio, percentage of total ratable base that is commercial or industrial, proportion of land in Pinelands Conservation Areas, unemployment rate, population change inside the Pinelands boundary, and municipal revenues per capita.

Special Project: Vacant Land Value Study (Underway)

While not an official special study, the vacant land value project is an extension of the property value and real estate monitoring aspect of the annual report. In September 1999, Pinelands Commission staff obtained data from the New Jersey Department of Treasury on all New Jersey land and housing transactions dating back to 1989. Vacant land transactions were supplemented with additional information in order to enhance the usefulness of the data in determining the value of vacant land. Pinelands Commission staff gathered supplemental data for each vacant land transaction (i.e., acreage, zoning, management area, and more). The supplemental data was gathered from tax maps as well as other available data sources. Data collection culminated in 2003. A formal database was created and cleaned in order to reconcile errors and fill in missing data. The database contains approximately 5,700 records of transactions inside the Pinelands boundary and 16,000 records outside the Pinelands boundary from the years 1989 through 2002. Statistical analysis of the data is presently being conducted. Data collection of vacant land transactions will continue in the future.

Special Project: Housing Task Force

In October of 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 is expected to issue its final report by the end of this year.

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.

NJ Pinelands Commission Long-Term Economic Monitoring Program
2005 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 boundary. Provides the most accurate measure of Pinelands activity. Available in limited instances.

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

Population 1

Population

US Census Bureau 1980, 1990, 2000

☐ Updated

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

Population 1980 - 2000

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

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

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

Summary of Previous Findings

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

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

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

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

Figure P1 Municipal Population Change (1990-2000)

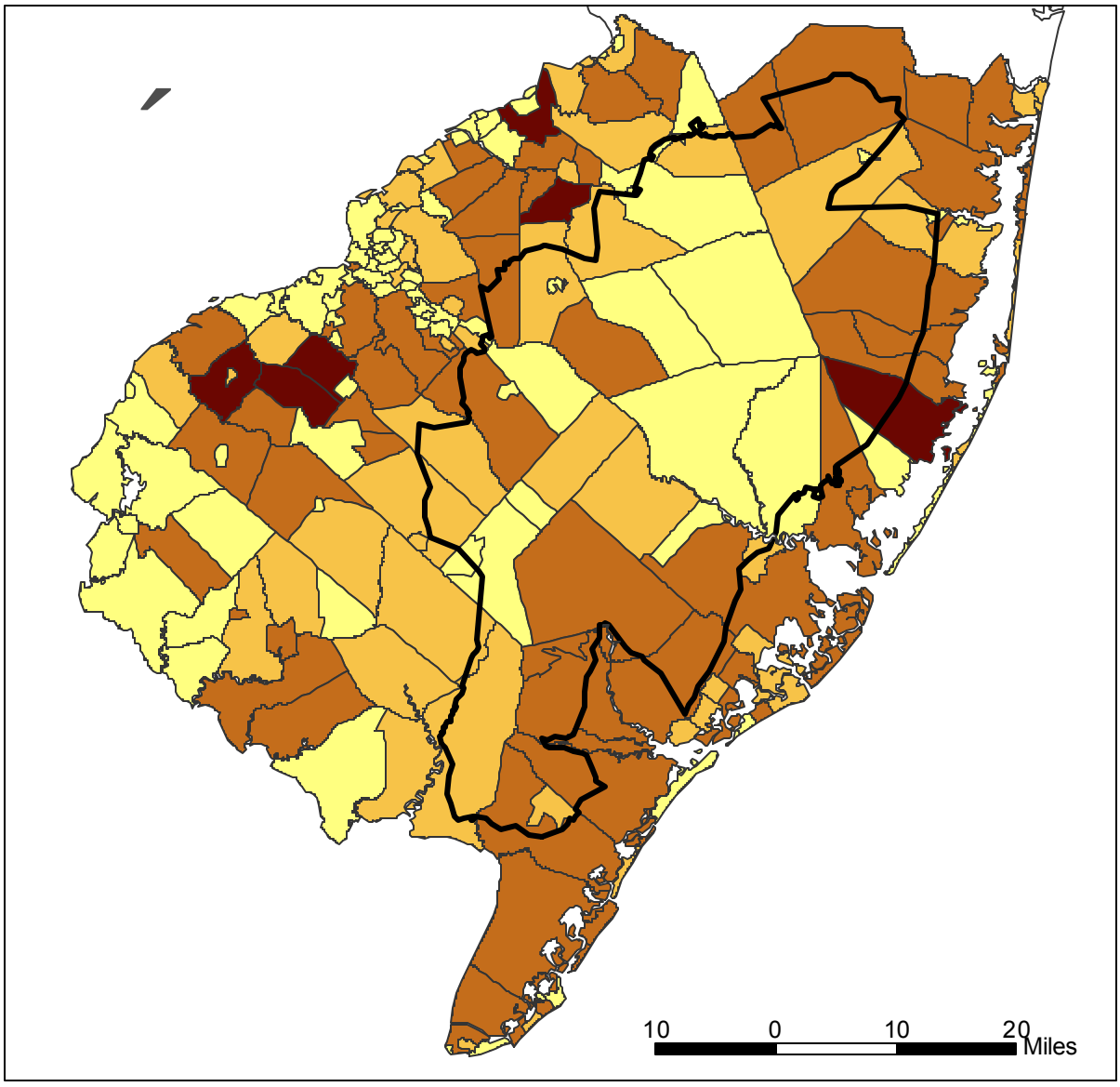


Table P1a Population by Pinelands Municipality

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

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

Table P1b 2000 Census Group Quarters Population

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

Table P1c Group Quarters Components of Population Change 1990-2000

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

Population 2

Population – Census Block

Updated

US Census Bureau 1990, 2000

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

Census Block Population

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

Municipal Population Change Categories

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

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

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

Summary of Previous Findings

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

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

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

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

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

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

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

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

Population 3

Age Demographics

Updated

US Census Bureau, 1980, 1990, 2000

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

Population Under 18 (Municipal Level)

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

Population 65 and over (Municipal Level)

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

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

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

Summary of Previous Findings

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

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

Update

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

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

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

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

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

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

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

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

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

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

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

Population 4

Population Estimates

X Updated

US Census Bureau / NJ Dept of Labor 2001 – 2003

- The Pinelands communities again grew more quickly than the Non-Pinelands in 2003. Evidence suggests that much of this growth is occurring on the fringes of the Pinelands.

Population Estimates

	2002 Estimate	2003 Estimate	Change	% Change
New Jersey	8,575,252	8,638,396	63,144	0.7%
South Jersey	2,321,865	2,350,748	28,883	1.2%
Pinelands	643,787	657,971	14,184	2.2%
Non-Pinelands	1,678,078	1,692,777	14,699	0.9%
100% Land in Pines (11 municipalities)	57,604	58,153	549	1.0%
55-99% Land in Pines (19 municipalities)	313,523	319,935	6,412	2.0%
10-54% Land in Pines (17 municipalities)	272,660	279,883	7,223	2.6%

Description: Population estimates are useful for measuring population during, and calculating per capita values for, intercensal years. Population estimates are particularly important in the later half of the decade as the census year becomes more distant and ceases to be a good measure of current population. Unfortunately, estimates further from the census year have a greater margin of error. Estimates are calculated using birth and death rates and a factor for migration. Estimates for 2002 and 2003 will be updated when 2004 estimates are released, and once the next census is taken (2010), estimates for this decade will be re-adjusted for the final time to reflect the new census.

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

Summary of Previous Findings:

The population of New Jersey grew by 2.1% between 2000 and 2002, adding almost 176,000 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 2002, increasing by 4.6% (compared to 2.1% statewide growth and 2.6% growth in South Jersey). Components of population growth (natural increase and migration) cannot be calculated for the Pinelands and Non-Pinelands as this information is not available below the county level.

Update:

Population growth slowed slightly throughout all regions of the state between 2002 and 2003. Despite this slowdown, the same patterns of growth continued in 2003. The Pinelands communities grew at twice the rate of both the state as a whole and the rest of South Jersey (Pines +2.2%, Non-Pines South Jersey +0.9%, and Statewide +0.7%). However, upon closer examination it appears that past inside/outside growth trends uncovered by the census block analysis appear to be continuing. The eleven communities with their land area entirely within the Pinelands boundary showed a 1% increase in population in 2003. Those communities that straddle the Pinelands boundary showed considerably higher growth as the percentage of land in the Pinelands decreases (see table above). This suggests that much of the growth may in fact be occurring just outside of the Pinelands boundary.

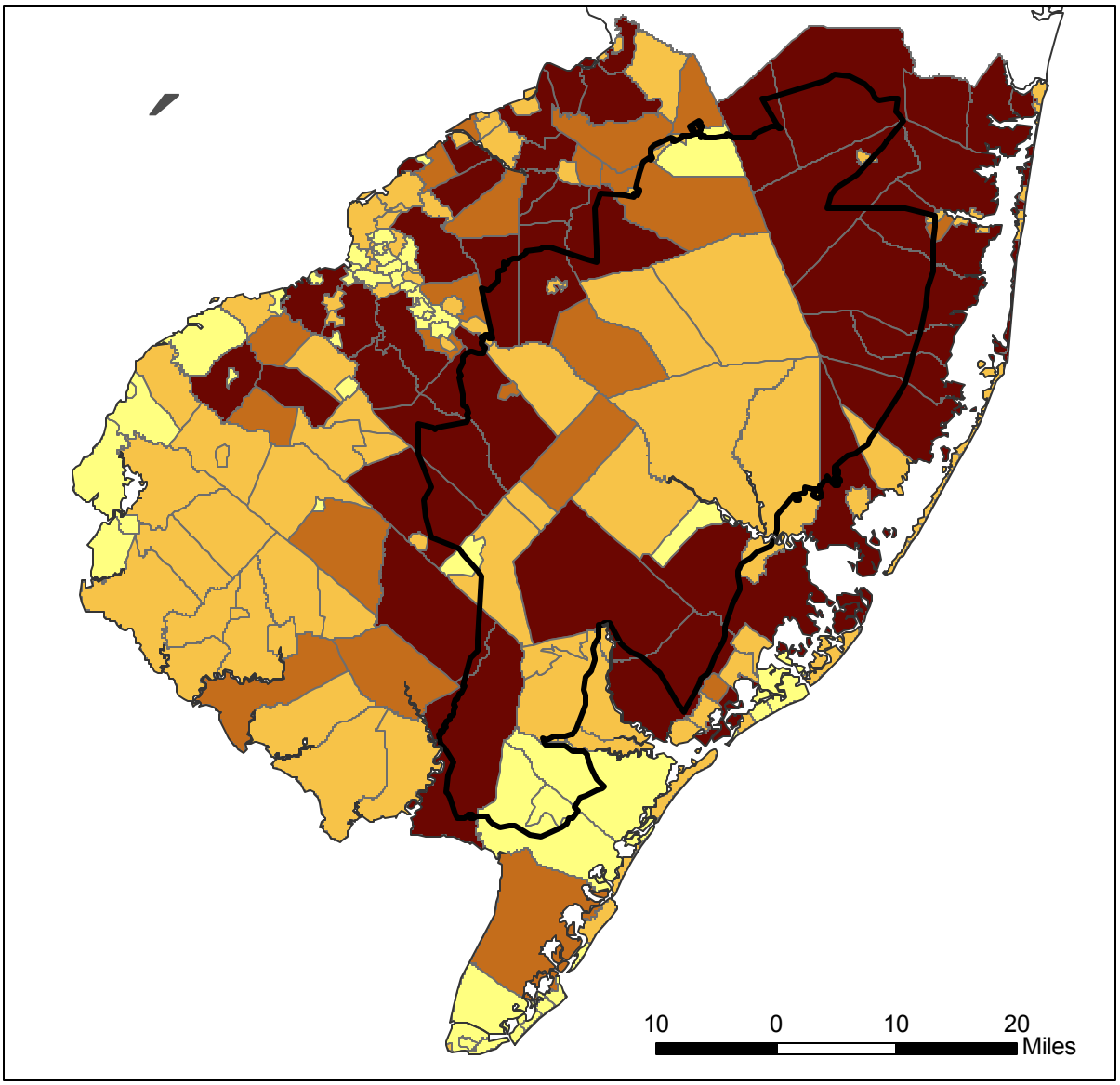
The following Pinelands communities ranked in the top 10% of South Jersey municipalities in both absolute population growth and percentage population growth: Jackson, Egg Harbor Township, Evesham, Barnegat, Little

Egg Harbor, Monroe, Hamilton, and Ocean Township (see Table P4). By contrast, only two South Jersey communities outside the Pines achieved such growth: Woolwich (+971, +21.3%) and Delran (+493, +3.1%).

Table P4 Population Estimates

Municipality	County	2002	2003	Change	South Jersey Rank : Change	% Change	South Jersey Rank : % Change
Jackson	Ocean	47,607	49,644	2,037	1	4.3%	12
Egg Harbor Township	Atlantic	33,337	35,061	1,724	2	5.2%	9
Evesham	Burlington	44,572	46,111	1,539	3	3.5%	16
Barnegat	Ocean	16,394	17,632	1,238	4	7.6%	3
Little Egg Harbor	Ocean	17,683	18,616	933	6	5.3%	8
Monroe	Gloucester	29,551	30,427	876	8	3.0%	19
Manchester	Ocean	41,404	42,228	824	10	2.0%	28
Hamilton	Atlantic	21,913	22,705	792	12	3.6%	14
Galloway	Atlantic	33,482	34,221	739	13	2.2%	27
Stafford	Ocean	23,770	24,318	548	18	2.3%	24
Ocean	Ocean	6,722	7,214	492	20	7.3%	4
Berkeley	Ocean	41,919	42,247	328	28	0.8%	91
Medford	Burlington	23,055	23,359	304	30	1.3%	52
Winslow	Camden	34,938	35,150	212	34	0.6%	105
Franklin	Gloucester	15,825	16,013	188	36	1.2%	58
Southampton	Burlington	10,734	10,918	184	37	1.7%	36
Hammonton	Atlantic	12,823	12,994	171	42	1.3%	50
Pemberton Township	Burlington	28,782	28,938	156	44	0.5%	112
Plumsted	Ocean	7,915	8,034	119	49	1.5%	44
Shamong	Burlington	6,636	6,749	113	51	1.7%	37
Chesilhurst	Camden	1,664	1,756	92	56	5.5%	7
Beachwood	Ocean	10,621	10,712	91	58	0.9%	86
Lacey	Ocean	26,152	26,240	88	59	0.3%	129
Mullica	Atlantic	5,968	6,038	70	64	1.2%	63
Buena Vista	Atlantic	7,501	7,556	55	77	0.7%	96
Tabernacle	Burlington	7,269	7,312	43	84	0.6%	108
Eagleswood	Ocean	1,500	1,534	34	88	2.3%	25
Maurice River	Cumberland	7,567	7,600	33	89	0.4%	120
Berlin Township	Camden	5,328	5,360	32	91	0.6%	107
Estell Manor	Atlantic	1,629	1,657	28	97	1.7%	35
South Toms River	Ocean	3,675	3,703	28	97	0.8%	94
Weymouth	Atlantic	2,297	2,324	27	103	1.2%	61
Waterford	Camden	10,622	10,645	23	106	0.2%	135
Bass River	Burlington	1,539	1,562	23	106	1.5%	45
Lakehurst	Ocean	2,562	2,582	20	112	0.8%	92
Woodland	Burlington	1,336	1,354	18	116	1.3%	49
Medford Lakes	Burlington	4,190	4,205	15	118	0.4%	126
Port Republic	Atlantic	1,057	1,071	14	122	1.3%	51
New Hanover	Burlington	9,508	9,520	12	126	0.1%	146
Folsom	Atlantic	1,971	1,977	6	138	0.3%	131
Washington	Burlington	633	637	4	144	0.6%	103
Wrightstown	Burlington	748	749	1	152	0.1%	144
Woodbine	Cape May	2,677	2,677	0	155	0.0%	155
Buena	Atlantic	3,836	3,832	-4	169	-0.1%	172
Egg Harbor City	Atlantic	4,492	4,486	-6	178	-0.1%	177
Upper	Cape May	12,000	11,965	-35	200	-0.3%	189
Dennis	Cape May	6,383	6,338	-45	201	-0.7%	201
"Outside" Munis							
Vineland	Cumberland	56,376	57,057	681	14	1.2%	57
Springfield	Burlington	3,422	3,504	82	60	2.4%	23
North Hanover	Burlington	7,489	7,556	67	67	0.9%	83
Berlin Borough	Camden	6,756	6,819	63	71	0.9%	77
Corbin City	Atlantic	505	519	14	122	2.8%	20

Figure P4 Population Change 2000 – 2003



Pinelands Boundary

Population Change

-427 - 0

1 - 200

201 - 500

501 - 6,828

Source: NJ Dept of Community Affairs

Author: NJ Pinelands Commission

Date: 2005

Real Estate 1

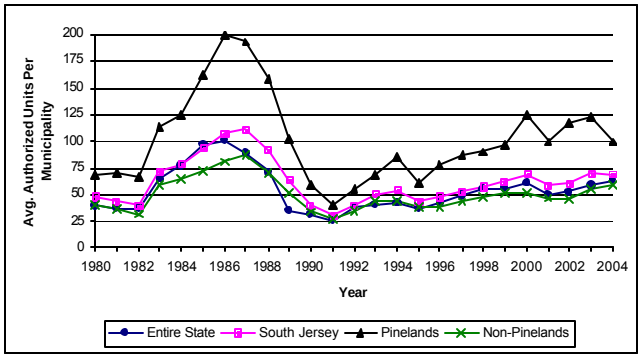
Building Permits for Dwelling Units

New Jersey Department of Labor 1980 – 2004

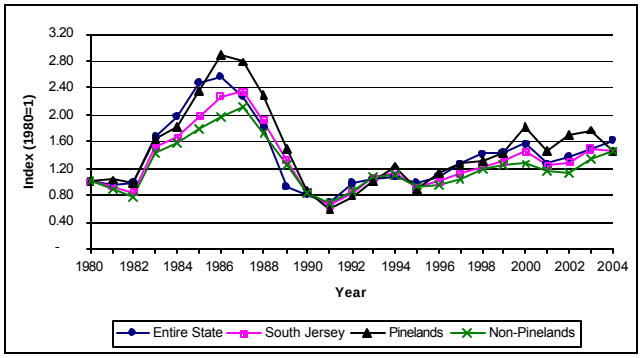
X Updated

- For the first time in the monitoring period, the average number of building permits issued in the Pinelands decreased while both the State as a whole and the Non-Pinelands region increased in 2004.

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-1980's 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 1980's.

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

Update:

There was a dramatic shift in building permit activity in the Pinelands in 2004. The average number of permits issued in the Pinelands decreased from 122 to 100, a decline of 18.9%. In contrast, the state as a whole increased permit activity by 8.9% (from 58 to 63) and the Non-Pinelands South Jersey municipalities increased permits by 8.4% (from 55 to 60). In fact, 2004 marked only the second time in the last 9 years that building permits have decreased in the Pinelands. The only other year during that period that saw a decrease in permits was 2001, but all the other regions of the state also experienced declines in that year as well (Statewide –18.3%, Pinelands –19.7%, and Non-Pinelands –9.4%).

Upon closer examination, it is clear that the large decrease in 2004 is mostly the result of rather large decreases in permit activity in four communities who in 2003 comprised almost half of all activity in the Pinelands. In 2004, Jackson, Hamilton, Egg Harbor Township, and Barnegat combined issued 1,095 fewer permits than they did in 2003

(see Table R1). In contrast to that sharp decrease (-42.3%), the remaining 43 Pinelands communities combined issued 34 more permits in 2004 than they did in 2003 (+1.1%). In fact, in 2003 Jackson, Hamilton, Egg Harbor Township, and Barnegat issued 45% of the total permits in the Pinelands. In 2004 that figured dropped to 31.8%. Other communities that experienced considerable decreases in 2004 were Manchester and Upper Township, both of which had declines of greater than 70%.

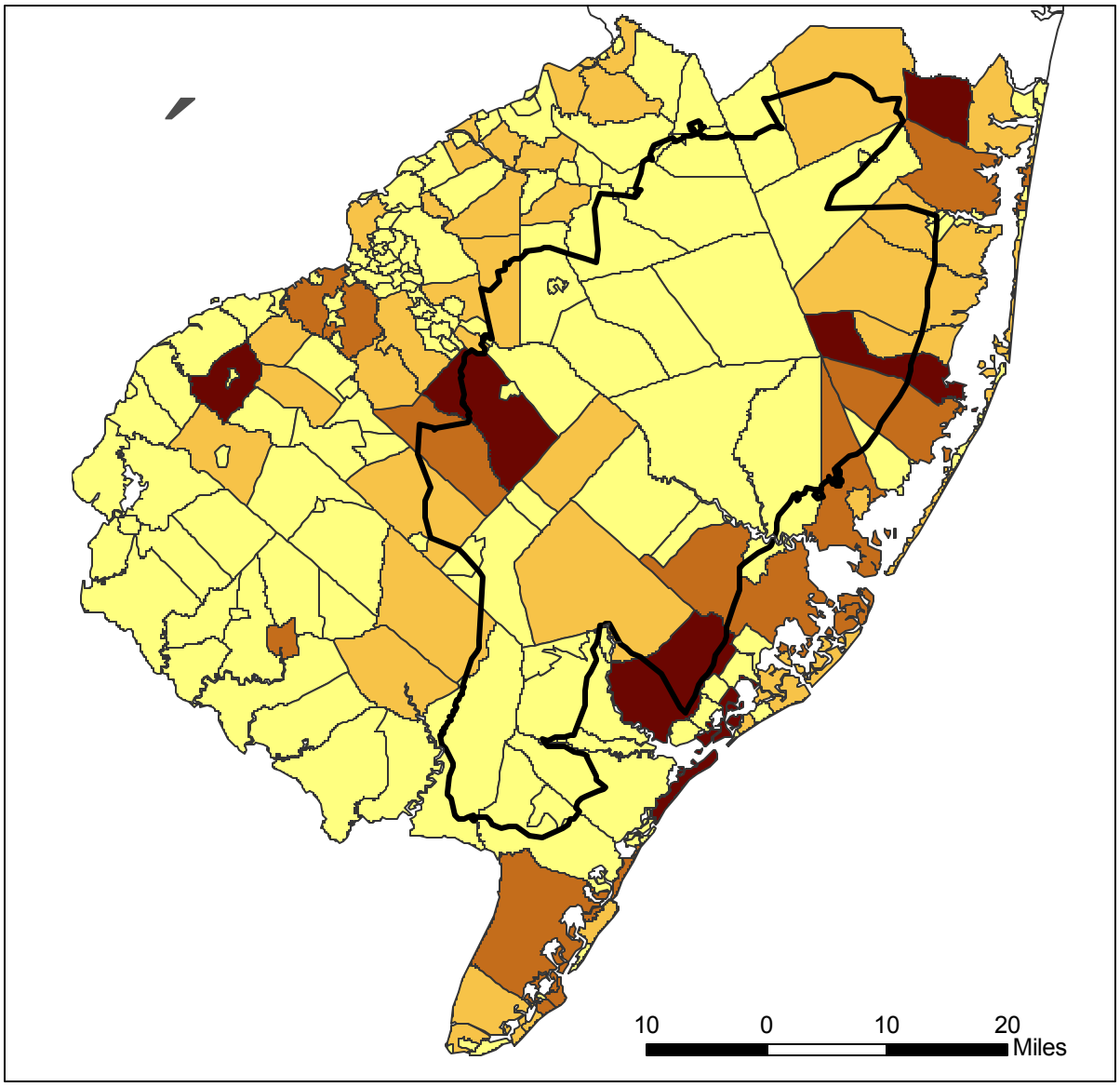
Permit growth did continue significantly in two Pinelands communities. For the second year in a row, Winslow had the greatest absolute increas e in permits issued in the Pinelands (+198, +52%). After showing a slight decrease in activity in 2003, Galloway was the only other Pinelands municipality that increased permits in 2004 by more than 100 (+126, +42%). Galloway has now issued in excess of 300 building permits in 4 of the last 5 years.

Table R1 Residential Building Permits[10]

		Permits Issued					
Municipality	**County**	**2004**	**2003**	**Change**	**% Change**	**4 Year Avg**	**Permits 2001-2004**
Winslow	Camden	580	382	198	52%	278	1,110
Galloway	Atlantic	423	297	126	42%	352	1,406
Lacey	Ocean	71	11	60	545%	52	207
Hammonton	Atlantic	175	121	54	45%	109	437
Ocean	Ocean	178	141	37	26%	149	595
Mullica	Atlantic	35	17	18	106%	24	95
Eagleswood	Ocean	20	7	13	186%	13	51
Pemberton Township	Burlington	35	25	10	40%	30	118
Egg Harbor City	Atlantic	17	8	9	113%	7	27
Tabernacle	Burlington	15	11	4	36%	13	51
Maurice River	Cumberland	9	5	4	80%	5	19
Folsom	Atlantic	4	1	3	300%	3	11
Stafford	Ocean	318	315	3	1%	283	1,130
Berlin Township	Camden	17	14	3	21%	14	57
Medford Lakes	Burlington	4	2	2	100%	3	13
Weymouth	Atlantic	8	7	1	14%	8	31
Lakehurst	Ocean	3	2	1	50%	3	11
South Toms River	Ocean	6	5	1	20%	5	20
Washington	Burlington	3	2	1	50%	2	8
Woodland	Burlington	5	4	1	25%	5	21
Wrightstown	Burlington	1	0	1	n/a	0	1
Monroe	Gloucester	242	241	1	0%	230	921
Beachwood	Ocean	18	18	0	0%	23	90
Woodbine	Cape May	11	11	0	0%	8	31
Bass River	Burlington	3	4	-1	-25%	4	17
Dennis	Cape May	23	24	-1	-4%	20	81
Port Republic	Atlantic	25	27	-2	-7%	16	65
Shamong	Burlington	26	28	-2	-7%	29	115
Southampton	Burlington	18	21	-3	-14%	41	162
Waterford	Camden	23	26	-3	-12%	23	93
New Hanover	Burlington	4	8	-4	-50%	4	16
Buena	Atlantic	9	14	-5	-36%	6	25
Estell Manor	Atlantic	11	16	-5	-31%	12	48
Plumsted	Ocean	20	25	-5	-20%	37	148
Chesilhurst	Camden	23	28	-5	-18%	35	138
Buena Vista	Atlantic	16	22	-6	-27%	18	72
Franklin	Gloucester	126	139	-13	-9%	100	401
Medford	Burlington	29	52	-23	-44%	73	291
Berkeley	Ocean	128	188	-60	-32%	173	693
Little Egg Harbor	Ocean	315	379	-64	-17%	406	1,625
Evesham	Burlington	135	217	-82	-38%	312	1,246
Manchester	Ocean	17	109	-92	-84%	209	834
Upper	Cape May	55	196	-141	-72%	84	337
Barnegat	Ocean	507	662	-155	-23%	455	1,819
Egg Harbor Township	Atlantic	619	781	-162	-21%	653	2,611
Hamilton	Atlantic	164	357	-193	-54%	294	1,177
Jackson	Ocean	201	786	-585	-74%	539	2,157
"Outside" Munis							
Corbin City	Atlantic	5	4	1	25%	5	21
Springfield	Burlington	13	12	1	8%	20	81
North Hanover	Burlington	23	26	-3	-12%	19	75
Vineland	Cumberland	114	179	-65	-36%	142	569
Berlin Borough	Camden	104	308	-204	-66%	132	526

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

Figure R1 Residential Building Permits Issued 2004



Pinelands Boundary

Building Permits

0 - 64

67 - 201

213 - 440

500 - 957

Source: NJ Department of Labor

Author: NJ Pinelands Commission

Date: 2005

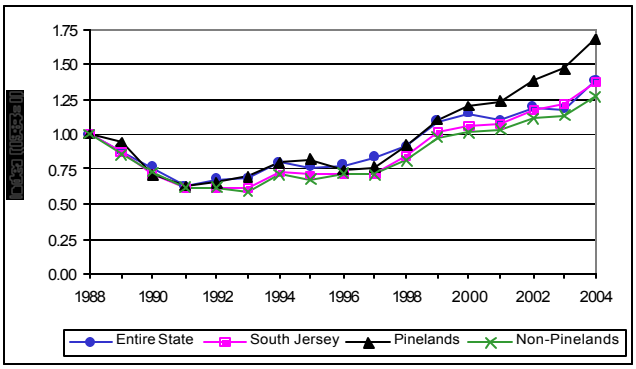
Real Estate 2

Residential Real Estate Transactions

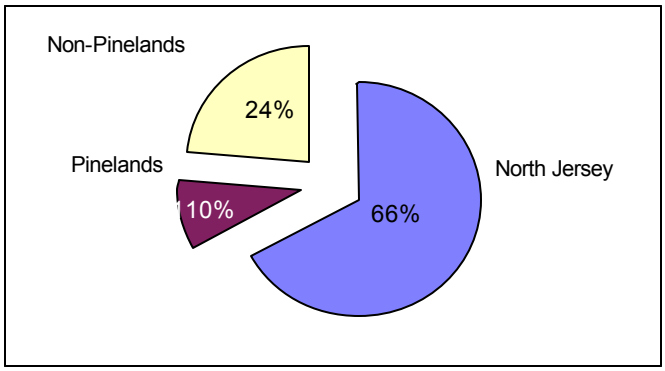
NJ Dept of Treasury, Div of Taxation 1988 – 2004 X Updated

- The real estate market experienced dramatic increases in all areas of the state in 2004. Pinelands communities posted their 8th consecutive year of growth in real estate transactions.

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 to 1996 followed by more substantial increases through 2003.

Update:

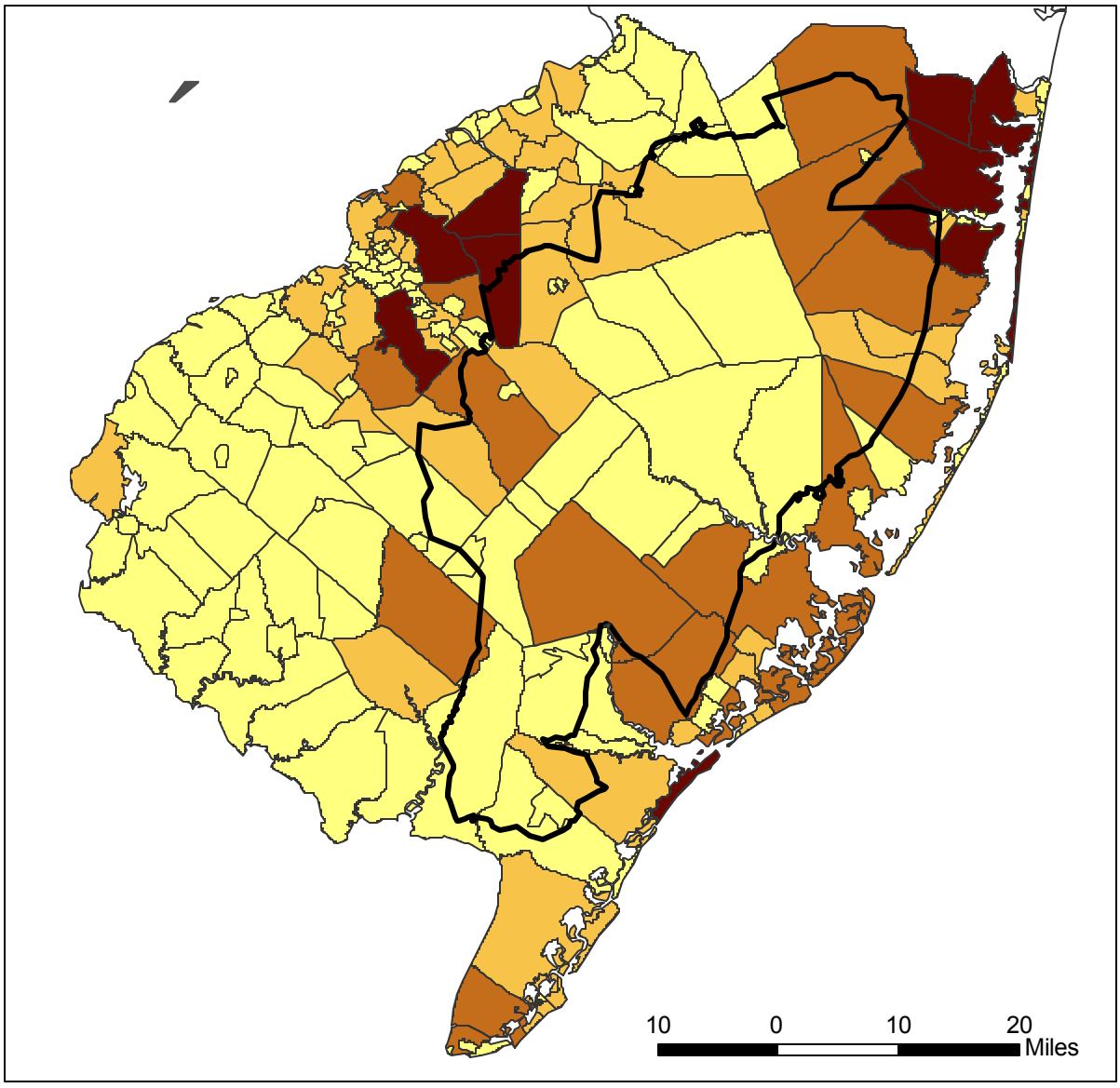
The number of residential transactions increased dramatically in all regions in 2004, posting the largest percentage increase in activity since 1999 (all regions of the state increased by 20% that year). Transactions increased statewide by 17.5% in 2004. In South Jersey, the Pinelands (+15.3%) grew at a quicker rate than the Non-Pinelands (+12.4%) for the 5th consecutive year.

The geographic pattern of transaction activity in the Pinelands remained the same with Berkeley, Evesham, Jackson, and Galloway again holding the top four spots for number of transactions. As is the case with building permits, much of the activity in real estate transactions is occurring on the fringes of the Pinelands (Figure R2). Ocean County continues to experience phenomenal growth. Four of the top five Pinelands municipalities in absolute growth in real estate transactions were in Ocean County in 2004 – Berkeley, Jackson, Stafford, and Lacey (Table R2). Southampton in Burlington County was second in absolute growth in transactions with 231, a 255% increase over 2003.

Table R2 Residential Housing Transactions

Municipality	County	2004	2003	Change	% Change	5 Year Avg
Berkeley	Ocean	1,225	1,052	173	16%	1,002
Southampton	Burlington	231	65	166	255%	167
Jackson	Ocean	901	739	162	22%	751
Stafford	Ocean	690	551	139	25%	476
Lacey	Ocean	685	574	111	19%	563
Egg Harbor Township	Atlantic	697	588	109	19%	513
Evesham	Burlington	1,083	979	104	11%	916
Barnegat	Ocean	414	321	93	29%	315
Pemberton Township	Burlington	411	332	79	24%	305
Winslow	Camden	796	717	79	11%	634
Beachwood	Ocean	216	153	63	41%	181
Monroe	Gloucester	418	365	53	15%	334
Plumsted	Ocean	102	63	39	62%	75
Waterford	Camden	184	148	36	24%	143
Lakehurst	Ocean	60	26	34	131%	31
Manchester	Ocean	579	551	28	5%	559
Medford	Burlington	423	395	28	7%	389
Little Egg Harbor	Ocean	588	562	26	5%	535
South Toms River	Ocean	66	41	25	61%	47
Hamilton	Atlantic	519	495	24	5%	427
Mullica	Atlantic	68	44	24	55%	52
Shamong	Burlington	88	64	24	38%	79
Ocean	Ocean	174	151	23	15%	156
Egg Harbor City	Atlantic	70	51	19	37%	50
Galloway	Atlantic	881	864	17	2%	750
Eagleswood	Ocean	31	19	12	63%	20
Buena	Atlantic	45	37	8	22%	33
Chesilhurst	Camden	16	8	8	100%	11
New Hanover	Burlington	8	1	7	700%	7
Buena Vista	Atlantic	33	28	5	18%	34
Estell Manor	Atlantic	17	13	4	31%	16
Bass River	Burlington	13	9	4	44%	10
Upper	Cape May	203	199	4	2%	171
Woodland	Burlington	16	13	3	23%	12
Port Republic	Atlantic	15	13	2	15%	12
Folsom	Atlantic	21	20	1	5%	15
Berlin Township	Camden	62	63	-1	-2%	55
Weymouth	Atlantic	6	8	-2	-25%	15
Washington	Burlington	2	4	-2	-50%	4
Wrightstown	Burlington	0	2	-2	-100%	2
Franklin	Gloucester	154	156	-2	-1%	120
Woodbine	Cape May	4	8	-4	-50%	5
Maurice River	Cumberland	26	32	-6	-19%	26
Medford Lakes	Burlington	66	73	-7	-10%	76
Dennis	Cape May	67	77	-10	-13%	76
Tabernacle	Burlington	85	97	-12	-12%	89
Hammonton	Atlantic	129	148	-19	-13%	114
"Outside" Municipalities						
Vineland	Cumberland	596	481	115	24%	478
Berlin Borough	Camden	103	89	14	16%	82
North Hanover	Burlington	16	15	1	7%	18
Corbin City	Atlantic	0	3	-3	-100%	2
Springfield	Burlington	26	29	-3	-10%	25

Figure R2 Residential Housing Transactions 2004



Real Estate 3

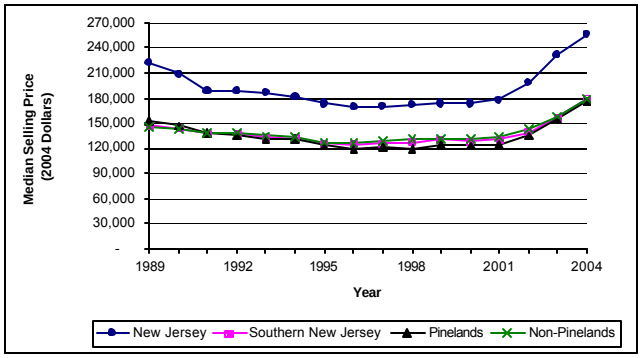
Median Selling Price of Homes

X Updated

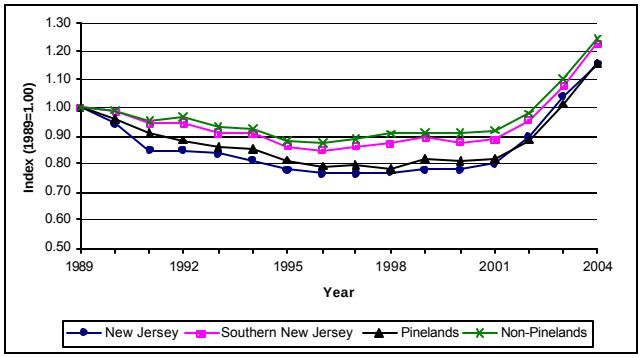
NJ Dept of Treasury, Division of Taxation 1989 – 2004

- Housing prices increased substantially again in 2004. The median sale price of homes grew faster in the Pinelands than in the Non-Pinelands for the third consecutive year.

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 2004 dollars.

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

Summary of Previous Findings

Median selling prices of homes inside and outside of the Pinelands declined from the beginning of the monitoring period (1989) into the early 1990's 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. 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:

The median sales price of homes continued to significantly increase for all regions in 2004, posting double-digit percentage increases for the second year in a row. The median inflation-adjusted sales price rose by 14.3% in the Pinelands, outperforming both the statewide and Non-Pinelands increases (11.3% and 13.1% respectively) for the year. The median sales price for a home in the Pinelands was $176,000 in 2004 compared to $180,000 for the Non-Pinelands.

The gap between the Pinelands and Non-Pinelands home values continues to narrow. In 1998, the median sales price in the Pinelands was 6.8% lower than the Non-Pinelands. The median sales price for a Pinelands home in 2004 was only 2.3% lower than the Non-Pinelands.

Table RE3 Median Home Values - 2004

Municipality	County	Median Sales Price	South Jersey Rank
Shamong	Burlington	$307,150	27
Medford	Burlington	$292,000	29
Tabernacle	Burlington	$280,000	33
Plumsted	Ocean	$271,000	35
Port Republic	Atlantic	$268,000	36
Stafford	Ocean	$259,900	37
Upper	Cape May	$250,000	40
Jackson	Ocean	$249,000	44
Medford Lakes	Burlington	$231,250	47
Lacey	Ocean	$224,000	55
Bass River	Burlington	$222,500	57
Eagleswood	Ocean	$220,000	59
Woodland	Burlington	$213,500	63
Beachwood	Ocean	$205,000	66
New Hanover	Burlington	$202,500	69
Dennis	Cape May	$200,000	70
Evesham	Burlington	$191,900	73
Barnegat	Ocean	$190,000	74
Ocean	Ocean	$189,000	76
Manchester	Ocean	$175,000	87
Estell Manor	Atlantic	$175,000	87
Little Egg Harbor	Ocean	$175,000	87
Egg Harbor Township	Atlantic	$170,000	91
Berkeley	Ocean	$163,000	99
Monroe	Gloucester	$157,000	104
Southampton	Burlington	$155,000	106
South Toms River	Ocean	$151,500	109
Waterford	Camden	$149,200	112
Franklin	Gloucester	$148,200	113
Lakehurst	Ocean	$146,500	116
Winslow	Camden	$142,700	122
Folsom	Atlantic	$142,000	123
Buena Vista	Atlantic	$140,000	124
Berlin Township	Camden	$139,450	128
Pemberton Township	Burlington	$137,000	133
Washington	Burlington	$132,400	141
Hammonton	Atlantic	$130,000	143
Galloway	Atlantic	$130,000	143
Hamilton	Atlantic	$128,000	146
Mullica	Atlantic	$126,750	147
Woodbine	Cape May	$124,900	155
Egg Harbor City	Atlantic	$123,500	157
Chesilhurst	Camden	$121,900	160
Buena	Atlantic	$117,000	166
Weymouth	Atlantic	$95,375	182
Maurice River	Cumberland	$92,100	184
Wrightstown	Burlington	No Sales	N/A
"Outside" Municipalities			
Springfield	Burlington	$338,000	21
North Hanover	Burlington	$281,200	32
Berlin Borough	Camden	$182,900	81
Vineland	Cumberland	$124,000	156
Corbin City	Atlantic	No Sales	N/A

Real Estate 4S

New Retail Space in Square Feet

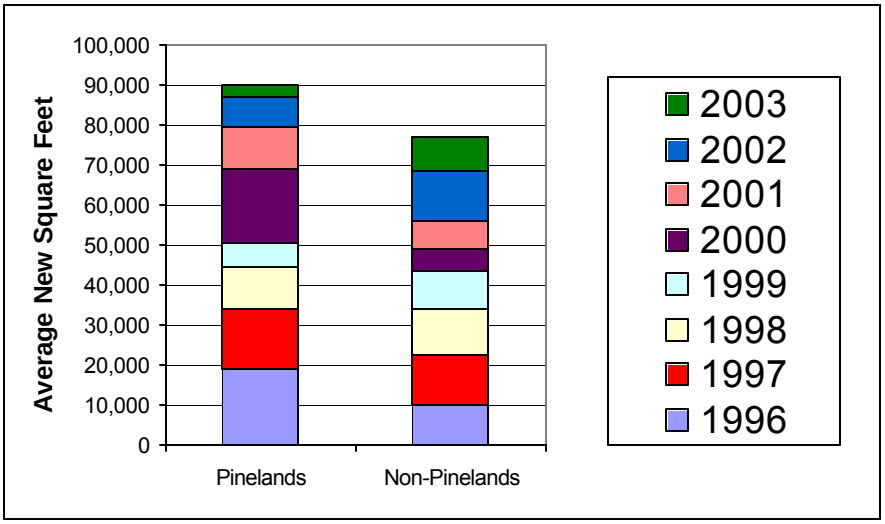
X New

NJ Dept of Community Affairs, Div of Codes & Standards

1996 – 2003

- Average New Retail Space in the Pinelands outpaced the Non-Pinelands by 17% in the eight-year period from 1996 to 2003.

Square Feet of New Retail Space 1996 – 2003



Description: Building permit activity for non-residential uses is reported in square feet instead of the absolute number of units as in residential permits. New retail space includes the square footage of both completely new structures as well as any new square footage added to existing structures.

Unit of Analysis: Municipal level data are aggregated to allow for inside/outside Pinelands analyses. The aggregation method calculates the sum of retail space in square feet for the period 1996 to 2003 for each municipality in South Jersey.

Supplemental Data:

The Pinelands has fared comparatively well with the Non-Pinelands in retail growth over the past eight years. Statistics from the 2002 Census of Retail Trade show retail sales in the Pinelands have increased at twice the rate as the Non-Pinelands have from 1997-2002 (+20.7% for the Pinelands versus 11.2% for the Non-Pinelands. See core variable E4 for more details). This growth in sales has spurred new growth in retail space. From 1996-2003, Pinelands municipalities issued permits averaging 90,107 square feet of new retail space. The Non-Pinelands municipalities averaged 17% less over the same period, issuing permits for an average of 77,190 square feet of new retail space.

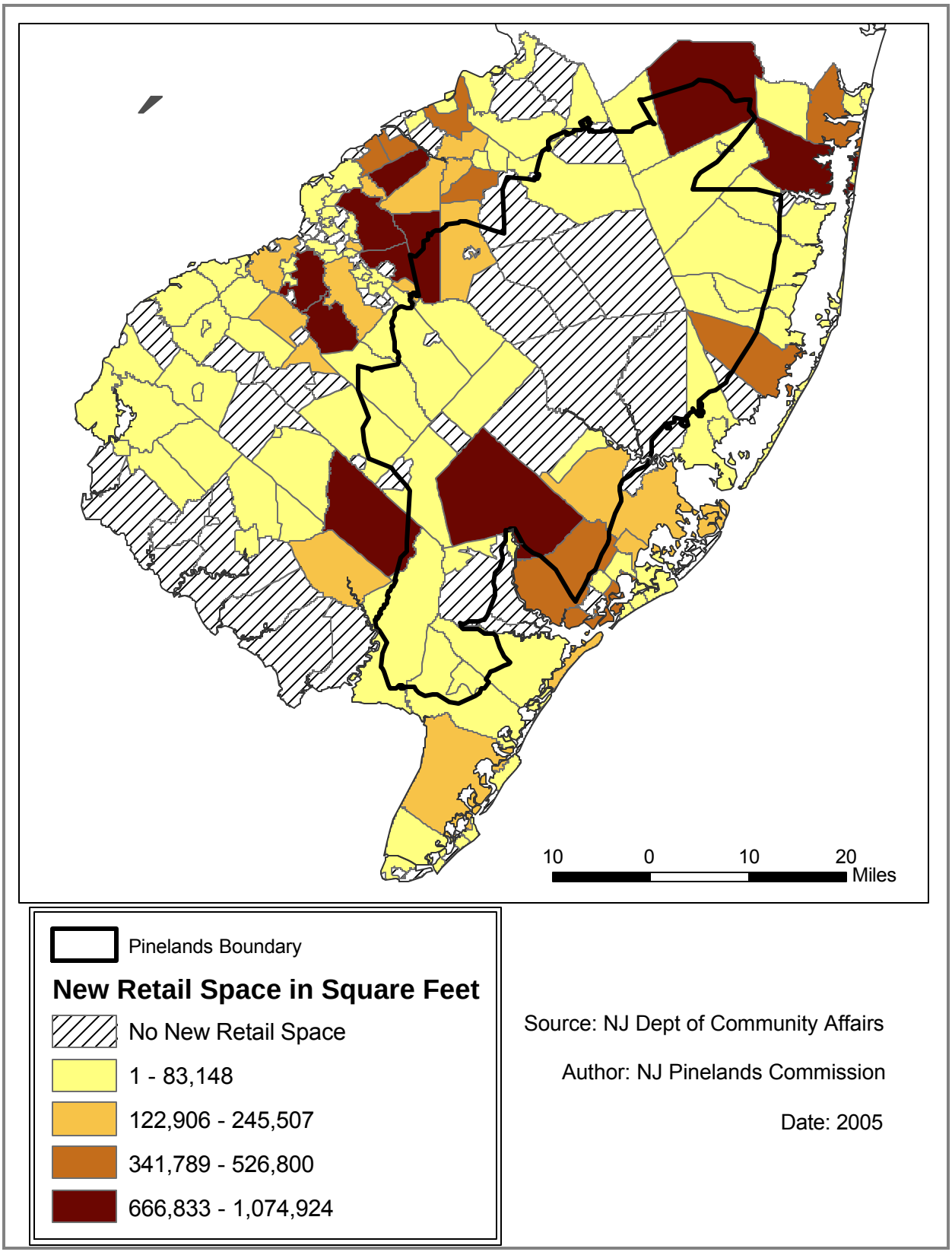
By its nature, retail space tends to be clustered in nodes that serve adjacent residential populations. For example, in the Pinelands, 17 of the 47 municipalities did not issue permits for any new retail space during the period 1996 to 2003, while 80% of the new retail space was concentrated in five municipalities. It is also of some interest to note the range of activity among those municipalities that did have new retail space. Of the 30 Pinelands municipalities with retail activity over the period, 8 municipalities exceeded 150,000 square feet of new space while the remaining 22 municipalities all had minor growth of less than 50,000 square feet of new space (see Table R4S and Figure R4S). The following Pinelands municipalities all ranked in the top 10 percent of South Jersey for retail growth in the past eight years: Hamilton (ranked 1st with over 1 million square feet of new retail space), Evesham (7th with 740,000 sq. ft), Jackson (8th with 715,000 sq. ft), Egg Harbor Township (12th with almost 500,000 sq. ft.), and Stafford (17th with 350,000 sq. ft.). In the Non-Pinelands, an approximately equal percentage of municipalities (66 of 155, or 43%) also issued no new retail space permits over the same period. The top 10% of Non-Pinelands municipalities accounted for 78% of the new retail space in that region, with Dover and Deptford leading the way each with over 1 million square feet of new space.

Figure 4S gives a fairly good representation of the growth of retail centers in South Jersey from 1996 to 2003. An overwhelming majority of the growth in retail space has been concentrated in three geographic areas: the Philadelphia suburbs that border the central western portion of the Pinelands have added 4.8 million new square feet of retail space over the eight years and include the following municipalities: Deptford, Cherry Hill, Voorhees, Evesham, Moorestown, and Washington Township (Gloucester County). The second major retail growth center has been on both sides of the southern border of the Pinelands comprised of Hamilton, Egg Harbor Township, and Vineland. These three municipalities added 2.4 million new square feet of retail space from 1996 to 2003. Finally, on the northeastern border of the Pinelands, Jackson and Dover have together added 1.8 million square feet of new retail space over the eight-year period. It is interesting to note that a large swath of contiguous area in the heart of the Pinelands added no new retail space in the same period. These municipalities make up a large portion of the preservation district in the Pinelands.

Table R4S New Retail Space 1996 – 2003

Municipality	County	New Retail Space in Square Feet	South Jersey Rank
Hamilton	Atlantic	1,074,924	1
Evesham	Burlington	742,250	7
Jackson	Ocean	715,782	8
Egg Harbor Township	Atlantic	496,088	12
Stafford	Ocean	348,213	17
Galloway	Atlantic	156,199	27
Medford	Burlington	151,768	28
Berlin Township	Camden	151,264	29
Monroe	Gloucester	47,844	44
Winslow	Camden	44,226	46
Dennis	Cape May	42,967	48
Hammonton	Atlantic	39,858	49
Berkeley	Ocean	36,831	50
Franklin	Gloucester	36,057	51
Lacey	Ocean	28,403	55
Egg Harbor City	Atlantic	24,047	58
Manchester	Ocean	22,870	60
Plumsted	Ocean	20,439	63
Waterford	Camden	15,180	71
Little Egg Harbor	Ocean	10,752	80
Ocean	Ocean	10,518	82
Maurice River	Cumberland	8,156	89
Buena Vista	Atlantic	3,474	99
Woodbine	Cape May	2,500	101
Upper	Cape May	1,276	107
Barnegat	Ocean	1,175	110
Pemberton Township	Burlington	928	112
Lakehurst	Ocean	760	113
Weymouth	Atlantic	210	116
Wrightstown	Burlington	64	119
Buena	Atlantic	0	120
Estell Manor	Atlantic	0	120
Folsom	Atlantic	0	120
Mullica	Atlantic	0	120
Port Republic	Atlantic	0	120
Bass River	Burlington	0	120
Medford Lakes	Burlington	0	120
New Hanover	Burlington	0	120
Shamong	Burlington	0	120
Southampton	Burlington	0	120
Tabernacle	Burlington	0	120
Washington	Burlington	0	120
Woodland	Burlington	0	120
Chesilhurst	Camden	0	120
Beachwood	Ocean	0	120
Eagleswood	Ocean	0	120
South Toms River	Ocean	0	120
"Outside" Municipalities			
Vineland	Cumberland	790,643	5
Springfield	Burlington	62,670	40
Berlin Borough	Camden	25,596	56
North Hanover	Burlington	1,152	111
Corbin City	Atlantic	0	120

Figure R4S **Square Feet of New Retail Space 1996 - 2003**



Real Estate 5S

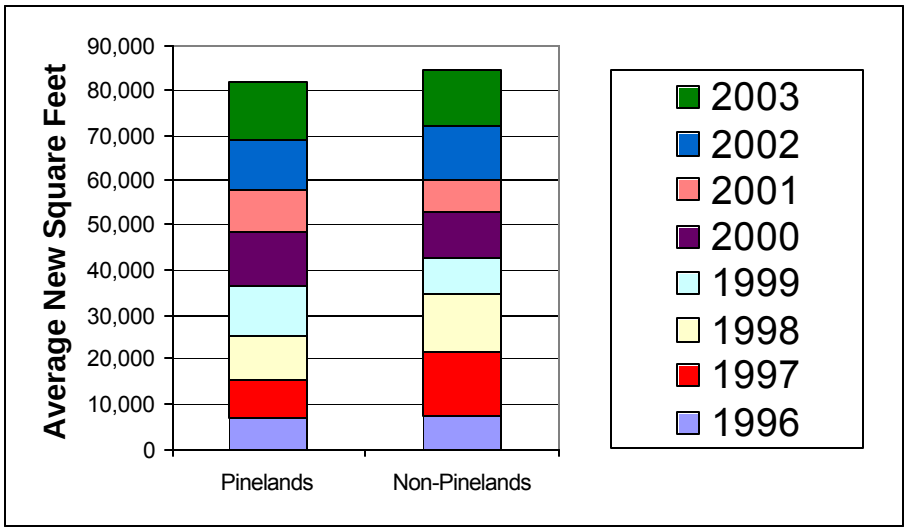
New Office Space in Square Feet

X New

NJ Dept of Community Affairs, Div of Codes & Standards
1996 – 2003

- The growth in new office space in South Jersey from 1996 – 2003 occurred primarily on the northwest, northeast, southwest, and southeast fringes of the Pinelands boundary.

Square Feet of New Office Space 1996 – 2003



Description: Building permit activity for non-residential uses is reported in square feet instead of the absolute number of units as in residential permits. New office space includes the square footage of both completely new structures as well as any new square footage added to existing structures.

Unit of Analysis: Municipal level data are aggregated to allow for inside/outside Pinelands analyses. The aggregation method calculates the sum of office space in square feet for the period 1996 to 2003 for each municipality in South Jersey.

Supplemental Data:

The comparison of the Pinelands and Non-Pinelands in respect to new office space between 1996 and 2003 is complicated by the inclusion of Mount Laurel in Burlington County, which by itself accounted for 13% of the new office space in all of South Jersey over the period. Mount Laurel added an astonishing 2.2 million square feet of new office space from 1996 to 2003 – by comparison, Dover Township, which ranked 2nd in South Jersey over that time, added about a third of that amount with 830,000 square feet of new office space. Mount Laurel is ideally situated as an office center, resting at the intersection of four major north/south (the NJ Turnpike and Interstate 295) and east/west highways (Routes 38 and 73). As a result they are the headquarters for a number of major corporations including Lockheed Martin, Okidata, and NFL Films. The Delaware Valley Regional Planning Commission estimates that the transient work force in Mount Laurel numbers 60,000 between 9am and 5pm during the work week and may climb as high as 100,000 by 2010. By contrast, the resident population of Mount Laurel in 2003 was slightly more than 40,000 people.

The chart above details the average square feet of building permits for new office space from 1996-2003 and includes Mount Laurel, as well as the other 201 municipalities in Southern New Jersey. The average for Pinelands' municipalities for the period was 81,533 new square feet. The Non-Pinelands municipality average was 4% higher at 84,704 square feet of new office space. However, if the data is examined with the Mount Laurel numbers removed, the average for the Non-Pinelands region falls to 70,794 square feet of new office space, a figure that is 15% lower than the Pinelands for the eight-year period.

Despite the overwhelming dominance of Mount Laurel, the pattern of new office space is much less concentrated than it is for new retail space. Only 15% (7 of the 47) of Pinelands municipalities had no activity in office space

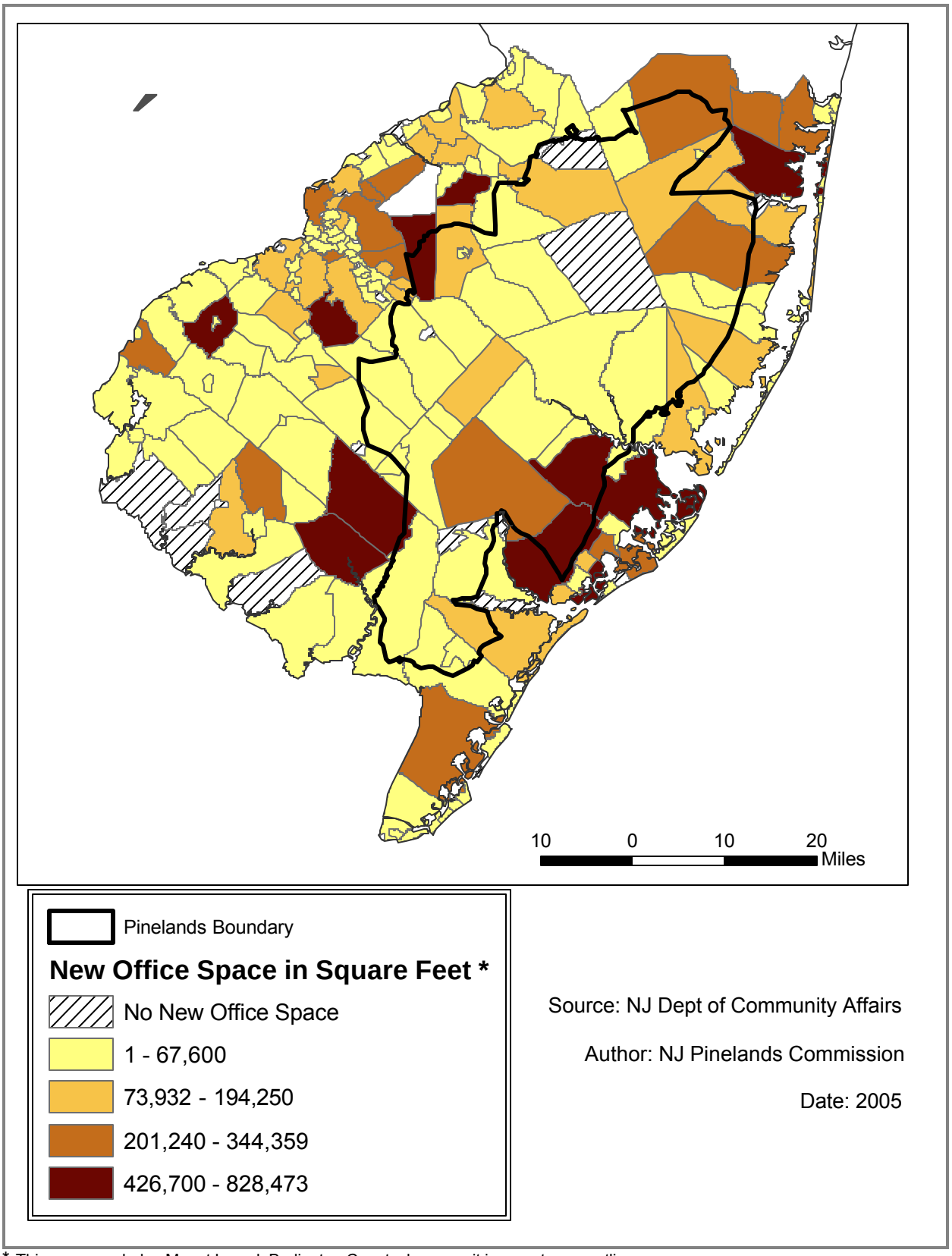
permits from 1996-2003 while 17% (27 of 155) of the Non-Pinelands municipalities did not issue any new office space permits. The concentration of the top municipalities is also lower for new office space than it is for new retail space. The top five Pinelands municipalities accounted for 52% of the new office space from 1996 to 2003, while the same percentage of the top Non-Pinelands municipalities make up 64% of the new office space in that region. When Mount Laurel is removed, that figure drops to 56% for the Non-Pinelands region. The range of activity is also less concentrated for office space in comparison to retail space. Of the 40 Pinelands municipalities issuing permits for new office space for the period, 14 exceeded 100,000 square feet of space while 22 had minor activity with less than 50,000 new square feet of space.

The majority of the growth in office space in South Jersey from 1996 to 2003 can be separated into four distinct regions. These are located on the fringe of the Pinelands at the northwest, northeast, southwest, and southeast corners of the Pinelands boundary (Figure R5S). The largest of these areas by far is on the northwest fringe of the Pinelands surrounding Mount Laurel that includes Evesham, Moorestown, Maple Shade, Cherry Hill, Voorhees, and Lumberton. Those 7 municipalities lie directly in the Philadelphia/New York corridor and have added 4.4 million square feet of new office during the past eight years. On the northeast fringe of the Pinelands, Jackson, Lakewood, Brick, and Dover combined have added 1.8 million square feet of new office space from 1996-2003. On the southwest border of the Pinelands, Millville and Vineland together have added 1 million square feet of new office space during the same time period. Finally, in the southeast section of the Pinelands, Galloway, Egg Harbor Township, and Hamilton have added 1.1 million square feet of new office space over the same eight-year period. Though it is impossible to say exactly how much of the growth in these three towns had occurred inside the Pinelands boundary, all three municipalities have substantial portions of their land area in regional growth areas. It may not be crucial to differentiate between inside/outside categories here considering that ratables derived from office or retail space are shared by the entire community regardless of their location with respect to the Pinelands boundary.

Table R5S New Office Space 1996 - 2003

Municipality	County	New Office Space in Square Feet	South Jersey Rank
Evesham	Burlington	574,188	4
Galloway	Atlantic	474,097	7
Egg Harbor Township	Atlantic	427,901	9
Jackson	Ocean	268,933	18
Lacey	Ocean	253,780	21
Hamilton	Atlantic	214,524	25
Stafford	Ocean	178,522	28
Little Egg Harbor	Ocean	162,934	30
Berlin Township	Camden	157,547	34
Berkeley	Ocean	130,470	39
Upper	Cape May	118,757	40
Medford	Burlington	114,571	41
Hammonton	Atlantic	108,048	43
Pemberton Township	Burlington	103,866	44
Manchester	Ocean	76,775	51
Dennis	Cape May	65,806	54
Monroe	Gloucester	58,060	57
Woodbine	Cape May	52,232	62
Franklin	Gloucester	49,191	65
Maurice River	Cumberland	39,404	71
Winslow	Camden	36,704	73
Plumsted	Ocean	32,464	80
Folsom	Atlantic	29,158	85
Barnegat	Ocean	13,477	102
Southampton	Burlington	11,816	106
Egg Harbor City	Atlantic	11,780	107
Bass River	Burlington	11,304	108
Buena Vista	Atlantic	10,756	109
Buena	Atlantic	9,640	113
Estell Manor	Atlantic	7,685	118
Waterford	Camden	6,508	123
Medford Lakes	Burlington	6,298	125
Lakehurst	Ocean	5,849	127
Eagleswood	Ocean	4,980	131
Ocean	Ocean	1,280	150
Washington	Burlington	800	157
Port Republic	Atlantic	574	160
Tabernacle	Burlington	517	161
Shamong	Burlington	450	162
Mullica	Atlantic	414	163
Weymouth	Atlantic	0	169
New Hanover	Burlington	0	169
Woodland	Burlington	0	169
Wrightstown	Burlington	0	169
Chesilhurst	Camden	0	169
Beachwood	Ocean	0	169
South Toms River	Ocean	0	169
"Outside" Municipalities			
Vineland	Cumberland	569,407	5
Berlin Borough	Camden	99,280	46
North Hanover	Burlington	28,191	87
Springfield	Burlington	1,498	149
Corbin City	Atlantic	0	169

Figure R5S **Square Feet of New Office Space 1996 – 2003**



* This range excludes Mount Laurel, Burlington County, because it is an extreme outlier.

Real Estate

6S

New School Space in Square Feet

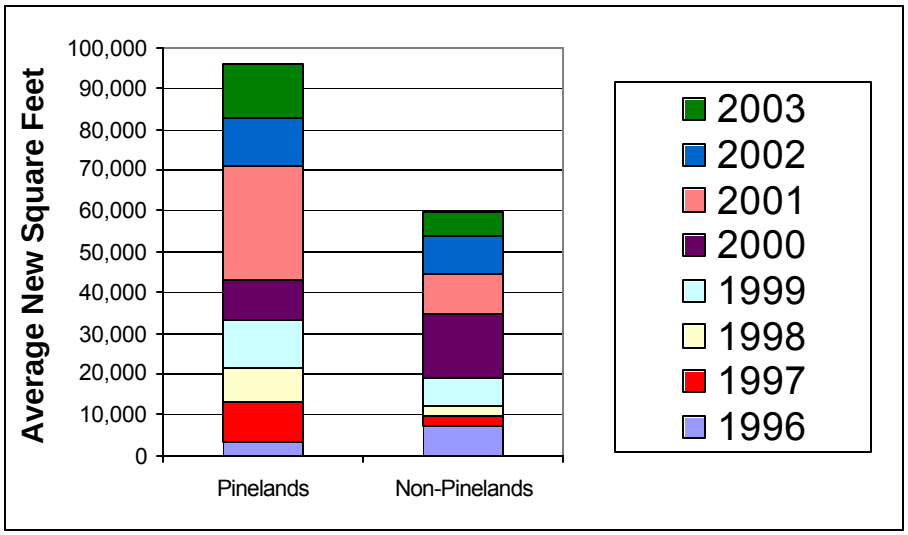
X New

NJ Dept of Community Affairs, Div of Codes & Standards

1996 – 2003

- Average New School Space in the Pinelands is 60% higher than in the Non-Pinelands over the past eight years.

Square Feet of New School Space 1996 – 2003



Description: Building permit activity for non-residential uses is reported in square feet instead of the absolute number of units as in residential permits. New school space includes the square footage of both completely new structures as well as any new square footage added to existing structures. This category of permit data includes all education facilities from grades K through 12, and does not differentiate between public and private schools.

Unit of Analysis: Municipal level data are aggregated to allow for inside/outside Pinelands analyses. The aggregation method calculates the sum of new school space in square feet for the period 1996 to 2003 for each municipality in South Jersey.

Supplemental Data:

The effect of the relative population growth in the Pinelands versus the Non-Pinelands over the past decade becomes more apparent when examining school infrastructure needs. According to population estimate data, the Pinelands population increased 15.5% between 1993 and 2003; the Non-Pinelands experienced roughly half that rate of growth over the same period with an 8.3% increase in population. As a result, the Pinelands municipalities have had more activity in building permits for new school space for the years from 1996 to 2003. The Pinelands municipality average for the eight-year period was 95,735 square feet of new school space. That figure is 60% higher than the 59,791 square feet of new school space in the average Non-Pinelands municipality during the same time.

Several Pinelands communities have had substantial growth in new school activity from 1996 to 2003, with 7 of the 47 municipalities ranking in the top 10% in Southern New Jersey in this category: Egg Harbor Township 4th, Evesham 6th, Stafford 7th, Winslow 10th, Jackson 15th, Hamilton 16th, and Hammonton 17th (Table R6Sa). Of the 34 Pinelands municipalities that issued new school building permits, 47% (16 municipalities) authorized permits in excess of 100,000 square feet of space. In the Non-Pinelands, 91 municipalities issued new school building permits over the same period, but only 30% (27 municipalities) of those required new school space in excess of 100,000 square feet. However, 6 of the top 10 fastest growing municipalities in regard to new school space from 1996-2003 were outside of the Pinelands (Harrison, Gloucester, Atlantic City, Dover, Washington Township in Gloucester County, and Pleasantville).

The brisk pace of growth in new school building permits has been of particular concern in some Pinelands municipalities due to the tremendous construction costs associated with this new infrastructure. Figure R6S demonstrates a line of intense new school growth that extends from the Philadelphia suburbs of western Camden County through the Pinelands and into the shore towns of Atlantic County. It should be noted that a number of the communities that are situated to the west of the Pinelands boundary are approaching "build-out", and as such have not had the large population increases that necessitate the need for new schools.

While there is understandable concern about the immediate fiscal impacts associated with the construction costs and debt service of new schools, a longer-term concern of the most affected communities is whether or not the continued operating costs of these new schools can be absorbed by the local taxpayers and municipal economies. Data from the previous two supplemental variables can help address that question. Table R6Sb shows the comparative building activity for new schools from 1996-2003 alongside the growth in ratables as measured by the total amount of new square feet in retail and office space over the same time frame. While no claim is being made as to how many square feet of new retail/office space is needed to support a square foot of new school space, it is clear that taxpayers in communities that have experienced growth in ratables will be in a better position than those communities where new school growth will be funded entirely or mostly by the residential population. When examined in this light, the effects of new school growth in the Pinelands for the long-term become quite different than the short-term costs associated with new construction.

For example, Egg Harbor Township, in addition to its almost 600,000 square feet of new school space, has added 925,000 square feet of retail/office space from 1996-2003. The tax revenues from these new ratables will help mitigate the costs to taxpayers of operating this new school space over the long-term. In contrast, municipalities that have added substantial new school space without a concurrent increase in their ratables base will have fewer options in how they will finance the new costs associated with these schools. Absent other revenue sources, the residential taxpaying population of these towns may be forced to bear these added costs in higher taxes. In the Pinelands from 1996-2003, Plumsted, Beachwood, Tabernacle, and Winslow have added an average of 217,000 square feet of new school space while increasing their ratables bases by an average of only 34,000 square feet of new space (Table R6Sb). It should be noted that some of these municipalities (Tabernacle, for example) have schools that participate in a regional sending district and thus share some of the costs with taxpayers in surrounding municipalities that are sending children to the same district. For example, at the high school level the Lenape Regional High School district includes children from Evesham, Medford, Medford Lakes, Mount Laurel, Shamong, Southampton, Tabernacle, and Woodland. However, for those who do not have such regional sharing of education costs (Plumsted, for example), rapid growth presents a real challenge to controlling taxes while providing the same level of education.

Table R6Sa New School Space 1996 – 2003

Municipality	County	New School Space in Square Feet	South Jersey Rank
Egg Harbor Township	Atlantic	591,959	3
Evesham	Burlington	499,284	6
Stafford	Ocean	395,659	7
Winslow	Camden	308,109	10
Jackson	Ocean	253,478	15
Hamilton	Atlantic	246,928	16
Hammonton	Atlantic	240,460	17
Lacey	Ocean	217,589	21
Galloway	Atlantic	216,330	23
Tabernacle	Burlington	215,174	24
Beachwood	Ocean	194,382	27
Berkeley	Ocean	177,104	32
Medford	Burlington	176,360	33
Little Egg Harbor	Ocean	158,903	35
Plumsted	Ocean	151,350	36
Dennis	Cape May	100,859	43
Barnegat	Ocean	65,881	51
Mullica	Atlantic	40,063	65
Ocean	Ocean	39,502	66
Manchester	Ocean	39,062	67
Pemberton Township	Burlington	29,416	74
Monroe	Gloucester	28,530	75
Maurice River	Cumberland	28,444	76
Upper	Cape May	21,664	84
Buena Vista	Atlantic	19,148	85
Estell Manor	Atlantic	14,058	92
Egg Harbor City	Atlantic	12,040	99
Lakehurst	Ocean	5,750	107
Wrightstown	Burlington	5,078	108
Woodland	Burlington	3,824	110
Shamong	Burlington	2,239	114
Medford Lakes	Burlington	510	122
Southampton	Burlington	240	124
Waterford	Camden	161	125
Buena	Atlantic	0	127
Folsom	Atlantic	0	127
Port Republic	Atlantic	0	127
Weymouth	Atlantic	0	127
Bass River	Burlington	0	127
New Hanover	Burlington	0	127
Washington	Burlington	0	127
Berlin Township	Camden	0	127
Chesilhurst	Camden	0	127
Woodbine	Cape May	0	127
Franklin	Gloucester	0	127
Eagleswood	Ocean	0	127
South Toms River	Ocean	0	127
“Outside” Municipalities			
Vineland	Cumberland	114,624	41
Berlin Borough	Camden	50,957	56
North Hanover	Burlington	12,900	97
Corbin City	Atlantic	0	127
Springfield	Burlington	0	127

Figure RS6 **Square Feet of New School Space 1996 – 2003**

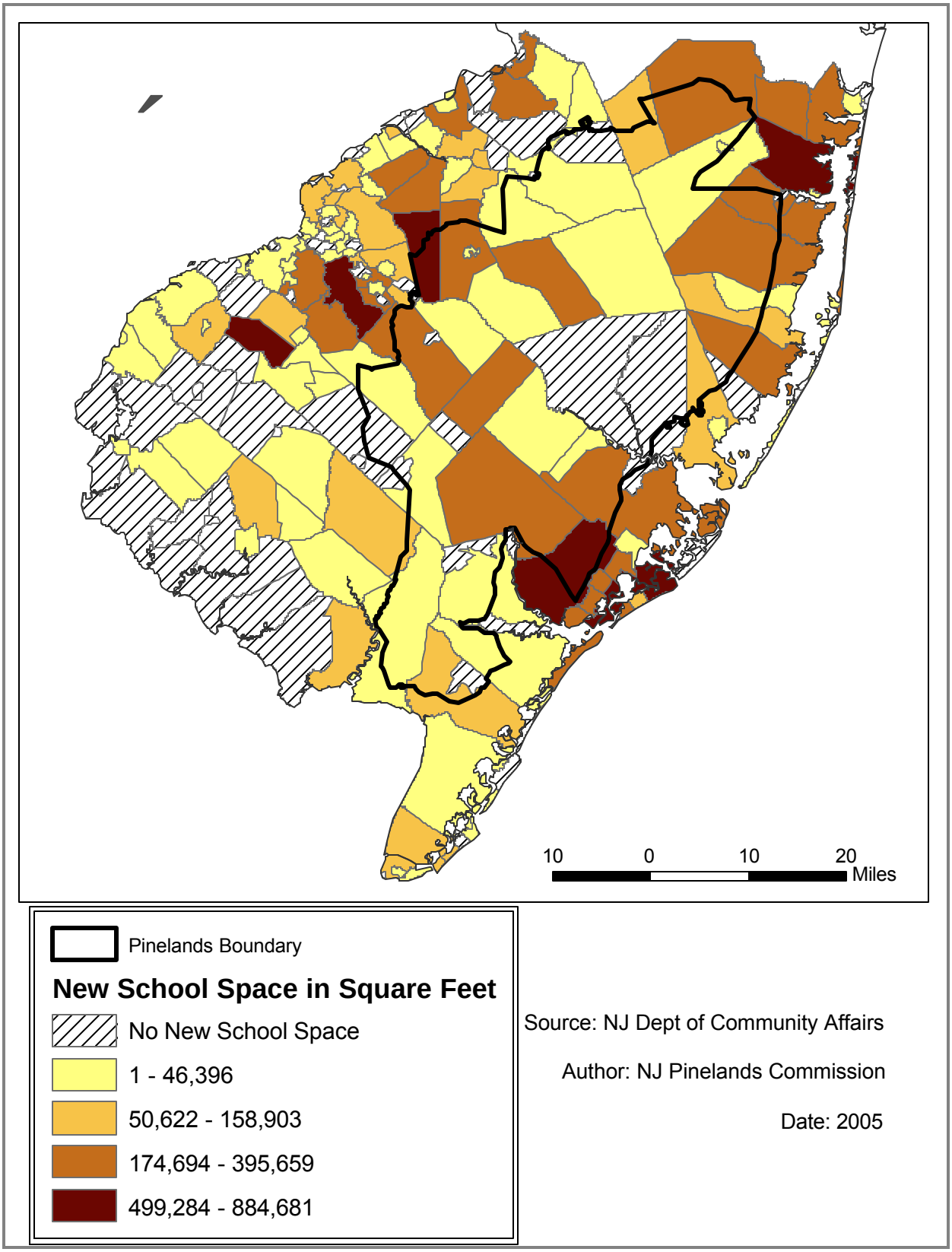


Table R6Sb New School Space versus New Ratables 1996 - 2003

Municipality	County	Sq. Ft. of New School Space	Total Sq. Ft. of New Retail and Office Space	New Ratables Space minus New School Space
Hamilton	Atlantic	246,928	1,289,448	1,042,520
Evesham	Burlington	499,284	1,316,438	817,154
Jackson	Ocean	253,478	984,715	731,237
Galloway	Atlantic	216,330	630,296	413,966
Egg Harbor Township	Atlantic	591,959	923,989	332,030
Berlin Township	Camden	0	308,811	308,811
Stafford	Ocean	395,659	526,735	131,076
Upper	Cape May	21,664	120,033	98,369
Medford	Burlington	176,360	266,339	89,979
Franklin	Gloucester	0	85,248	85,248
Monroe	Gloucester	28,530	105,904	77,374
Pemberton Township	Burlington	29,416	104,794	75,378
Lacey	Ocean	217,589	282,183	64,594
Manchester	Ocean	39,062	99,645	60,583
Woodbine	Cape May	0	54,732	54,732
Folsom	Atlantic	0	29,158	29,158
Egg Harbor City	Atlantic	12,040	35,827	23,787
Waterford	Camden	161	21,688	21,527
Maurice River	Cumberland	28,444	47,560	19,116
Little Egg Harbor	Ocean	158,903	173,686	14,783
Southampton	Burlington	240	11,816	11,576
Bass River	Burlington	0	11,304	11,304
Buena	Atlantic	0	9,640	9,640
Dennis	Cape May	100,859	108,773	7,914
Medford Lakes	Burlington	510	6,298	5,788
Eagleswood	Ocean	0	4,980	4,980
Lakehurst	Ocean	5,750	6,609	859
Washington	Burlington	0	800	800
Port Republic	Atlantic	0	574	574
Weymouth	Atlantic	0	210	210
New Hanover	Burlington	0	0	0
Chesilhurst	Camden	0	0	0
South Toms River	Ocean	0	0	0
Shamong	Burlington	2,239	450	-1,789
Woodland	Burlington	3,824	0	-3,824
Buena Vista	Atlantic	19,148	14,230	-4,918
Wrightstown	Burlington	5,078	64	-5,014
Estell Manor	Atlantic	14,058	7,685	-6,373
Berkeley	Ocean	177,104	167,301	-9,803
Ocean	Ocean	39,502	11,798	-27,704
Mullica	Atlantic	40,063	414	-39,649
Barnegat	Ocean	65,881	14,652	-51,229
Hammonton	Atlantic	240,460	147,906	-92,554
Plumsted	Ocean	151,350	52,903	-98,447
Beachwood	Ocean	194,382	0	-194,382
Tabernacle	Burlington	215,174	517	-214,657
Winslow	Camden	308,109	80,930	-227,179
"Outside" Municipalities				
Vineland	Cumberland	114,624	1,360,050	1,245,426
Berlin Borough	Camden	50,957	124,876	73,919
Springfield	Burlington	0	64,168	64,168
North Hanover	Burlington	12,900	29,343	16,443
Corbin City	Atlantic	0	0	0

Real Estate 7S

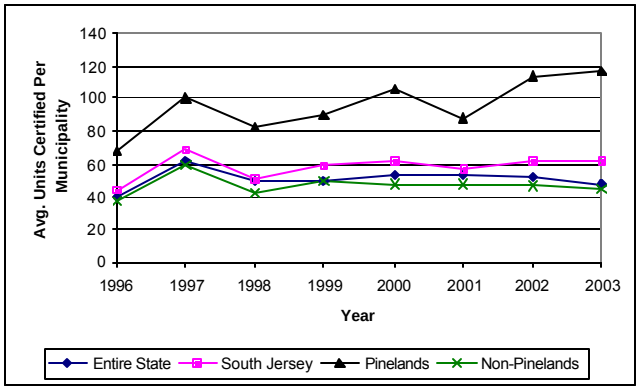
Certificates of Occupancy

X New

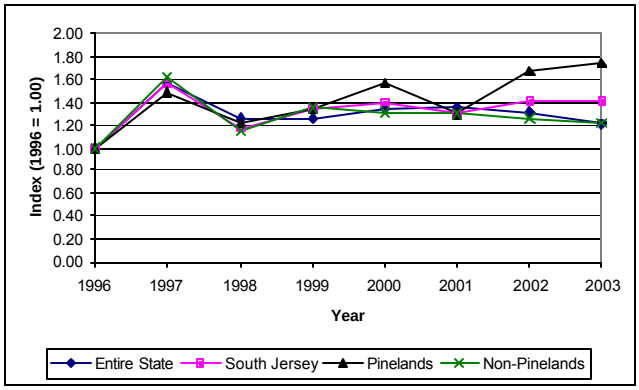
NJ Dept of Community Affairs, Div of Codes & Standards
1996 – 2003

- The Pinelands region contains 11 of the 20 fastest growing municipalities in Southern New Jersey from 1996 to 2003 as measured by construction of new residential units.

Avg # Dwelling Units Issued Certificate of Occupancy



Index of Dwelling Units Issued Certificate of Occupancy



Description: Construction officials issue certificates of occupancy at the end of the construction process, when buildings are complete and ready for occupancy. In contrast to building permits, which establish planned growth, certificates of occupancy document actual new growth on the ground.

Unit of Analysis: Municipal level data are aggregated to allow for inside/outside Pinelands analyses. The aggregation method calculates the average of certificates of occupancy issued for the period 1996 to 2003 for each municipality in South Jersey.

Supplemental Data:

For a variety of reasons, not all building permits granted are eventually built. The development process can span several years from conception to completion, and economic and planning considerations often cause adjustments to what actually gets built in relation to permits granted. In examining the historical data, it is apparent that the percentage of units built in relation to the number of permits issued is not constant across municipalities. It is therefore illustrative to examine the data for certificates of occupancy issued to monitor actual growth in new units over time.

On a regional basis, the Pinelands has still exhibited higher growth in comparison to the Non-Pinelands over the past decade. On average, Pinelands municipalities issued about twice as many certificates of occupancy as the Non-Pinelands and the state as a whole from 1996 – 2001. In 2002 and 2003, growth spiked in the Pinelands and now is about three times the average for the Non-Pinelands and the rest of the state annually. From 1996 to 2003, 11 of the top 20 fastest growing municipalities for new construction were located in the Pinelands. During the same period, 28% of municipalities in the Pinelands issued more than 1,000 certificates of occupancy (13 of 47 municipalities). By comparison, only 12% of the Non-Pinelands municipalities achieved such growth (18 of 155 municipalities). It should be noted, however, that many of the Non-Pinelands municipalities are much closer to approaching "build-out" and therefore many of them have significantly less vacant developable land.

In addition, as is the case with the population estimate data, there is some question as to how many of these new units were actually constructed within the Pinelands boundary. Data is only available at the municipal level, so it is not possible with any degree of certainty to say exactly which units fall on each side of the boundary in those municipalities with only a portion of their land in the Pinelands. By dividing the Pinelands municipalities into groupings based on the percentage of their land inside the boundary, we can make an educated guess as to the actual numbers.

The following chart is similar to the one presented in the population estimates section and addresses this issue:

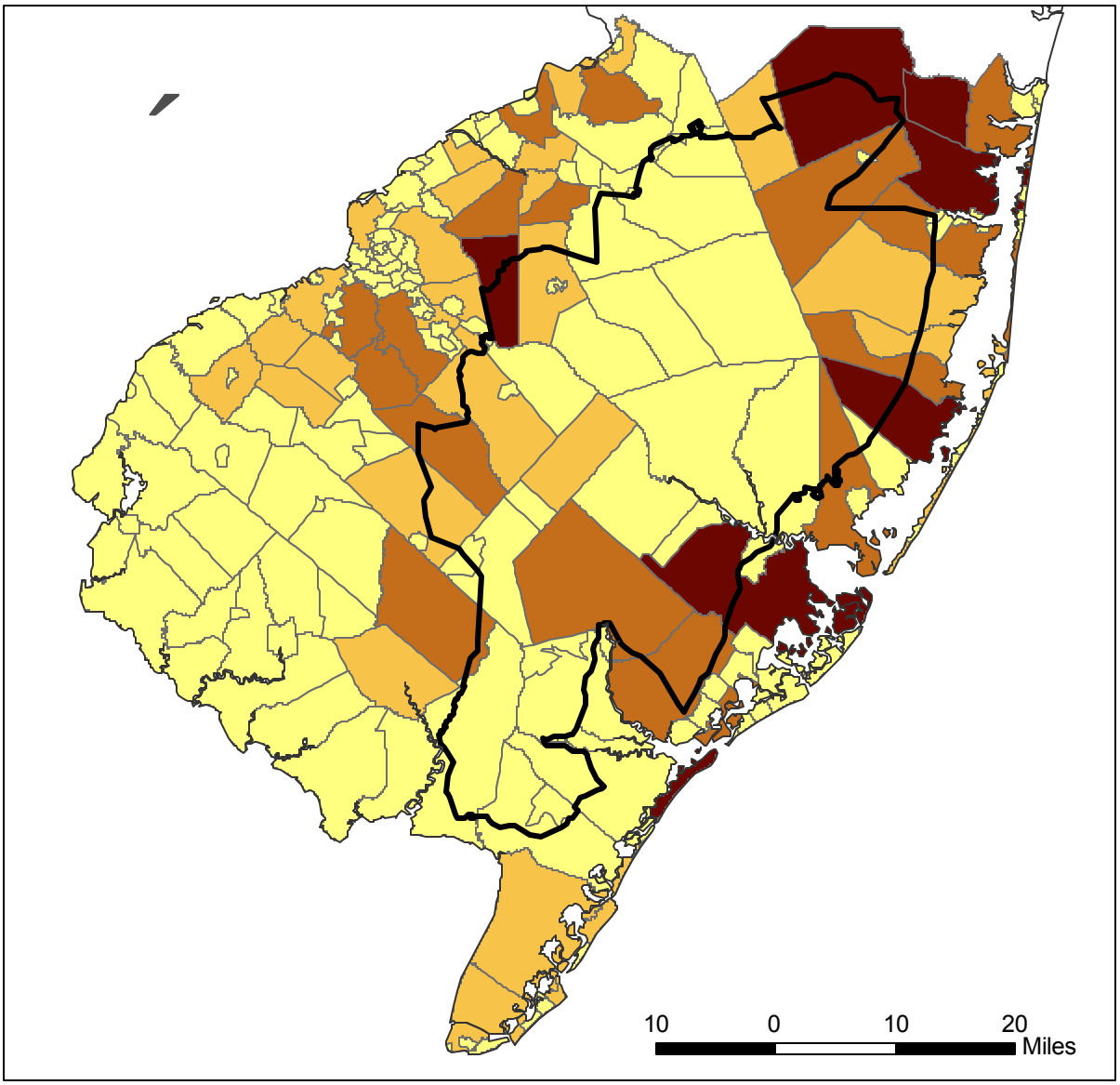
Region (# of Municipalities)	Average # of Certificates Of Occupancy Issued from 1996 - 2003
Pinelands (47)	765
Non-Pinelands (155)	374
100% of Land in Pines (11)	151
55-99% of Land in Pines (19)	824
10-54% of Land in Pines (17)	1,096
< 10% of Land in Pines (155)	374

The same pattern emerges with certificates of occupancy issued as did with the population estimate data. Municipalities completely inside or outside of the Pinelands have comparatively low rates of activity in relation to those municipalities that straddle the Pinelands border. In addition, construction activity increases as the percentage of land inside the Pinelands boundary decreases for these "border" municipalities. This strongly suggests that a large portion of the construction activity is probably taking place just outside of the Pinelands boundary. A visual inspection of Southern New Jersey depicted in Figure R7S confirms that the largest areas of growth in certificates of occupancy issued over the eight-year period are located on the eastern and western borders of the Pinelands boundary. Ocean County in particular has experienced incredible growth, adding 29,763 new certified housing units from 1996 – 2003.

Table R7S Certificates of Occupancy Issued 1996 – 2003

Municipality	County	Certificates of Occupancy Issued	South Jersey Rank
Jackson	Ocean	4,146	2
Evesham	Burlington	3,387	3
Galloway	Atlantic	3,191	4
Stafford	Ocean	2,816	7
Manchester	Ocean	2,381	12
Barnegat	Ocean	2,066	14
Egg Harbor Township	Atlantic	2,065	15
Little Egg Harbor	Ocean	1,877	16
Monroe	Gloucester	1,837	17
Berkeley	Ocean	1,835	18
Hamilton	Atlantic	1,590	20
Winslow	Camden	1,155	27
Lacey	Ocean	1,062	30
Medford	Burlington	838	35
Franklin	Gloucester	589	43
Plumsted	Ocean	558	45
Ocean	Ocean	532	46
Hammonton	Atlantic	527	48
Southampton	Burlington	428	54
Upper	Cape May	390	55
Waterford	Camden	372	56
Pemberton Township	Burlington	304	65
Dennis	Cape May	271	68
Shamong	Burlington	263	70
Berlin Township	Camden	211	75
Buena Vista	Atlantic	198	79
Weymouth	Atlantic	185	81
Mullica	Atlantic	178	83
Tabernacle	Burlington	124	97
Estell Manor	Atlantic	96	103
Maurice River	Cumberland	80	112
Chesilhurst	Camden	70	116
Woodland	Burlington	55	125
Buena	Atlantic	52	128
Eagleswood	Ocean	45	134
Woodbine	Cape May	33	143
Beachwood	Ocean	31	145
Egg Harbor City	Atlantic	24	153
Port Republic	Atlantic	23	155
Folsom	Atlantic	20	161
New Hanover	Burlington	17	166
Washington	Burlington	17	166
Medford Lakes	Burlington	13	175
Lakehurst	Ocean	3	192
South Toms River	Ocean	2	194
Bass River	Burlington	1	196
Wrightstown	Burlington	1	196
“Outside” Municipalities			
Vineland	Cumberland	1,465	21
Berlin Borough	Camden	448	52
Springfield	Burlington	167	84
North Hanover	Burlington	122	98
Corbin City	Atlantic	35	141

Figure R7S Certificates of Occupancy Issued 1996 – 2003



Economy 1

Per Capita Income

Updated

US Census Bureau 1979, 1989, 1999

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

Per Capita Income

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

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

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

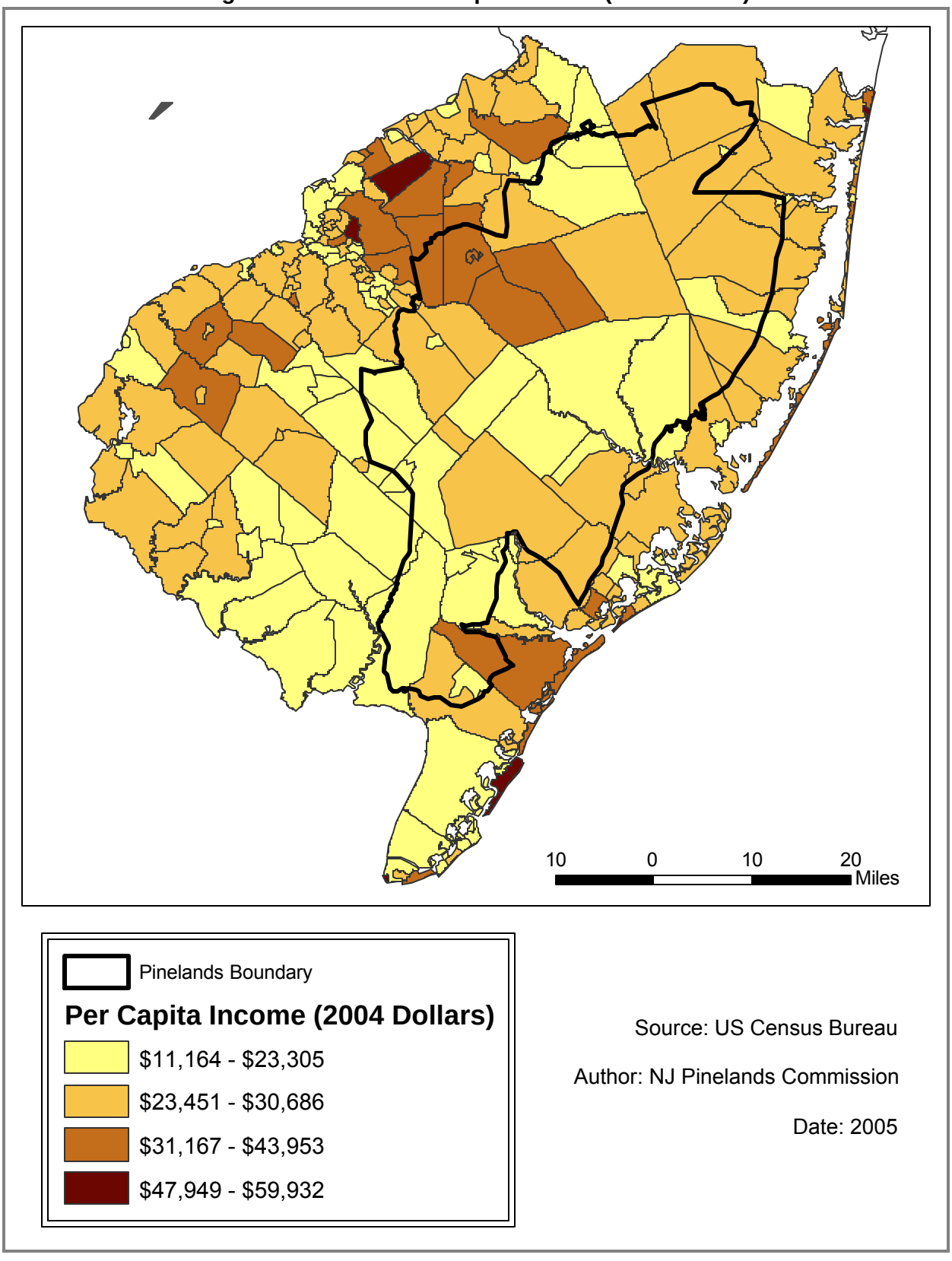
Summary of Previous Findings

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

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

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

Figure E1 1999 Per Capita Income (2004 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%
"Outside" Municipalities						
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

Economy 2

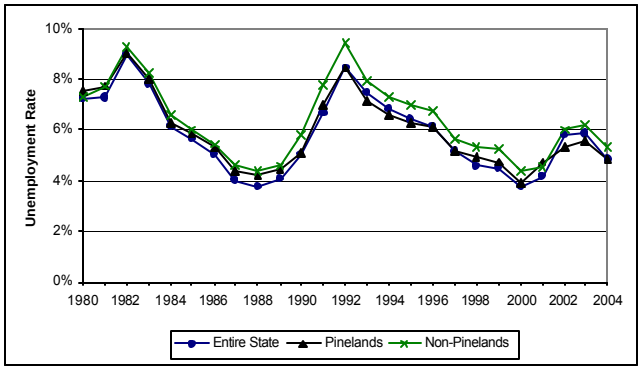
Unemployment

X Updated

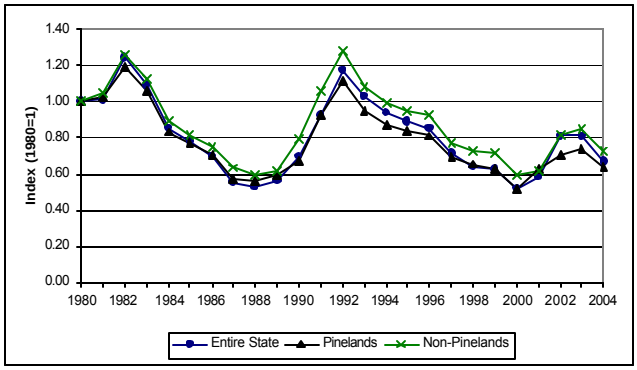
New Jersey Department of Labor 1980 – 2004

- After three consecutive years of modest increases across all regions, the unemployment rate decreased between .75% and 1% in the Pinelands, Non-Pinelands, and Statewide.

Unemployment Rate



Index of Unemployment Rate



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

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

Summary of Previous Findings

Trends in unemployment in the Pinelands and Non-Pinelands regions have tracked closely together, with levels in the Pinelands consistently lower than the levels in the Non-Pinelands from 1990-2000. Unemployment in New Jersey appeared to follow general economic conditions, declining in the mid-1980s before increasing at the turn of the decade during the recession. Following a peak in 1992, unemployment levels declined steadily by roughly four percentage points by 2000, coinciding with a period of economic growth. Unemployment rose in 2001 with the onset of recession, and job recovery following the end of the recession in 2002 was sluggish with modest increases in unemployment in 2002 and 2003.

Update

After three consecutive years of unemployment increases (2001-2003), the job market began to improve in 2004. According to the US Bureau of Labor statistics, approximately 8.1 million Americans were unemployed in 2004, compared to 8.8 million in 2003. The national unemployment rate dropped by half a percentage point from 6.0% in 2003 to 5.5% in 2004.

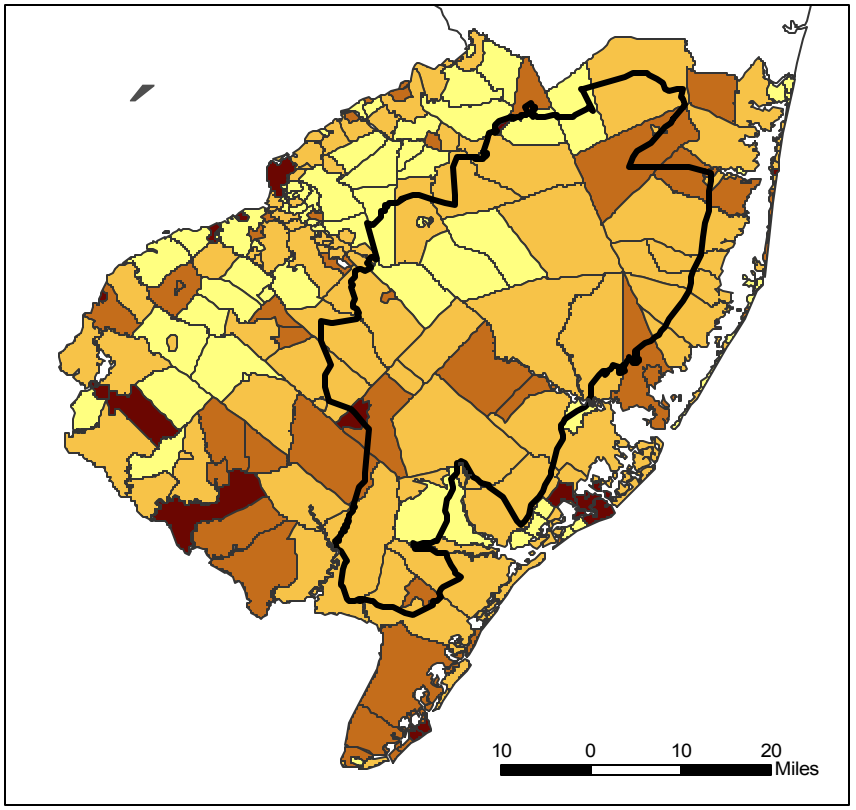
Job growth in New Jersey improved even more than the national average with the unemployment rate dropping 1.1% from 5.9% in 2003 to 4.8% in 2004. In the Pinelands, the unemployment rate dropped 0.8% to settle at 4.8%. The Non-Pinelands also experienced a 0.8% decrease in unemployment during the year, finishing with an average rate of 5.4% for the year. In the 25 years of data that is covered in the monitoring period (1980 –2004), the Pinelands has 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 westernmost suburbs of Trenton and Philadelphia. The highest rates in South Jersey are found in Cumberland and Cape May counties, although those areas have shown the most improvement in regards to employment gains relative to the rest of the region from 2001-2004 (Figure E2). Among Pinelands communities some of the largest increases in unemployment from 2001-2004 have been in municipalities surrounding Ft. Dix military base– Wrightstown (+2.3%) and Pemberton Township (+1.5%) in Burlington county ranked 1st and 4th in the Pinelands for change in unemployment rate over the period 2001-2004 (Table E2).

Table E2 Unemployment 2001 – 2004

Municipality	County	2004	2003	2002	2001	Three Year Change 2001 - 2004
Wrightstown	Burlington	10.1%	11.0%	11.0%	7.8%	2.3%
Chesilhurst	Camden	7.3%	8.2%	7.9%	5.6%	1.7%
Washington	Burlington	5.8%	6.3%	6.4%	4.3%	1.5%
Pemberton Township	Burlington	5.9%	6.4%	6.4%	4.4%	1.5%
Buena	Atlantic	11.5%	13.1%	12.5%	10.2%	1.3%
Woodland	Burlington	5.0%	5.5%	5.5%	3.8%	1.2%
Winslow	Camden	5.0%	5.6%	5.4%	3.8%	1.2%
South Toms River	Ocean	6.6%	7.6%	7.1%	5.4%	1.2%
Bass River	Burlington	4.8%	5.2%	5.3%	3.6%	1.2%
Franklin	Gloucester	5.5%	6.2%	5.9%	4.3%	1.2%
Little Egg Harbor	Ocean	6.6%	7.6%	7.2%	5.5%	1.1%
Berkeley	Ocean	6.2%	7.1%	6.7%	5.1%	1.1%
Manchester	Ocean	6.0%	6.9%	6.5%	4.9%	1.1%
Medford	Burlington	4.3%	4.7%	4.7%	3.2%	1.1%
Southampton	Burlington	4.5%	5.0%	5.0%	3.4%	1.1%
Beachwood	Ocean	5.6%	6.4%	6.1%	4.6%	1.0%
Egg Harbor City	Atlantic	8.4%	9.6%	9.1%	7.4%	1.0%
Berlin Township	Camden	4.0%	4.5%	4.3%	3.1%	0.9%
Ocean	Ocean	5.0%	5.7%	5.4%	4.1%	0.9%
Eagleswood	Ocean	4.7%	5.4%	5.1%	3.8%	0.9%
Stafford	Ocean	5.2%	6.0%	5.7%	4.3%	0.9%
Buena Vista	Atlantic	7.4%	8.4%	8.0%	6.5%	0.9%
Monroe	Gloucester	4.2%	4.7%	4.5%	3.3%	0.9%
Lacey	Ocean	5.1%	5.9%	5.6%	4.2%	0.9%
Medford Lakes	Burlington	3.5%	3.8%	3.8%	2.6%	0.9%
Jackson	Ocean	4.8%	5.5%	5.2%	3.9%	0.9%
Barnegat	Ocean	4.6%	5.3%	5.0%	3.8%	0.8%
Mullica	Atlantic	7.3%	8.4%	8.0%	6.5%	0.8%
Shamong	Burlington	3.1%	3.4%	3.4%	2.3%	0.8%
Waterford	Camden	3.1%	3.5%	3.3%	2.4%	0.7%
Tabernacle	Burlington	2.8%	3.1%	3.1%	2.1%	0.7%
Lakehurst	Ocean	3.9%	4.5%	4.3%	3.2%	0.7%
Egg Harbor Township	Atlantic	5.0%	5.7%	5.4%	4.4%	0.6%
New Hanover	Burlington	2.6%	3.0%	2.9%	2.0%	0.6%
Plumsted	Ocean	3.5%	4.1%	3.9%	2.9%	0.6%
Evesham	Burlington	2.4%	2.6%	2.6%	1.8%	0.6%
Hammonton	Atlantic	5.1%	5.9%	5.6%	4.5%	0.6%
Weymouth	Atlantic	5.3%	6.1%	5.8%	4.7%	0.6%
Galloway	Atlantic	4.5%	5.2%	4.9%	4.0%	0.5%
Folsom	Atlantic	4.3%	5.0%	4.7%	3.8%	0.5%
Hamilton	Atlantic	4.3%	5.0%	4.7%	3.8%	0.5%
Port Republic	Atlantic	3.3%	3.7%	3.6%	2.9%	0.4%
Estell Manor	Atlantic	3.0%	3.4%	3.3%	2.6%	0.4%
Maurice River	Cumberland	4.4%	5.8%	5.6%	5.0%	-0.6%
Upper	Cape May	4.3%	6.4%	6.2%	5.3%	-1.0%
Dennis	Cape May	4.7%	6.9%	6.7%	5.7%	-1.0%
Woodbine	Cape May	7.4%	10.7%	10.3%	8.9%	-1.5%
"Outside Municipalities"						
North Hanover	Burlington	6.0%	6.5%	6.5%	4.5%	1.5%
Berlin Borough	Camden	4.4%	5.0%	4.8%	3.4%	1.0%
Springfield	Burlington	3.6%	3.9%	3.9%	2.7%	0.9%
Corbin City	Atlantic	4.4%	4.9%	4.6%	3.9%	0.5%
Vineland	Cumberland	6.5%	8.4%	8.2%	7.3%	-0.8%

Figure E2 Unemployment Rate 2004 and Change in Unemployment Rate 2001 - 2004



Pinelands Boundary

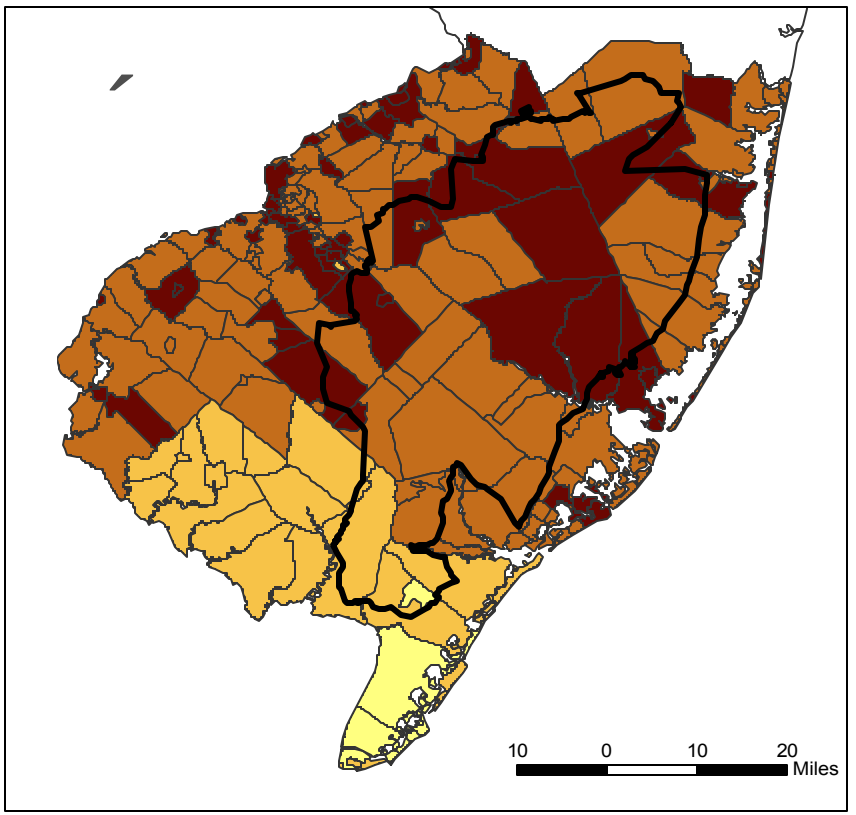
Unemployment Rate

- 0.8% to 3.8%
- 3.9% to 5.9%
- 6.0% to 9.0%
- 9.0% to 17.0%

Source: NJ Department of Labor

Author: NJ Pinelands Commission

Date: 2005



Pinelands Boundary

Unemployment Change*

- -3.0% to -1.5%
- -1.3% to 0%
- +0.1% to +1.0%
- +1.1% to +3.2%

Source: NJ Department of Labor

Author: NJ Pinelands Commission

Date: 2005

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

Economy 3

Employment, Establishments, Wages

New Jersey Department of Labor 1991 – 2003

X Updated

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

2003 NAICS	Largest Employment Sector	2nd Largest Sector	3rd Largest Sector
Atlantic	Accomodation & 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	Accomodation & 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%)	Accomodation & 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%)	Accomodation & Food (15%)
New Jersey	Retail (14%)	Health Care (13%)	Manufacturing (11%)

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

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

Summary of Previous Findings

Employment

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

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

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

Whereas the largest sectors for the state and Non-Pinelands region are services, retail, and manufacturing. While service employment is greater than retail employment in the Pinelands, employment in the Pinelands is weighted more towards the retail sector and less towards 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 from 1993 to 1998 by 2.7%. 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 since they capture more data at the individual industrial classification level since 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

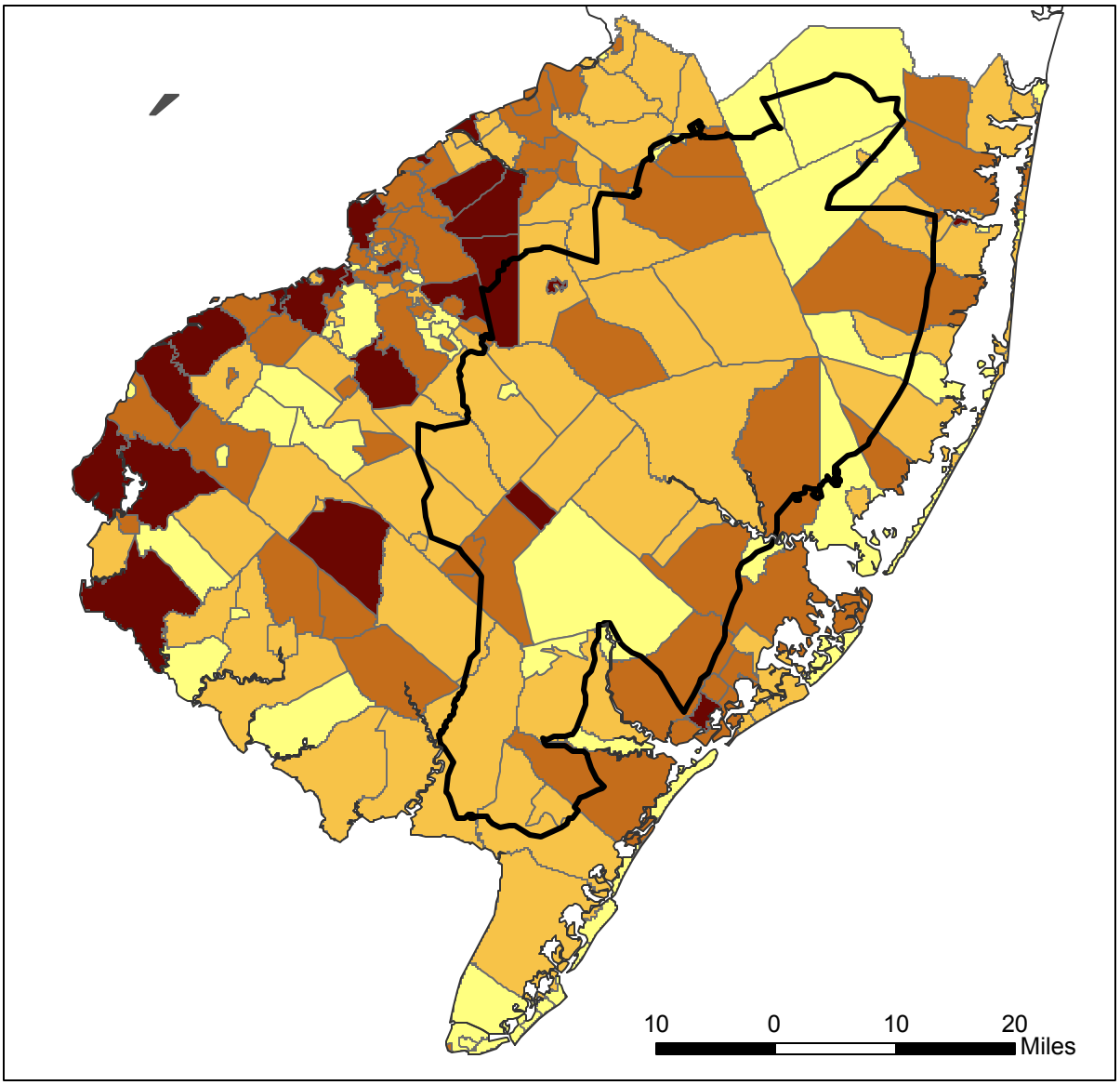
Growth in establishments slowed in all regions from 1998-2003 in comparison to 1993-1998. The Pinelands again fared better in this respect, however. Over the most recent five years, the Pinelands added 1,000 new establishments, a gain of 9.2% over 1998. The Non-Pinelands region actually posted a slight 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 over 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. Over the ten-year period of 1993-2003, Southern New Jersey has fared very well in comparison to North Jersey in respect to wage growth. During that time, wages in the state as a whole grew very slightly by 1.3%. In contrast, Non-Pinelands wages increased by 9.6% and the Pinelands region increased by 7.4% over the same time frame.

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

Figure E3
2003 Average Annual Private Sector Wages for Municipal Economies (in 2004 dollars)



Pinelands Boundary

Average Annual Wages

- $12,812 - $26,141
- $26,142 - $33,563
- $33,564 - $43,154
- $43,155 - $75,462

Source: NJ Dept of Community Affairs

Author: NJ Pinelands Commission

Date: 2005

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

X Updated

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

Per Capita Retail Sales

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

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

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

Summary of Previous Findings

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

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

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

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

Update

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

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

Economy 5

Assessed Farmland Acreage

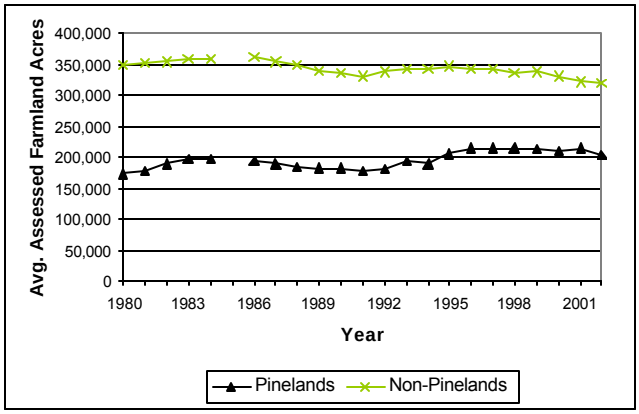
X Updated

New Jersey Agricultural Statistics Service 1980 – 2002*

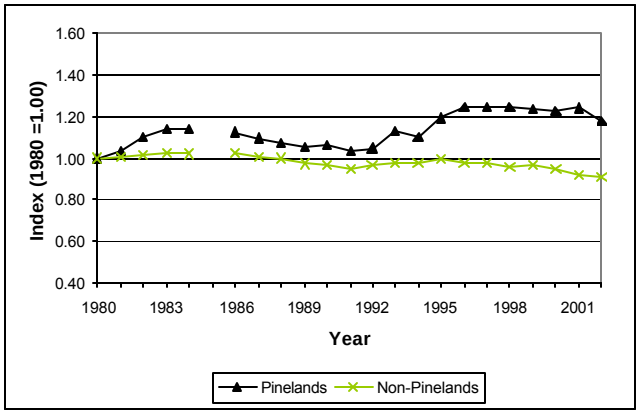
* Data from 1985 is not available.

- Assessed acres in farmland decreased in both the Pinelands and Non-Pinelands in 2002.

Average Assessed Acres of Farmland



Index of Average Assessed Acres of Farmland



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

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

Summary of Previous Findings

Assessed farmland acres were fairly stable in the Non-Pinelands portion of South Jersey from 1980-1995. Since 1995, development pressures have slowly eroded the farm base outside the Pinelands and assessed acres in that region have decreased in 5 of the 6 years from 1995-2001. In contrast, the Pinelands has shown a substantial increase in acreage devoted to agriculture since 1980. This growth was fueled by two periods that contributed significantly to farmland acres in the Pinelands: from 1980-1983, farm acreage increased 13.8% in the Pinelands and from 1992-1996 acreage increased by 19.2%. Over the entire period monitored, the Pinelands percentage of South Jersey farm acres has increased from 33% in 1980 to 40% in 2001.

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

Assessed farmland in the Pinelands decreased 4.9% in 2002, marking the largest one-year decrease in the monitoring period. For the year, there were 202,649 acres in farmland in the Pinelands. The Non-Pinelands farmland acreage also decreased in 2002, falling 1.1% to a total of 317,863 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).

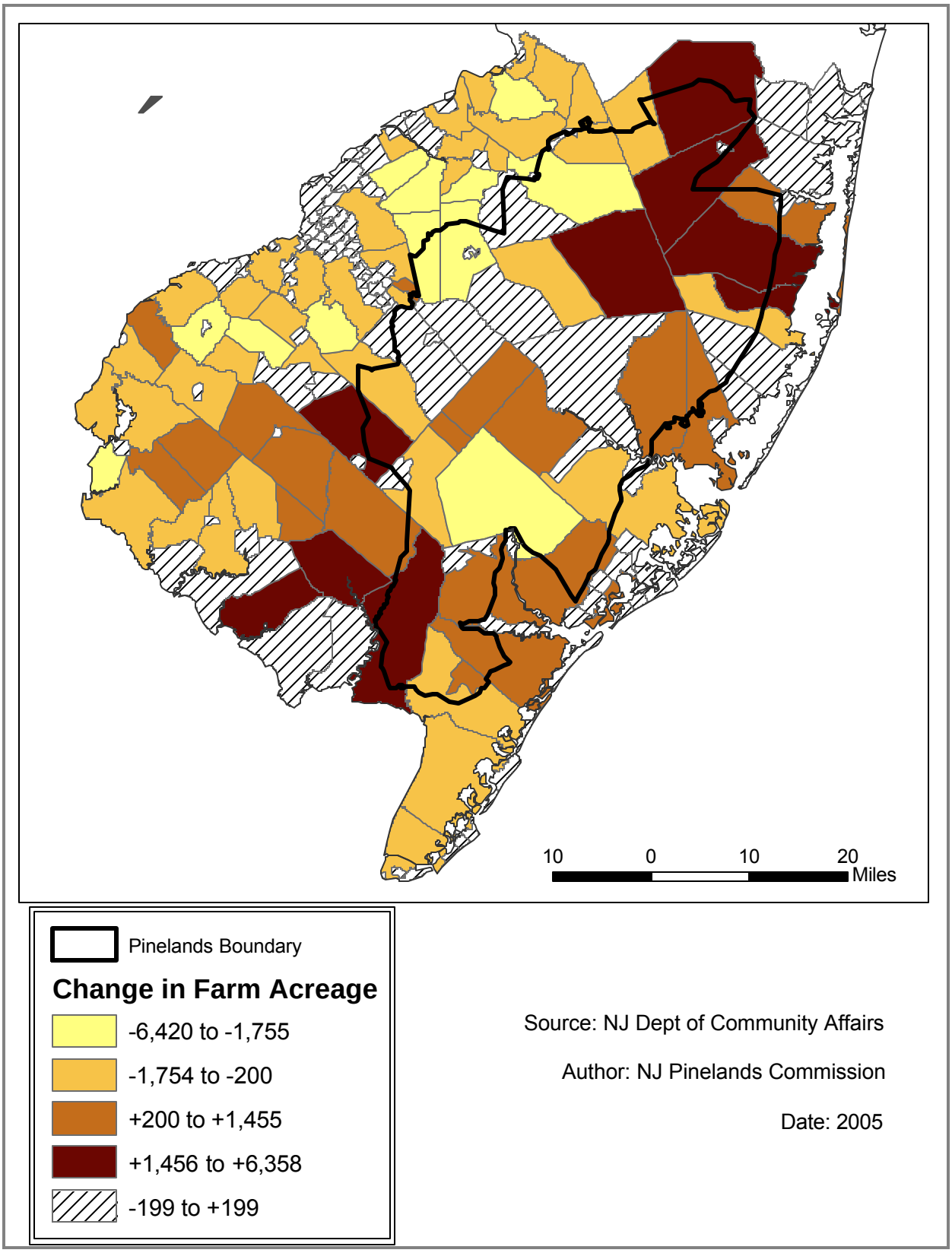
Figure E5 depicts the changes in acreage using averages from the period 1983-87 to the period 1998-2002 for all of South Jersey. Municipalities that are crosshatched in this map have had minor changes over the period. The pattern for the larger changes in acreage are clear - with the exception of Cumberland County and parts of Salem County, most of the municipalities to the west of the Pinelands boundary have experienced decreases in farmland in the last

20 years. In the Pinelands, most of the municipalities have either remained steady or shown increases in farmland over the same period. Despite its massive increases in population over the last 10 years, Ocean County has in fact substantially increased its land in farming over the past 20 years. Four municipalities in the Pinelands have experienced large losses in farmland over the past 20 years: Hamilton (-6,400 acres), Pemberton Township (-4,300), Medford (-2,100), and Evesham (-1,900).

Table E5 Farmland Assessed Acreage

Average Farmland Assessed Acreage in the Pinelands Municipalities					
County	1983-1987 Average	1988-1992 Average	1993-1997 Average	1998-2002 Average	Change between 83-87 and 98-02
Atlantic	42,924	39,427	43,083	41,105	-4%
Burlington	91,311	85,573	92,846	89,580	-2%
Camden	10,498	10,005	10,572	10,706	2%
Cape May	6,681	7,552	7,143	6,885	3%
Cumberland	8,475	6,656	6,435	11,875	40%
Gloucester	20,304	19,052	22,742	22,115	9%
Ocean	12,587	12,600	20,051	27,953	122%
Average Farmland Assessed Acreage in the Non-Pinelands Municipalities					
County	1983-1987 Average	1988-1992 Average	1993-1997 Average	1998-2002 Average	Change between 83-87 and 98-02
Atlantic	106	275	304	287	171%
Burlington	74,984	65,749	64,271	59,214	-21%
Camden	4,614	3,127	2,692	2,206	-52%
Cape May	7,272	6,372	5,397	5,197	-29%
Cumberland	78,956	78,189	84,570	83,436	6%
Gloucester	65,984	62,355	59,568	54,508	-17%
Ocean	904	755	726	659	-27%
Salem	124,325	121,669	125,393	122,745	-1%
Percentage of Total Average Farmland Assessed Acreage that is within Pinelands Municipalities					
County	1983-1987 Average	1988-1992 Average	1993-1997 Average	1998-2002 Average	Change between 83-87 and 98-02
Atlantic	100%	99%	99%	99%	-1%
Burlington	55%	57%	59%	60%	5%
Camden	69%	76%	80%	83%	14%
Cape May	48%	54%	57%	57%	9%
Cumberland	10%	8%	7%	12%	2%
Gloucester	24%	23%	28%	29%	5%
Ocean	93%	94%	97%	98%	5%

Figure E5 Change in Average Farm Acreage from 1983-1987 to 1998-2002



Economy 6

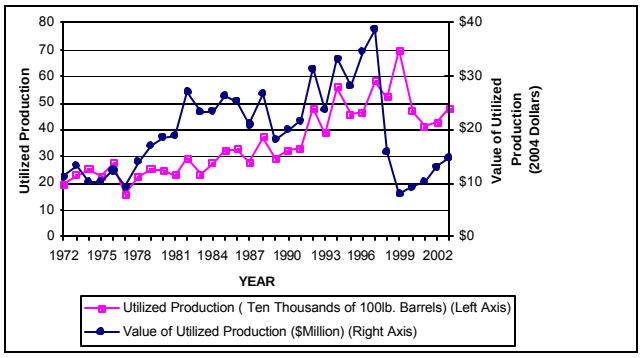
Cranberry and Blueberry Production

NJ Agricultural Statistics Service 1972 - 2003

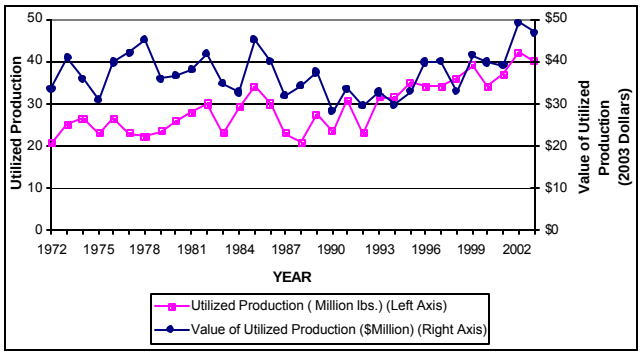
X Updated

- Prices for both cranberries and blueberries were unchanged for 2003. Cranberry production increased 11% while blueberry production declined 5% for the year.

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 2003 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 to1996 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 decreased by 39% between 1999 and 2002. The value of production increased dramatically, growing 63% between 1999 and 2002, with the price of cranberries climbing from $11.45 per 100 lbs in 1999 to $30.45 per 100 lbs in 2002, an increase of 166%. Despite this increase, prices remain well below their peak of $74.40 per 100 lbs in 1996.

The value of utilized production for blueberries remained fairly steady with yearly fluctuations over the period 1972-1997. Overall production increased by 24% between 1997 and 2002. The value of production increased consistently over this five-year period, rising by 23%, while the sale price fell by 1%. (Figure E6). Like cranberries, the blueberry market has suffered from a combination of increasing production and steady demand. To respond to poor market conditions, the blueberry industry created a blueberry council to increase promotional activities and strengthen demand for blueberries.

Update

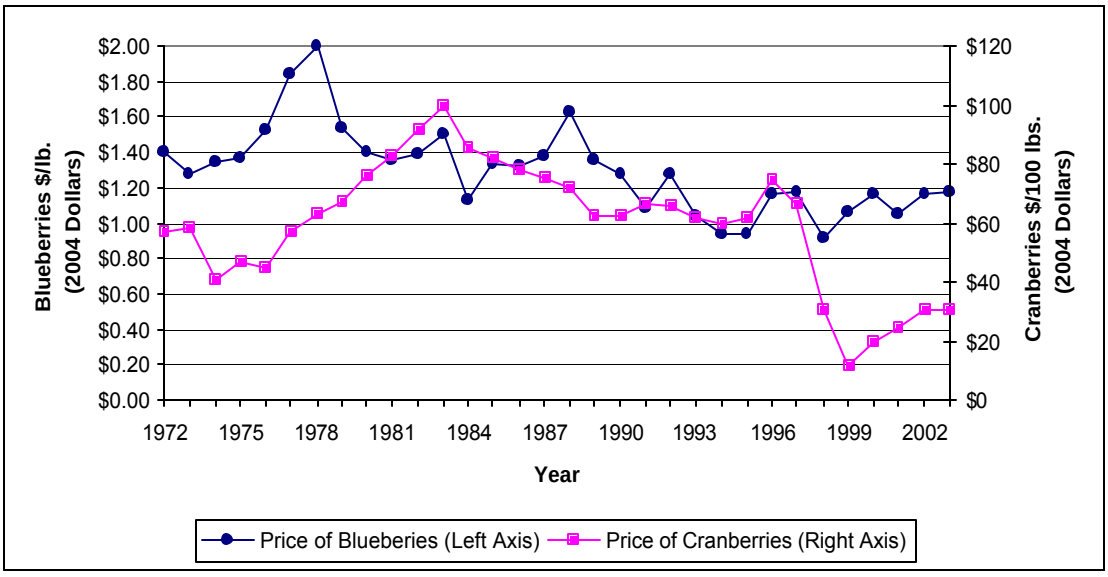
The value in utilized production of cranberries increased for the 4th consecutive year in 2003, rising 11.4% to $14.6 million. This increase was due primarily to an increase in production of 11.6%. After posting impressive price increases from 1999-2002 (+166% over the period), cranberry prices stalled in 2003 falling 0.2% to $30.39 per 100

lbs. The blueberry industry also experienced flat growth in prices in 2003, posting a price gain of only 0.4% to $1.17 per pound. Blueberry farmers, however, also experienced a decrease in value of production (-4.5%) as output decreased 4.8% to 40 million pounds in 2003.

Table E6 Sales of New Jersey Farm Products

	Sales (in $1,000 Dollars)				Annual % Change		
Year	Cranberry	Blueberry	New Jersey		Cranberry	Blueberry	New Jersey
1992	31,406	29,378	869,226				
1993	23,818	32,689	917,347		-24.2%	11.3%	5.5%
1994	25,496	29,577	971,183		7.0%	-9.5%	5.9%
1995	28,137	32,847	945,399		10.4%	11.1%	-2.7%
1996	34,749	39,744	963,535		23.5%	21.0%	1.9%
1997	38,768	39,991	939,856		11.6%	0.6%	-2.5%
1998	15,879	32,866	937,443		-59.0%	-17.8%	-0.3%
1999	8,017	41,489	839,584		-49.5%	26.2%	-10.4%
2000	9,209	39,602	926,026		14.9%	-4.5%	10.3%
2001	10,151	39,176	890,948		10.2%	-1.1%	-3.8%
2002	14,403	49,130	912,846		41.9%	25.4%	2.5%
2003	15,522	46,905	868,387		7.8%	-4.5%	-4.9%

Figure E6 Cranberry and Blueberry Prices



Economy 7

Census of Agriculture

X Updated

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

- According to the recently released 2002 Census of Agriculture, the seven Pinelands counties are responsible for more than half of the agricultural sales statewide.

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 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. From 1982-1997, the State lost 9.1% of its farm base, with Pinelands counties experiencing an 8.7% decline and Non-Pinelands counties experiencing a 9.5% loss. However, from 1992-1997, farm acres in Pinelands counties increased by roughly 1% to 289,435 acres, almost 35% of the State's 832,600 farm acres. Cape May County continued to have high rates of decline in its farm base from 1992 to 1997. In contrast, Atlantic, Burlington, Camden and Ocean Counties experienced gains in farmland acreage over the same period.

The number of farms from 1992-1997 remained relatively constant for Pinelands counties, Non-Pinelands counties and the State. The average farm size increased slightly for Pinelands counties from 1992-1997. However, the average farm size for Non-Pinelands counties and the State continued to decrease over the same period.

With respect to agricultural sales, Pinelands counties contributed nearly 48% of total sales statewide in 1992. Similarly, Pinelands counties contributed 45% of total agricultural sales statewide in 1982 while accounting for only 35% of farm acreage. From 1992-1997 agricultural sales in Pinelands counties increased 18.4% while agricultural sales in Non-Pinelands counties increased by 10.7%. Pinelands counties contributed 49.4% of total sales statewide in 1997; a high value relative to its 34.8% share of total State agricultural 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. Burlington County's share of statewide returns increased from 11% in 1992 to 13.5% in 1997. Comparison of total net cash returns over the monitoring period (1987-1997) clearly demonstrates the influence of economic conditions on the State's farm sector. The effect of the recession can be seen as statewide returns dropped 24.2% over 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 shown to be 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 also increased at a faster rate than the remainder of the State and remained at overall higher levels. Net cash return per farm in Pinelands counties increased 70.1% from 1992-1997, while Non-Pinelands counties increased by 49.3% over the same period.

More than half of New Jersey's farms lost money in 1987, 1992, and 1997 while the proportion of farms losing money grew each year. Almost 55% of farmers statewide lost money in 1997, up 1.5% from 1992. However, farmers in Pinelands counties continued to fare better than farmers in Non-Pinelands counties. The percentage of farmers in Pinelands counties that lost money in 1997 was 45.6%, down almost 2% from 1992.

Update

By nearly any measure used in the recently released 2002 Census of Agriculture, the Pinelands counties made considerable gains in relation to the rest of the state in regards to agriculture between 1997 and 2002. Over the five-year period 1997-2002, Pinelands counties increased their acres in farming by 2.3% to 295,959 acres. The remainder of counties in the state had a net decrease in acres farmed of 10.2%. The increase in the Pinelands is due

primarily to increases in Burlington and Cumberland counties that totaled more than 11,500 acres (Burlington +7,610, +7.3% and Cumberland +3,903, +5.8%).

The number of farms tells the same story for the period 1997 to 2002. Pinelands counties had an increase of 6.4% in the number of farms during the period in contrast to a 4.6% decline in the rest of the state. While average farm size did decrease in the Pinelands counties (-3.9%), the drop in the rest of the state was larger (-5.8%). Again, the two largest agricultural bases in the Pinelands (Burlington and Cumberland counties) recorded increases in farm size between 1997 and 2002 (+10.8% and +6.8% respectively).

Agricultural sales in the Pinelands counties relative to the rest of the state continued their increase from previous agricultural censuses. With $406 million in sales in 2002, the Pinelands counties for the first time make up more than half of the state's agricultural sales (52.8%) while comprising only 36.7% of the total acres farmed in the state. In terms of net cash returns, farms in the Pinelands counties posted profits of $107.7 million in 2002, a total that represents 68.4% of statewide agricultural profits. Net cash return per farm in the Pinelands counties did decline 15.2% from 1997 to 2002; however, in the rest of the state net cash return per farm dropped 49% over the same period.

Farm viability continues to be an issue in New Jersey. In 2002, more than half (56.1%) of the farms in the Pinelands counties posted net losses. In the rest of the state, 64.4% of farms had net losses for the year. Gloucester and Ocean counties had the highest percentage of farms with losses in the Pinelands in 2002 (74.1% and 60.4% respectively). In contrast, Atlantic county was the only Pinelands county to decrease its percentage of farms with net losses from 1997 to 2002 (1997: 53.5% and 2002: 43.2%) .

Table E7a Land in Farming

	Land in Farming (acres)				Percentage Change			
County	**1987**	**1992**	**1997**	**2002**	**'87-'92**	**'92-'97**	**'97-'02**	**'87-'02**
Atlantic	29,423	29,606	31,620	30,337	0.6%	6.8%	-4.1%	3.1%
Burlington	103,224	97,186	103,627	111,237	-5.8%	6.6%	7.3%	7.8%
Camden	10,033	7,799	9,446	10,259	-22.3%	21.1%	8.6%	2.3%
Cape May	13,553	11,644	9,840	10,037	-14.1%	-15.5%	2.0%	-25.9%
Cumberland	72,406	68,627	67,194	71,097	-5.2%	-2.1%	5.8%	-1.8%
Gloucester	62,128	61,748	58,888	50,753	-0.6%	-4.6%	-13.8%	-18.3%
Ocean	8,820	10,365	12,061	12,239	17.5%	16.4%	1.5%	38.8%
Pinelands Counties	**299,587**	**286,975**	**289,435**	**295,959**	-4.2%	0.9%	2.3%	-1.2%
Non-Pinelands Counties	594,839	560,620	567,474	509,723	-5.8%	1.2%	-10.2%	-14.3%
State Total	894,426	847,595	856,909	805,682	-5.2%	1.1%	-6.0%	-9.9%

	Number of Farms				Percentage Change			
County	**1987**	**1992**	**1997**	**2002**	**'87-'92**	**'92-'97**	**'97-'02**	**'87-'02**
Atlantic	384	391	465	456	1.8%	18.9%	-1.9%	18.8%
Burlington	834	816	935	906	-2.2%	14.6%	-3.1%	8.6%
Camden	177	188	236	216	6.2%	25.5%	-8.5%	22.0%
Cape May	124	163	165	197	31.5%	1.2%	19.4%	58.9%
Cumberland	612	609	622	616	-0.5%	2.1%	-1.0%	0.7%
Gloucester	681	704	718	692	3.4%	2.0%	-3.6%	1.6%
Ocean	206	233	268	217	13.1%	15.0%	-19.0%	5.3%
Pinelands Counties	**3,018**	**3,104**	**3,101**	**3,300**	2.8%	-0.1%	6.4%	9.3%
Non-Pinelands Counties	6,014	5,975	6,944	6,624	-0.6%	16.2%	-4.6%	10.1%
State Total	9,032	9,079	10,045	9,924	0.5%	10.6%	-1.2%	9.9%

	Average Farm Size (acres)				Percentage Change			
County	**1987**	**1992**	**1997**	**2002**	**'87-'92**	**'92-'97**	**'97-'02**	**'87-'02**
Atlantic	77	76	68	67	-1.3%	-10.5%	-2.2%	-13.6%
Burlington	124	119	111	123	-4.0%	-6.9%	10.8%	-1.0%
Camden	57	41	40	47	-28.1%	-2.4%	18.7%	-16.7%
Cape May	109	71	60	51	-34.9%	-16.0%	-14.6%	-53.3%
Cumberland	118	113	108	115	-4.2%	-4.4%	6.8%	-2.2%
Gloucester	91	88	82	73	-3.3%	-6.8%	-10.6%	-19.4%
Ocean	43	44	45	56	2.3%	2.3%	25.3%	31.2%
Pinelands Counties	**99**	**92**	**93**	**90**	-7.1%	1.5%	-3.9%	-9.4%
Non-Pinelands Counties	99	94	82	77	-5.1%	-13.1%	-5.8%	-22.3%
State Total	99	93	85	81	-6.1%	-8.3%	-4.8%	-18.0%

Table E7b Agricultural Sales (2004 Dollars)

	Agricultural Sales ($1,000s)				Percentage Change				Agricultural Sales as % of New Jersey			
County	**1987**	**1992**	**1997**	**2002**	**'87-'92**	**'92-'97**	**'97-'02**	**'87-'02**	**1987**	**1992**	**1997**	**2002**
Atlantic	62,162	58,685	74,944	82,700	-5.6%	27.7%	10.3%	33.0%	7.5%	8.2%	9.1%	10.7%
Burlington	92,618	87,212	103,361	87,698	-5.8%	18.5%	-15.2%	-5.3%	11.2%	12.1%	12.6%	11.4%
Camden	13,217	11,049	20,632	14,366	-16.4%	86.7%	-30.4%	8.7%	1.6%	1.5%	2.5%	1.9%
Cape May	7,677	7,583	8,037	11,852	-1.2%	6.0%	47.5%	54.4%	0.9%	1.1%	1.0%	1.5%
Cumberland	97,149	98,599	111,175	129,222	1.5%	12.8%	16.2%	33.0%	11.7%	13.7%	13.5%	16.8%
Gloucester	77,390	73,720	79,080	69,534	-4.7%	7.3%	-12.1%	-10.2%	9.4%	10.2%	9.6%	9.0%
Ocean	8,202	6,817	9,647	11,300	-16.9%	41.5%	17.1%	37.8%	1.0%	0.9%	1.2%	1.5%
Pinelands Counties	**358,415**	**343,664**	**406,876**	**406,671**	**-4.1%**	**18.4%**	**-0.1%**	**13.5%**	**43.3%**	**47.7%**	**49.4%**	**52.8%**
Non-Pinelands Counties	462,459	376,298	416,587	363,147	-18.6%	10.7%	-12.8%	-21.5%	55.9%	52.3%	50.6%	47.2%
State Total	827,445	719,961	823,463	769,819	-13.0%	14.4%	-6.5%	-7.0%	100.0%	100.0%	100.0%	100.0%

Table E7c Net Cash Return for New Jersey Farms (2004 Dollars)

	Total Net Cash Return (1,000's)			Percentage Change			Total Net Cash Return as Pct. of NJ		
County	**1992**	**1997**	**2002**	**'92-'97**	**'97-'02**	**'92-'02**	**1992**	**1997**	**2002**
Atlantic	$13,924	$17,542	$28,037	26.0%	59.8%	101.4%	10.8%	8.4%	17.8%
Burlington	$14,226	$27,948	$23,347	96.5%	-16.5%	64.1%	11.0%	13.5%	14.8%
Camden	$2,580	$9,263	$3,977	259.1%	-57.1%	54.1%	2.0%	4.5%	2.5%
Cape May	$1,318	$2,287	$5,637	73.5%	146.4%	327.6%	1.0%	1.1%	3.6%
Cumberland	$23,017	$34,678	$34,152	50.7%	-1.5%	48.4%	17.8%	16.7%	21.7%
Gloucester	$14,175	$24,340	$10,901	71.7%	-55.2%	-23.1%	11.0%	11.7%	6.9%
Ocean	$1,021	$3,115	$1,631	204.9%	-47.6%	59.6%	0.8%	1.5%	1.0%
Pinelands Counties	**$70,262**	**$119,173**	**$107,681**	**69.6%**	**-9.6%**	**53.3%**	**54.3%**	**57.4%**	**68.4%**
Non-Pinelands Counties	$59,103	$88,527	$49,838	49.8%	-43.7%	-15.7%	45.7%	42.6%	31.6%
New Jersey	$129,367	$207,700	$157,519	60.6%	-24.2%	21.8%	100.0%	100.0%	100.0%

Table E7d Net Cash Return per Farm (2004 Dollars)

	Net Cash Return per Farm			Percentage Change		
County	**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

	Farms with Net Losses			Percentage of All Farms with Net Losses		
County	**1992**	**1997**	**2002**	**1992**	**1997**	**2002**
Atlantic	162	227	197	41.4%	53.5%	43.2%
Burlington	431	369	478	52.8%	43.1%	52.8%
Camden	91	94	108	48.4%	44.5%	50.0%
Cape May	75	75	111	46.0%	50.3%	56.3%
Cumberland	219	248	314	36.0%	43.3%	51.0%
Gloucester	337	286	513	47.9%	43.9%	74.1%
Ocean	159	114	131	68.2%	48.5%	60.4%
Pinelands Counties	**1,474**	**1,413**	**1,852**	**47.5%**	**45.6%**	**56.1%**
Non-Pinelands Counties	3,375	3,582	4,265	56.5%	59.7%	64.4%
New Jersey	4,849	4,995	6,117	53.4%	54.9%	61.6%

Municipal Finance

1

Avg Residential Property Tax Bill

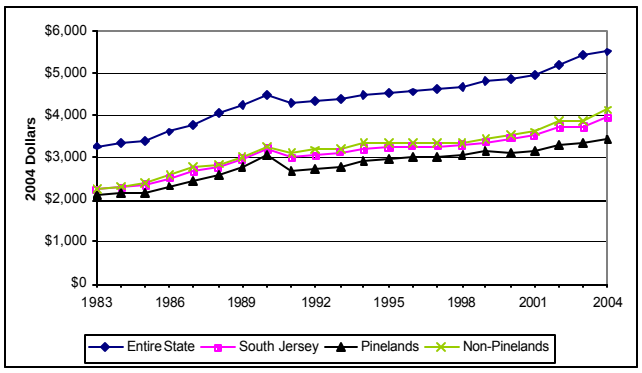
X Updated

NJ Dept of Treasury, Division of Taxation 1983 - 1999

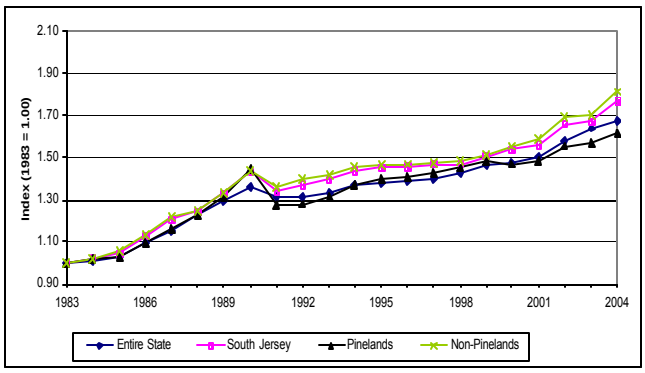
NJ Dept of Community Affairs, Div LGS 2000 - 2004

- The gap in the average residential property tax bill paid between the Pinelands and Non-Pinelands continued to expand in 2004.

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 2004 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 1980's to a peak in 1990, followed by a decline in 1991 and a subsequent slow, continued increase. 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. Tax bills accelerated at a greater rate in 2002, but in 2003 growth in taxes for South Jersey was less than 1% in both the Pinelands and Non-Pinelands. [15]

Update

After modest increases in the average property tax bills for South Jersey in relation to the state as a whole in 2003 (South Jersey +0.8%, Statewide +3.9%), the scenario was reversed in 2004. The average residential property tax bill increased 5.8% in South Jersey in 2004; in contrast, statewide average residential property tax bills rose only 1.9%. The Pinelands did fare better than the Non-Pinelands in South Jersey, registering an increase in average residential property taxes of 3.0% versus a 6.5% increase in the Non-Pinelands. Average residential property taxes in the Pinelands are now $700 lower than in the Non-Pinelands and $2,085 lower than the state as a whole.

The average residential property tax bill in New Jersey, adjusted for inflation, has increased by 65% between 1984 and 2004, from $3,333 to $5,513. Within Southern New Jersey, the average Pinelands bill increased by 60% (from $2,149 to $3,428) while the average Non-Pinelands bill increased by 77% (from $2,336 to $4,126).

The rapidly growing 2nd 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 1984-2004.

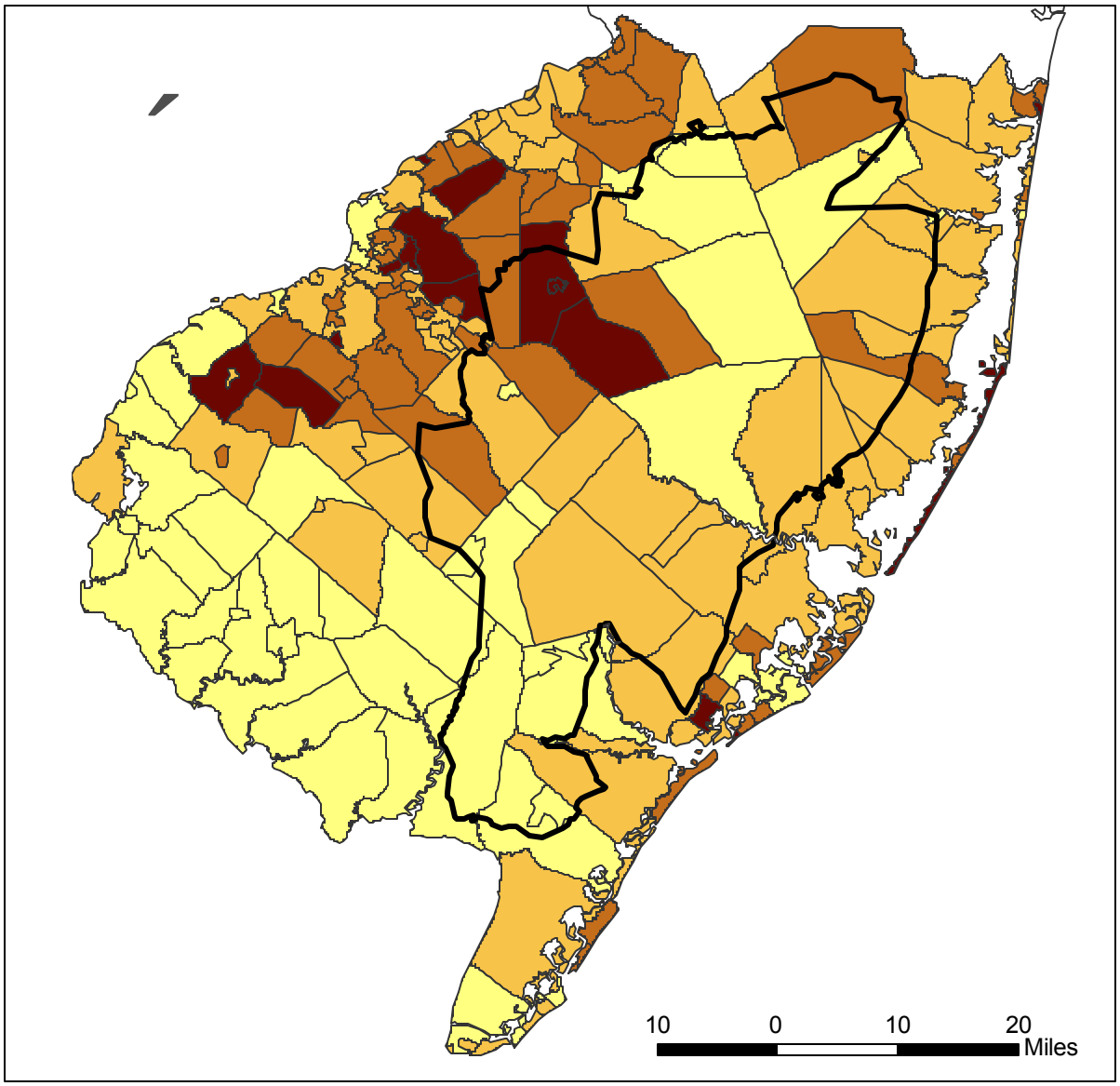
From 2003 to 2004, 11 of the 47 Pinelands municipalities (23.4%) experienced real tax decreases (Table F1). In the remaining 155 municipalities that comprise the Non-Pinelands, 28 had real tax decreases from 2003 to 2004 (18.1%).

[15] Average property tax numbers reported in the 2004 Annual Report were adjusted in this report with new data obtained for 2003.

Table F1 Average Residential Property Tax Bill in the Pinelands

Municipality	County	Avg. Property Tax Bill 2004	Actual Change from 2003	% Change from 2003	South Jersey Rank 2004
Woodbine	Cape May	$1,409	$446	46.4%	197
Medford	Burlington	$7,343	$441	6.4%	6
Evesham	Burlington	$5,377	$353	7.0%	23
Egg Harbor Township	Atlantic	$3,911	$292	8.1%	82
Stafford	Ocean	$3,987	$285	7.7%	77
Washington	Burlington	$2,670	$285	12.0%	162
Monroe	Gloucester	$4,173	$284	7.3%	70
Berlin Township	Camden	$4,001	$260	6.9%	76
Estell Manor	Atlantic	$2,734	$196	7.7%	156
Buena Vista	Atlantic	$2,507	$194	8.4%	173
Southampton	Burlington	$3,600	$190	5.6%	100
South Toms River	Ocean	$2,626	$185	7.6%	167
Woodland	Burlington	$2,313	$176	8.2%	185
Port Republic	Atlantic	$3,718	$167	4.7%	90
Dennis	Cape May	$2,395	$166	7.4%	181
Eagleswood	Ocean	$3,276	$147	4.7%	123
Hammonton	Atlantic	$3,504	$139	4.1%	109
Lacey	Ocean	$3,698	$137	3.8%	92
Berkeley	Ocean	$2,842	$137	5.0%	151
Barnegat	Ocean	$4,047	$131	3.3%	75
Tabernacle	Burlington	$4,988	$124	2.6%	30
Jackson	Ocean	$4,740	$117	2.5%	43
Little Egg Harbor	Ocean	$3,364	$117	3.6%	116
Galloway	Atlantic	$3,449	$111	3.3%	111
Ocean	Ocean	$3,569	$103	3.0%	105
Hamilton	Atlantic	$2,848	$89	3.2%	150
Manchester	Ocean	$2,632	$88	3.5%	166
Folsom	Atlantic	$2,447	$85	3.6%	179
Buena	Atlantic	$2,648	$80	3.1%	165
Beachwood	Ocean	$3,097	$60	2.0%	137
Upper	Cape May	$3,393	$58	1.7%	115
Franklin	Gloucester	$3,101	$54	1.8%	136
Maurice River	Cumberland	$2,284	$49	2.2%	187
Medford Lakes	Burlington	$6,446	$48	0.8%	10
Winslow	Camden	$3,605	$46	1.3%	99
Shamong	Burlington	$5,589	$34	0.6%	20
Pemberton Township	Burlington	$2,674	-$7	-0.3%	161
Mullica	Atlantic	$3,255	-$12	-0.4%	126
Chesilhurst	Camden	$2,791	-$23	-0.8%	153
Lakehurst	Ocean	$3,062	-$35	-1.1%	138
Plumsted	Ocean	$3,960	-$40	-1.0%	79
Bass River	Burlington	$3,041	-$52	-1.7%	139
Egg Harbor City	Atlantic	$3,404	-$72	-2.1%	113
Waterford	Camden	$4,287	-$123	-2.8%	62
Weymouth	Atlantic	$2,325	-$165	-6.6%	184
Wrightstown	Burlington	$1,691	-$261	-13.4%	195
New Hanover	Burlington	$2,300	-$351	-13.2%	186
"Outside Municipalities"					
Corbin City	Atlantic	$3,582	$1,072	42.7%	103
Springfield	Burlington	$4,401	$39	0.9%	57
Vineland	Cumberland	$2,683	$19	0.7%	158
North Hanover	Burlington	$3,514	-$1	0.0%	107
Berlin Borough	Camden	$4,627	-$28	-0.6%	47

Figure F1 Average Residential Property Tax Bill in 2004



* Range excludes outliers Tavistock Borough and Mantoloking Borough.

Municipal Finance

2

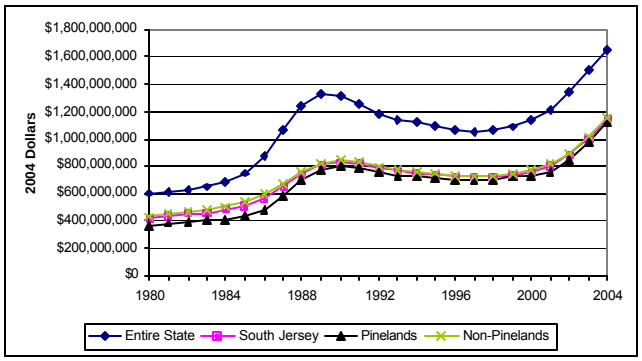
State Equalized Valuation

X Updated

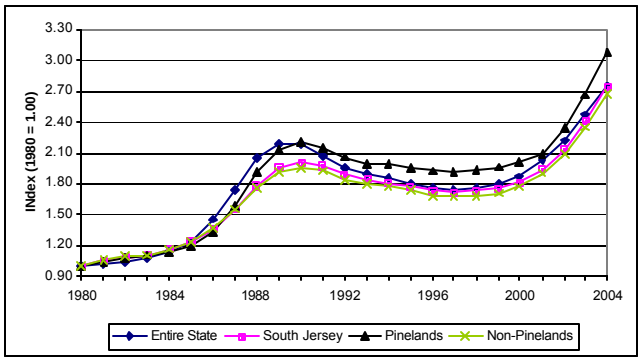
NJ Dept of Community Affairs, Div LGS 1980 - 1993
NJ Dept of Treasury, Division of Taxation 1994 – 2004

- In 2004, the average equalized property value in the Pinelands increased by more than 10% for the third consecutive year.

Average State Equalized Valuation (2004 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 2004 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 1980's, 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 2003 in all regions.

Update

Equalized property values rose across all regions of the state for the seventh consecutive year in 2004. In fact, over the past seven years the percentage increase in equalized values has in each year been greater than the previous year for all regions. Once again, the increase in valuation for the Pinelands slightly eclipsed the increase in the Non-Pinelands (+15.2% versus +13.8%). The valuation for the average Pinelands municipality was $1.12 billion in 2004, compared to an average of $1.15 billion for the average Non-Pinelands municipality. The gap in valuation between the Pinelands and Non-Pinelands continues to narrow – in 1985, the average Non-Pinelands municipality valuation was 22.8% higher than the average Pinelands municipality. By 2004, that difference has almost evaporated; the average Non-Pinelands municipality valuation is now only 2.6% higher than in the Pinelands.

More populated municipalities tend to have higher equalized values, as more structures and higher densities push up property values. Per Capita equalized values can be used to make more equal comparisons by accounting for the relative wealth of inhabitants for particular jurisdictions. Total 2004 equalized values were divided by 2003 population estimates for each region. The results show that the state has a higher equalized value per capita than Southern New Jersey ($108,841 versus $98,396), while the Pinelands region has a much lower per capita value compared to the Non-Pinelands region ($80,175 versus $105,478). The Pinelands municipalities exhibit a great deal of variation with per capita values ranging from a high of $141,000 in Stafford to a low of $6,200 in New Hanover (Table F2).

Table F2 2004 Equalized Value and Equalized Value Per Capita

County	Municipality	Population Est 2003	Equalized Value 2004*	Eq Value Per Capita*
Ocean	Stafford	24,318	$3,429,900,000	$141,000
Burlington	Washington	637	$88,400,000	$138,800
Cape May	Upper	11,965	$1,426,200,000	$119,200
Ocean	Lacey	26,240	$2,982,400,000	$113,700
Burlington	Medford	23,359	$2,555,900,000	$109,400
Ocean	Ocean	7,214	$766,100,000	$106,200
Ocean	Berkeley	42,247	$4,381,900,000	$103,700
Ocean	Eagleswood	1,534	$154,900,000	$101,000
Atlantic	Port Republic	1,071	$106,400,000	$99,300
Ocean	Jackson	49,644	$4,918,100,000	$99,100
Cape May	Dennis	6,338	$626,500,000	$98,800
Ocean	Little Egg Harbor	18,616	$1,762,900,000	$94,700
Burlington	Woodland	1,354	$125,800,000	$92,900
Burlington	Evesham	46,111	$4,178,400,000	$90,600
Burlington	Shamong	6,749	$591,100,000	$87,600
Burlington	Medford Lakes	4,205	$365,200,000	$86,800
Burlington	Southampton	10,918	$932,100,000	$85,400
Ocean	Plumsted	8,034	$686,200,000	$85,400
Atlantic	Egg Harbor Township	35,061	$2,948,700,000	$84,100
Burlington	Tabernacle	7,312	$595,200,000	$81,400
Atlantic	Estell Manor	1,657	$134,600,000	$81,200
Ocean	Barnegat	17,632	$1,426,300,000	$80,900
Ocean	Manchester	42,228	$3,166,800,000	$75,000
Camden	Berlin Township	5,360	$396,300,000	$73,900
Atlantic	Hamilton	22,705	$1,638,200,000	$72,200
Atlantic	Galloway	34,221	$2,454,300,000	$71,700
Atlantic	Folsom	1,977	$137,600,000	$69,600
Burlington	Bass River	1,562	$108,400,000	$69,400
Atlantic	Hammonton	12,994	$886,100,000	$68,200
Ocean	Beachwood	10,712	$704,600,000	$65,800
Atlantic	Mullica	6,038	$374,700,000	$62,100
Gloucester	Monroe	30,427	$1,769,300,000	$58,100
Camden	Waterford	10,645	$600,900,000	$56,400
Gloucester	Franklin	16,013	$902,100,000	$56,300
Atlantic	Buena Vista	7,556	$389,400,000	$51,500
Atlantic	Weymouth	2,324	$119,200,000	$51,300
Atlantic	Buena	3,832	$192,900,000	$50,300
Camden	Winslow	35,150	$1,727,400,000	$49,100
Ocean	Lakehurst	2,582	$123,200,000	$47,700
Ocean	South Toms River	3,703	$172,100,000	$46,500
Atlantic	Egg Harbor City	4,486	$187,900,000	$41,900
Burlington	Pemberton Township	28,938	$1,099,700,000	$38,000
Cape May	Woodbine	2,677	$93,900,000	$35,100
Burlington	Wrightstown	749	$25,700,000	$34,300
Camden	Chesilhurst	1,756	$52,700,000	$30,000
Cumberland	Maurice River	7,600	$187,900,000	$24,700
Burlington	New Hanover	9,520	$58,700,000	$6,200
"Outside" Municipalities				
Burlington	Springfield	3,504	$368,800,000	$105,300
Camden	Berlin Borough	6,819	$527,400,000	$77,300
Atlantic	Corbin City	519	$28,400,000	$54,700
Cumberland	Vineland	57,057	$2,580,800,000	$45,200
Burlington	North Hanover	7,556	$299,400,000	$39,600

* Values have been rounded. Shown in current 2004 dollars.

Effective Tax Rate

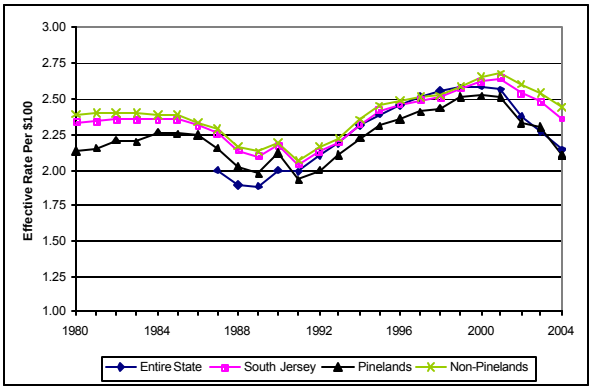
X Updated

NJ Dept of Treasury, Division of Taxation 1994 - 2001

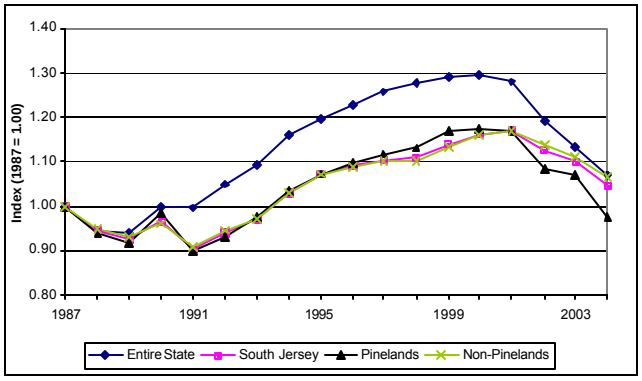
NJ Dept of Community Affairs, Div LGS 1980 - 93, 2002 - 04

- Effective Tax Rates experienced their sharpest one-year decline in over a decade in all regions of the state in 2004. In the Pinelands, the average effective tax rate dropped by 9%.

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 1980's 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 1990's and surpassed earlier highs set in the 1980's. Pinelands effective tax rates continue to remain lower than all other regions of New Jersey. Rates began falling in 2001 and continued to fall through 2003.

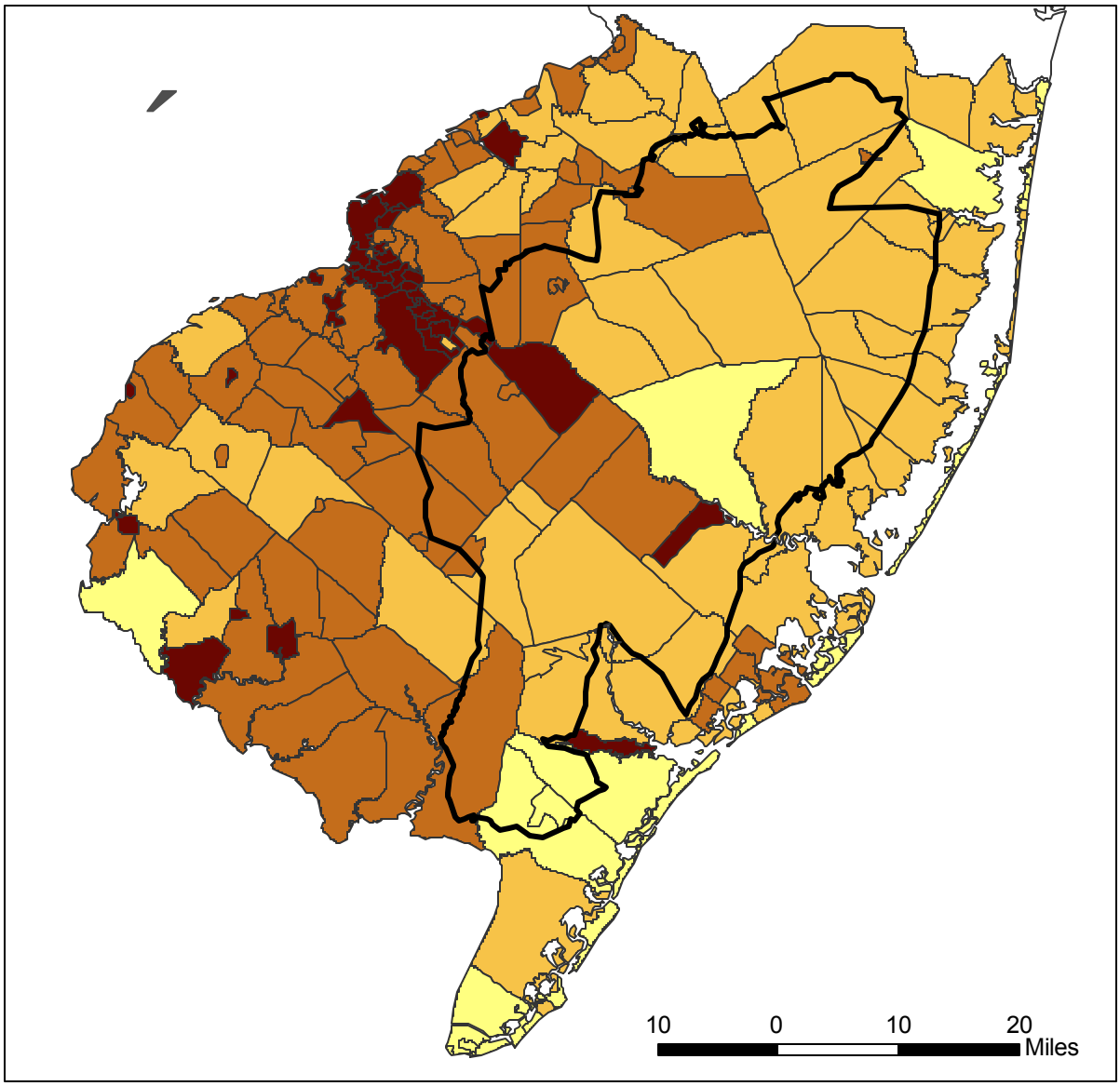
Update

Effective tax rates declined across all regions of the state for the fourth consecutive year in 2004. Fueled by an increasingly active real estate market and rising home prices, effective tax rates experienced their largest one-year percentage decrease since 1991. Statewide, New Jersey posted a decrease of 5.7% in effective tax rates in 2004, dropping from 2.27 in 2003 to 2.14 in 2004. In Southern New Jersey, effective tax rates fell 4.0% in the Non-Pinelands to 2.44 compared to an 8.5% decrease in the Pinelands to 2.10. The decrease in effective tax rates is linked to an increase in home sale price and a corresponding increase 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.[16] Berlin Township, Egg Harbor City, and Waterford are the only Pinelands municipalities with rates higher than 3.00. These municipalities represent 6.4% of the 47 Pinelands municipalities. By contrast, in the Non-Pinelands 39 municipalities have effective tax rates above 3.00, which represents 25.2% of the Non-Pinelands municipalities. The majority of municipalities with rates above 3.00 are clustered in Camden County (Figure RE3).

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

Figure F3 Effective Tax Rates 2004



Pinelands Boundary

Effective Tax Rate

0.45 - 1.50

1.54 - 2.25

2.26 - 3.00

3.01 - 8.59

Source: NJ Dept of Community Affairs

Author: NJ Pinelands Commission

Date: 2005

Table F3 Effective Tax Rates 2004

Municipality	County	Effective Tax Rate	South Jersey Rank
Berlin Township	Camden	3.27	25
Egg Harbor City	Atlantic	3.13	32
Waterford	Camden	3.04	40
Winslow	Camden	2.88	54
Monroe	Gloucester	2.82	57
Medford Lakes	Burlington	2.77	60
Chesilhurst	Camden	2.72	65
Buena	Atlantic	2.58	75
Medford	Burlington	2.58	77
Hammonton	Atlantic	2.56	80
Evesham	Burlington	2.43	96
Franklin	Gloucester	2.43	97
Mullica	Atlantic	2.30	109
Pemberton Township	Burlington	2.30	109
Lakehurst	Ocean	2.29	113
Maurice River	Cumberland	2.27	114
Tabernacle	Burlington	2.19	122
Egg Harbor Township	Atlantic	2.17	124
Hamilton	Atlantic	2.17	125
Galloway	Atlantic	2.15	127
Buena Vista	Atlantic	2.14	128
Shamong	Burlington	2.14	129
Wrightstown	Burlington	2.12	132
Southampton	Burlington	2.12	133
Bass River	Burlington	2.08	134
Barnegat	Ocean	2.05	136
Woodland	Burlington	2.02	138
Little Egg Harbor	Ocean	1.99	140
South Toms River	Ocean	1.98	142
Eagleswood	Ocean	1.98	143
Estell Manor	Atlantic	1.88	148
Ocean	Ocean	1.84	150
Folsom	Atlantic	1.71	154
Jackson	Ocean	1.71	155
Beachwood	Ocean	1.69	156
Port Republic	Atlantic	1.69	157
Plumsted	Ocean	1.66	158
Stafford	Ocean	1.61	160
Manchester	Ocean	1.61	161
Lacey	Ocean	1.60	162
Berkeley	Ocean	1.58	166
New Hanover	Burlington	1.56	168
Weymouth	Atlantic	1.54	170
Woodbine	Cape May	1.42	172
Washington	Burlington	1.40	174
Dennis	Cape May	1.38	175
Upper	Cape May	1.35	177
"Outside" Municipalities			
Corbin City	Atlantic	3.33	22
Berlin Borough	Camden	2.64	70
Vineland	Cumberland	2.22	120
Springfield	Burlington	2.15	126
North Hanover	Burlington	1.77	153

Municipal Finance

4

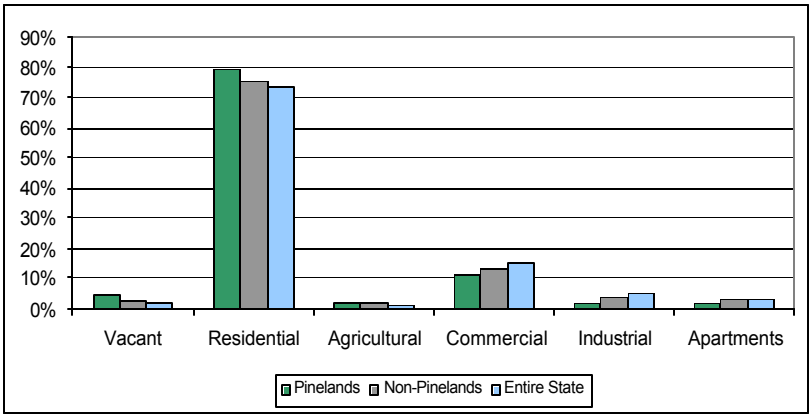
Assessment Class Proportions in Municipal Tax Revenues

X Updated

NJ Dept of Community Affairs, Div LGS 1980 – 1994, 2002 - 2004

- The vacant land category in the Pinelands has declined from 11.9% of total assessment in 1984 to 4.7% in 2004. Over the same period, the residential category has increased 9.2%.

Assessment Class Proportions in Municipal Tax Revenue 2004



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, and updates were collected for 2003 and 2004. However, all data for the years 1995 to 2001 is still unavailable. Because a time series is unavailable, this section examines changes in assessment class proportions using ten-year intervals of 1984, 1994, and 2004. 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 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 11.9% of total Pinelands assessed value in 1984, but dropped to 8.0% in 1994 and declined even further to 4.7% in 2004. 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 69.9% in 1984, to 74.1% in 1994, to 79.1% in 2004. The percentage of assessment in agricultural and commercial land has remained relatively steady between 1994 and 2002, while the percentage of industrial assessed value has decreased.

The Pinelands municipalities of Medford Lakes, Beachwood, Tabernacle, Berkeley, Shamong, and Port Republic have the highest percentage of assessed value in the residential category (above ninety percent) in the Pinelands. Wrightstown, Berlin Township, and Woodbine have the lowest percentage of assessed value in the residential category (below sixty percent).

Table F4a Assessment Class Proportions in Municipal Valuations

	1984	1994	2004	Change from 1984 - 2004
Pinelands				
Vacant	11.9%	8.0%	4.7%	-7.2%
Residential	69.9%	74.1%	79.1%	9.2%
Agricultural	3.4%	2.2%	1.9%	-1.5%
Commercial	10.4%	11.7%	11.3%	0.9%
Industrial	2.5%	2.4%	1.6%	-0.9%
Apartments	1.9%	1.6%	1.5%	-0.4%
Non-Pinelands				
Vacant	4.3%	3.4%	2.7%	-1.6%
Residential	68.8%	72.1%	75.2%	6.4%
Agricultural	4.1%	3.1%	2.2%	-1.9%
Commercial	14.0%	13.5%	13.4%	-0.6%
Industrial	4.7%	4.4%	3.6%	-1.1%
Apartments	3.4%	2.8%	3.0%	-0.4%
State				
Vacant	3.9%	3.3%	2.2%	-1.7%
Residential	67.3%	70.0%	73.6%	6.3%
Agricultural	1.2%	0.9%	0.8%	-0.4%
Commercial	14.8%	15.9%	15.6%	0.8%
Industrial	8.6%	7.1%	4.9%	-3.7%
Apartments	4.1%	2.9%	2.9%	-1.2%

Table F4b 2002 Assessment Class Proportions for Pinelands Municipalities

Municipality	County	Vacant	Residential	Agricultural	Commercial	Industrial	Apartments
Medford Lakes	Burlington	0.4%	98.1%	0.0%	1.5%	0.0%	0.0%
Beachwood	Ocean	1.4%	94.6%	0.0%	3.8%	0.0%	0.2%
Tabernacle	Burlington	1.5%	93.3%	2.7%	2.4%	0.1%	0.0%
Shamong	Burlington	1.3%	92.4%	3.8%	2.1%	0.4%	0.0%
Berkeley	Ocean	2.1%	92.2%	0.0%	4.3%	0.4%	1.0%
Port Republic	Atlantic	4.4%	90.9%	1.4%	3.2%	0.0%	0.0%
Pemberton Township	Burlington	2.4%	87.1%	1.9%	5.9%	0.5%	2.2%
Waterford	Camden	2.4%	86.9%	2.0%	8.0%	0.3%	0.5%
Medford	Burlington	1.4%	86.6%	1.2%	8.5%	0.5%	1.7%
Plumsted	Ocean	2.4%	86.5%	4.6%	5.1%	1.0%	0.4%
Barnegat	Ocean	5.6%	85.8%	0.1%	6.1%	0.2%	2.2%
Stafford	Ocean	3.1%	85.8%	0.0%	10.9%	0.1%	0.2%
Little Egg Harbor	Ocean	6.2%	85.8%	0.1%	7.7%	0.0%	0.2%
Southampton	Burlington	2.2%	85.8%	4.8%	6.2%	1.1%	0.0%
Lacey	Ocean	2.9%	85.6%	0.1%	7.4%	3.9%	0.0%
Ocean	Ocean	8.4%	84.6%	0.2%	6.8%	0.1%	0.0%
Winslow	Camden	3.6%	83.7%	1.6%	6.9%	1.7%	2.5%
Jackson	Ocean	3.8%	83.7%	0.5%	10.2%	0.7%	1.2%
Chesilhurst	Camden	9.3%	83.5%	0.0%	5.3%	1.4%	0.5%
Mullica	Atlantic	7.4%	83.4%	2.2%	5.9%	0.9%	0.2%
South Toms River	Ocean	2.5%	83.2%	0.0%	14.2%	0.1%	0.0%
Monroe	Gloucester	3.0%	83.0%	1.3%	11.0%	0.5%	1.3%
Franklin	Gloucester	4.5%	82.0%	4.6%	8.6%	0.0%	0.3%
Weymouth	Atlantic	6.8%	81.5%	0.3%	9.4%	0.2%	1.6%
Upper	Cape May	5.7%	81.5%	0.5%	11.0%	1.3%	0.1%
Galloway	Atlantic	4.4%	80.7%	0.7%	11.2%	0.7%	2.4%
Estell Manor	Atlantic	12.4%	80.3%	2.0%	3.1%	1.4%	0.8%
Washington	Burlington	4.5%	79.8%	4.4%	9.0%	2.1%	0.2%
Maurice River	Cumberland	7.5%	79.0%	3.4%	4.4%	5.6%	0.1%
Evesham	Burlington	1.2%	78.9%	0.2%	15.1%	0.8%	3.9%
Buena Vista	Atlantic	7.1%	77.9%	4.6%	8.0%	2.5%	0.0%
Bass River	Burlington	7.4%	76.1%	2.1%	14.5%	0.0%	0.0%
Lakehurst	Ocean	1.3%	75.6%	0.0%	22.7%	0.0%	0.5%
Manchester	Ocean	3.4%	75.1%	0.1%	6.9%	0.5%	14.0%
Dennis	Cape May	8.7%	74.8%	2.0%	14.6%	0.0%	0.0%
Folsom	Atlantic	4.5%	74.0%	1.1%	9.4%	11.0%	0.0%
Buena	Atlantic	2.3%	72.9%	6.2%	12.0%	3.7%	3.0%
Egg Harbor City	Atlantic	2.3%	71.0%	0.0%	19.2%	3.8%	3.8%
Hammonton	Atlantic	3.7%	70.4%	3.1%	18.7%	2.9%	1.1%
Egg Harbor Township	Atlantic	8.5%	69.7%	0.2%	21.2%	0.0%	0.4%
Eagleswood	Ocean	13.8%	69.6%	0.2%	13.6%	2.6%	0.2%
Woodland	Burlington	6.8%	67.7%	13.9%	5.1%	6.4%	0.0%
New Hanover	Burlington	5.9%	65.4%	6.0%	22.6%	0.2%	0.0%
Hamilton	Atlantic	5.5%	60.3%	0.8%	28.8%	1.5%	3.1%
Woodbine	Cape May	10.4%	57.0%	4.4%	21.5%	3.3%	3.4%
Berlin Township	Camden	2.5%	52.0%	0.1%	34.5%	9.7%	1.2%
Wrightstown	Burlington	2.4%	41.0%	0.0%	41.2%	1.2%	14.1%
“Outside” Munis							
Corbin City	Atlantic	7.0%	82.6%	1.1%	9.4%	0.0%	0.0%
Berlin Borough	Camden	3.9%	77.6%	0.1%	15.5%	1.9%	1.0%
Springfield	Burlington	2.4%	74.6%	12.6%	10.4%	0.0%	0.0%
North Hanover	Burlington	2.5%	73.7%	7.7%	12.6%	0.0%	3.4%
Vineland	Cumberland	2.0%	70.7%	1.8%	19.1%	3.5%	2.9%

Municipal Finance 5

Local Municipal Purpose Revenues

NJ Dept of Community Affairs, Div LGS 1998 - 2004
Individual SJ County Tax Divisions 1995 - 1997

X Updated

- In 2004, municipal budgets increased at a smaller rate in the Pinelands than in the Non-Pinelands. State aid decreased in both regions, with the Pinelands experiencing a steeper decline in state funding.

	Local Municipal Budget*	Budget Per Capita	Population Estimate	State Aid	State Aid Per Capita
Pinelands 1996	$390,910,050	$648	591,420	NA	NA
Pinelands 2000	$401,577,906	$638	615,984	$105,793,617	$174
Pinelands 2004	$449,298,862	$660	657,971	$100,918,284	$160
Change	14.9%	1.9%	11.3%	-4.6%	-8.0%
Non-Pinelands 1996	$1,549,565,726	$948	1,612,610	NA	NA
Non-Pinelands 2000	$1,588,551,142	$940	1,647,532	$303,413,714	$185
Non-Pinelands 2004	$1,748,162,910	$969	1,692,777	$293,489,586	$172
Change	12.8%	2.2%	5.0%	-3.3%	-7.0%

* = 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 m unicipal 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 in 2000, and municipal estimates for 2001 to 2004. The population estimate for 2003 was used to calculate per capita figures for 2004, as 2004 municipal estimates were not available when this report was prepared. Per capita figures for 2004 may be slightly inflated as a result of using the 2003 population estimate.

This variable has been upgraded to a core variable for this year's report and will be tracked annually in subsequent reports.

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 budget of Pinelands municipalities increased faster than the Non-Pinelands from 1995 to 2003. The Pinelands municipal budget increased by 12% during this period, compared to 7% for the Non-Pinelands. Within the local budget, monies raised through local municipal purposes increased substantially (by 40% in the Pinelands and 14% in the Non-Pinelands) while monies raised through miscellaneous revenues were relatively stable (a decrease of 2% in the Pinelands and an increase of 1.5% in the Non-Pinelands).

While municipal revenues increased both inside and outside the Pinelands from 1995 to 2003, the amount of revenue collected per person has remained relatively the same. As a whole, the Pinelands municipalities collected $666 in municipal revenues per capita in 1995 and $663 per capita in 2003, a decrease of 0.5%. The Non-Pinelands municipalities collected $973 per capita in 1995 versus $986 in 2003, an increase of 1.3%. The increase in revenues corresponds with population increases. As the population increases, the ability 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 in both the Pinelands and Non-Pinelands since 1995. Per Capita revenues did not surpass 1995 levels until 2002 in the Non-Pinelands and 2003 in the Pinelands (Table F5a).

From 1995-2003, the Pinelands municipalities collected approximately $300 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, 36% of Pinelands municipalities have no local police force, compared to 15% of Non-Pinelands municipalities (see 2003 Annual Report).

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 1999-2003, state aid decreased by 3% to Pinelands municipalities and by 5% to Non-Pinelands municipalities. Per capita rates decreased by 8% in the Pines and 7% in the Non-Pines. While there is quite a gulf between Pinelands and Non-Pinelands municipalities in terms of municipal revenues per capita, both regions receive a comparable amount of state aid per capita.

There is a large degree of variation among the Pinelands municipalities in terms of local municipal revenues and state aid. Municipal revenues have 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 from 1995 to 2003.

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 have 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 1995-2003.

Update

The total municipal budget for the Pinelands municipalities rose 2.9% in 2004 compared to a rise of 4.8% in the Non-Pinelands. However, it is likely that the actual per capita numbers tell a somewhat different story. At the time this report was prepared, population estimates had not yet been released for 2004. We do know that between 1999 and 2003 that population increased at an annual average rate of 1.7% in the Pinelands as opposed to an annual average increase of 0.7% in the Non-Pinelands. If we assume the same rates of growth in population for 2004, per capita municipal budgets in the Pinelands increased 1.3% in 2004 while rising by 4.0% in the Non-Pinelands for the year.

Total municipal state aid fell 4.7% in the Pinelands and dropped 1.1% in the Non-Pinelands in 2004. Once again making the assumption that population rate increases remained the same in the two regions for 2004, per capita state aid decreased by 6.3% in the Pinelands and fell 1.8% in the Non-Pinelands. For the period 1999-2004, the Pinelands municipalities have had both a smaller percentage increase in their per capita municipal budget and a larger percentage decrease in per capita state aid than the Non-Pinelands municipalities (Table F5a).

Among Pinelands municipalities, Wrightstown more than doubled their municipal budget in 2004 (from $930,000 in 2003 to $2 million in 2004) while Berlin Township, Egg Harbor City, Barnegat, and New Hanover all had increases between 10 and 20 percent. Estell Manor (-34%) and Plumsted (-24.8%) were the only Pinelands municipalities to have large decreases in their municipal budgets for 2004. Meanwhile, only five municipalities in the Pinelands had more state aid in 2004 than 2003 (Medford Lakes, Beachwood, New Hanover, Evesham, and South Toms River). All of those increases were less than 1%, however. Washington, Woodland, Estell Manor, and Bass River had decreases in state aid of more than 30% in 2004(-89.8%, -54.7%, -40.7%, and -32.2% respectively).

Table F5a Local Municipal Purpose Revenues and State Aid for Pinelands and Non-Pinelands Regions (In 2004 $s)

Region	Year	Local Municipal Purposes	Misc Revenues	Total Municipal Budget	Budget Per Capita	Population Estimate	State Aid	Aid Per Capita
Pines	1995	$131,906,433	$257,010,152	$388,916,585	$666	584,232		
Pines	1996	$136,044,931	$254,865,118	$390,910,050	$661	591,420		
Pines	1997	$140,348,840	$254,684,684	$395,033,524	$661	597,454		
Pines	1998	$145,233,608	$253,990,515	$399,224,123	$660	604,928		
Pines	1999	$151,903,517	$248,411,438	$400,314,955	$655	610,785	$108,644,733	$178
Pines	2000	$154,837,198	$246,740,709	$401,577,906	$652	615,984	$105,793,617	$172
Pines	2001	$166,450,096	$252,157,025	$418,607,120	$664	630,550	$108,641,058	$172
Pines	2002	$173,577,041	$255,415,022	$428,992,063	$666	643,787	$102,359,083	$159
Pines	2003	$184,870,815	$251,560,445	$436,431,259	$663	657,971	$105,858,830	$161
Pines	2004	$197,107,838	$252,191,023	$449,298,862	$683	657,971	$100,918,284	$153
NonPines	1995	$710,277,169	$848,716,256	$1,558,993,424	$973	1,601,776		
NonPines	1996	$710,706,082	$838,859,644	$1,549,565,726	$961	1,612,610		
NonPines	1997	$712,358,417	$841,918,216	$1,554,276,633	$958	1,622,388		
NonPines	1998	$723,651,006	$861,759,908	$1,585,410,914	$972	1,630,733		
NonPines	1999	$738,679,516	$843,320,273	$1,581,999,788	$965	1,639,053	$309,921,989	$189
NonPines	2000	$737,961,214	$850,589,928	$1,588,551,142	$964	1,647,532	$303,413,714	$184
NonPines	2001	$734,279,185	$849,699,363	$1,583,978,547	$954	1,660,123	$306,234,497	$184
NonPines	2002	$775,500,360	$866,618,307	$1,642,118,667	$979	1,678,078	$306,841,172	$183
NonPines	2003	$807,525,995	$861,086,686	$1,668,612,681	$986	1,692,777	$296,750,773	$175
NonPines	2004	$842,540,398	$905,622,514	$1,748,162,910	$1,033	1,692,777	$293,489,586	$173
Pines	99-04	$45,204,321	$3,779,585	$48,983,907	$28	47,186	($7,726,449)	($24)
NonPines	99-04	$103,860,882	$62,302,241	$166,163,122	$68	53,724	($16,432,403)	($16)
Pines	99-04	29.8%	1.5%	12.2%	4.3%	7.7%	-7.1%	-13.8%
NonPines	99-04	14.1%	7.4%	10.5%	7.0%	3.3%	-5.3%	-8.3%

Table F5b Local Municipal Purpose Revenues and State Aid for Pinelands Municipalities in 2004

County	Municipality	Population Est 2003	Municipal Budget*	State Aid	Budget Per Capita	Aid Per Capita
Burlington	Washington	637	$1,786,921	$131,663	$2,805	$207
Burlington	Wrightstown	749	$2,009,010	$533,084	$2,682	$712
Atlantic	Egg Harbor City	4,486	$5,598,011	$641,972	$1,248	$143
Camden	Berlin Township	5,360	$6,316,440	$1,578,038	$1,178	$294
Camden	Chesilhurst	1,756	$2,068,477	$864,220	$1,178	$492
Ocean	Stafford	24,318	$27,172,282	$3,200,680	$1,117	$132
Cape May	Woodbine	2,677	$2,873,723	$465,559	$1,073	$174
Ocean	Eagleswood	1,534	$1,570,047	$252,709	$1,023	$165
Atlantic	Port Republic	1,071	$1,061,514	$222,552	$991	$208
Ocean	Lakehurst	2,582	$2,501,256	$421,571	$969	$163
Cape May	Upper	11,965	$11,537,525	$6,550,911	$964	$548
Ocean	Ocean	7,214	$6,659,026	$816,838	$923	$113
Burlington	Bass River	1,562	$1,415,500	$218,264	$906	$140
Burlington	Woodland	1,354	$1,127,783	$222,462	$833	$164
Ocean	Little Egg Harbor	18,616	$15,434,022	$1,746,472	$829	$94
Gloucester	Monroe	30,427	$24,279,085	$5,324,647	$798	$175
Ocean	Lacey	26,240	$20,623,942	$11,814,597	$786	$450
Burlington	Medford Lakes	4,205	$3,152,093	$429,594	$750	$102
Atlantic	Hammonton	12,994	$9,699,552	$1,663,049	$746	$128
Camden	Waterford	10,645	$7,913,565	$1,497,095	$743	$141
Ocean	Barnegat	17,632	$12,996,288	$1,385,196	$737	$79
Atlantic	Buena	3,832	$2,809,855	$623,738	$733	$163
Ocean	Berkeley	42,247	$30,647,630	$5,600,302	$725	$133
Burlington	Medford	23,359	$16,760,646	$2,656,702	$718	$114
Atlantic	Hamilton	22,705	$16,239,117	$3,635,678	$715	$160
Atlantic	Mullica	6,038	$4,236,195	$665,614	$702	$110
Atlantic	Egg Harbor Township	35,061	$24,481,246	$7,053,519	$698	$201
Cape May	Dennis	6,338	$4,379,379	$1,755,517	$691	$277
Ocean	South Toms River	3,703	$2,469,824	$460,884	$667	$124
Atlantic	Estell Manor	1,657	$1,102,122	$259,363	$665	$157
Burlington	Pemberton Township	28,938	$18,629,718	$3,751,280	$644	$130
Camden	Winslow	35,150	$21,952,333	$7,892,048	$625	$225
Ocean	Jackson	49,644	$30,950,766	$4,518,033	$623	$91
Atlantic	Folsom	1,977	$1,217,199	$272,227	$616	$138
Ocean	Beachwood	10,712	$6,519,342	$905,285	$609	$85
Burlington	Evesham	46,111	$25,761,894	$4,270,182	$559	$93
Ocean	Manchester	42,228	$23,565,728	$4,123,761	$558	$98
Gloucester	Franklin	16,013	$8,916,172	$1,937,769	$557	$121
Atlantic	Galloway	34,221	$17,817,149	$3,445,662	$521	$101
Atlantic	Buena Vista	7,556	$3,819,292	$976,132	$505	$129
Atlantic	Weymouth	2,324	$1,059,355	$375,588	$456	$162
Cumberland	Maurice River	7,600	$3,158,493	$945,170	$416	$124
Burlington	Tabernacle	7,312	$2,987,476	$802,309	$409	$110
Burlington	Southampton	10,918	$4,396,490	$1,544,929	$403	$142
Ocean	Plumsted	8,034	$3,012,707	$666,757	$375	$83
Burlington	Shamong	6,749	$2,513,700	$710,027	$372	$105
Burlington	New Hanover	9,520	$2,098,972	$1,088,635	$220	$114
"Outside" Municipalities						
Atlantic	Corbin City	519	$615,931	$78,012	$1,187	$150
Burlington	Springfield	3,504	$2,926,817	$584,211	$835	$167
Camden	Berlin Borough	6,819	$5,268,136	$1,002,568	$773	$147
Cumberland	Vineland	57,057	$41,832,457	$8,106,398	$733	$142
Burlington	North Hanover	7,556	$2,784,602	$1,105,915	$369	$146

* Municipal budget = Local Municipal Purpose Revenues + Miscellaneous Revenues

5. Recommendations for Future Study

- Continue to investigate 2000 Census data at the block-group level in order to refine the analysis of current variables (per capita income) and to add new supplemental variables (place of work, housing, etc.) to subsequent reports.

- Obtain sub-municipal census data (census block group) back to 1980, so a thorough examination of the change in population, housing, and land use within the Pinelands boundary can be conducted. Such an exercise could evolve as a special study.

- Collect data prior to 1980, i.e. back to 1970. The collection and analysis of this data would enable a comparison of trends before and after the adoption of the CMP. This analysis could also evolve as a special study.

- Obtain sub-municipal data for non-Census indicators, such as employment establishments and real estate transactions, that have address information associated with them. These addresses can be used to pinpoint establishments and transactions to their specific locations inside and outside the Pinelands boundary by using a GIS roads data layer. Addresses of establishments and transactions are matched to addresses in the roads layer. Work on this process began in 2003 when a GIS roads layer was acquired, but technical and quality control problems were encountered. Work should continue into the future.

- Investigate using other statistical measures, such as median values and per capita figures, for some of the core variables.

- Explore the possibilities for obtaining recent municipal employment data.

- Complete the Municipal Fiscal Health study.

- Continue work on the Land Value Study.

- Begin work on Pinelands Development Credit Supply and Demand Study.

Appendix A. Selected References

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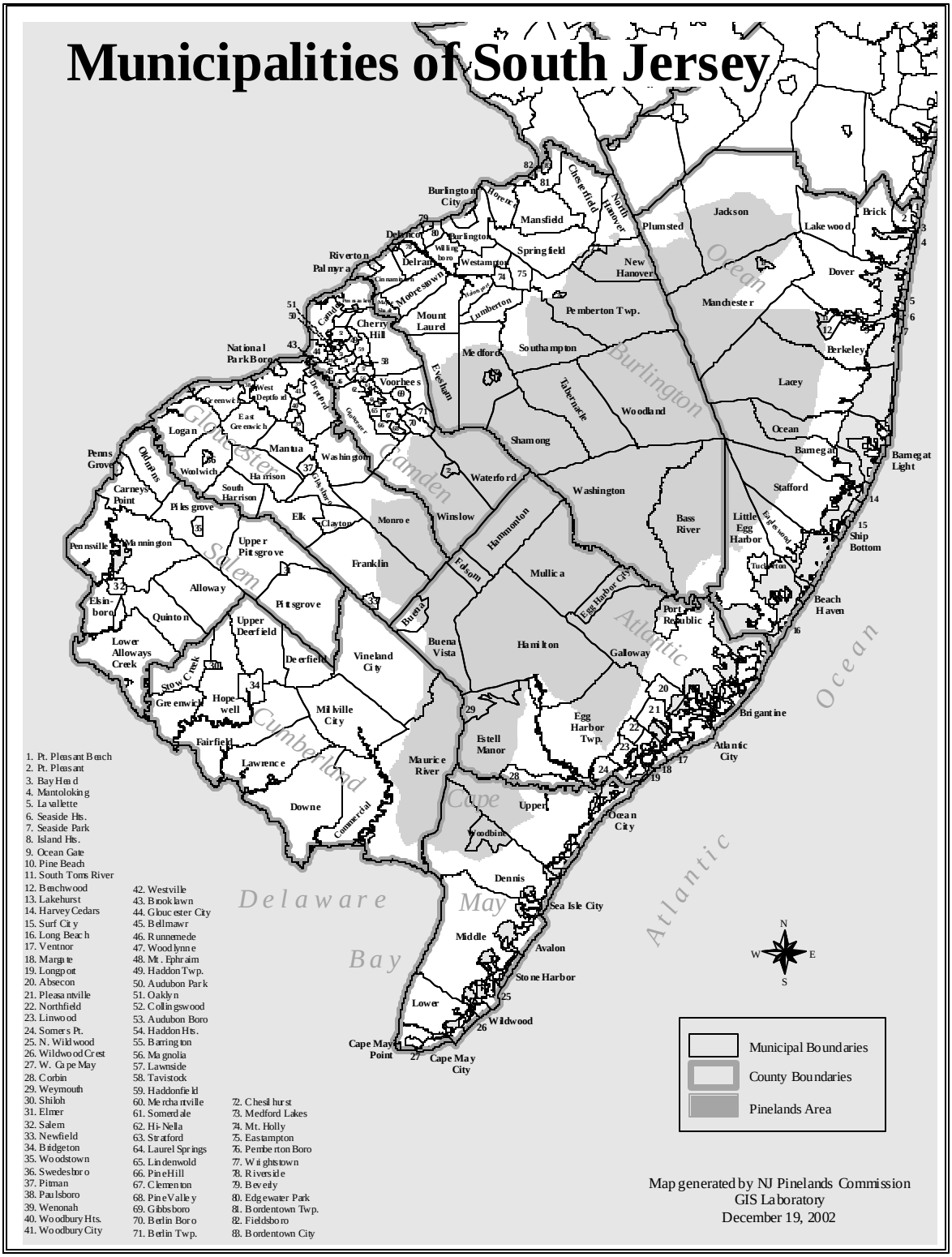
Appendix B. Pinelands and Non-Pinelands Acreage by County

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

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

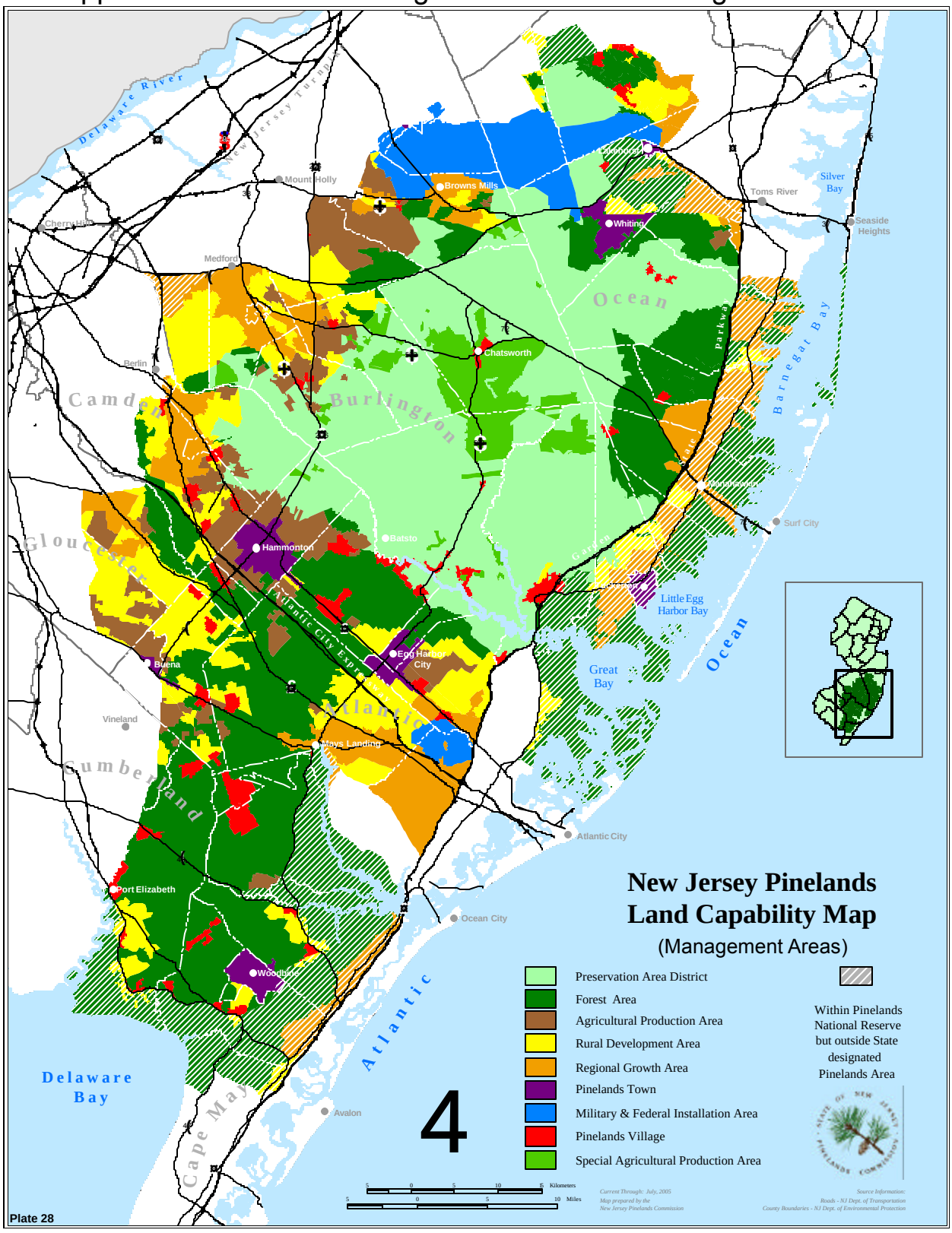
Appendix C. Municipalities of South Jersey



Appendix D Pinelands Management Areas

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

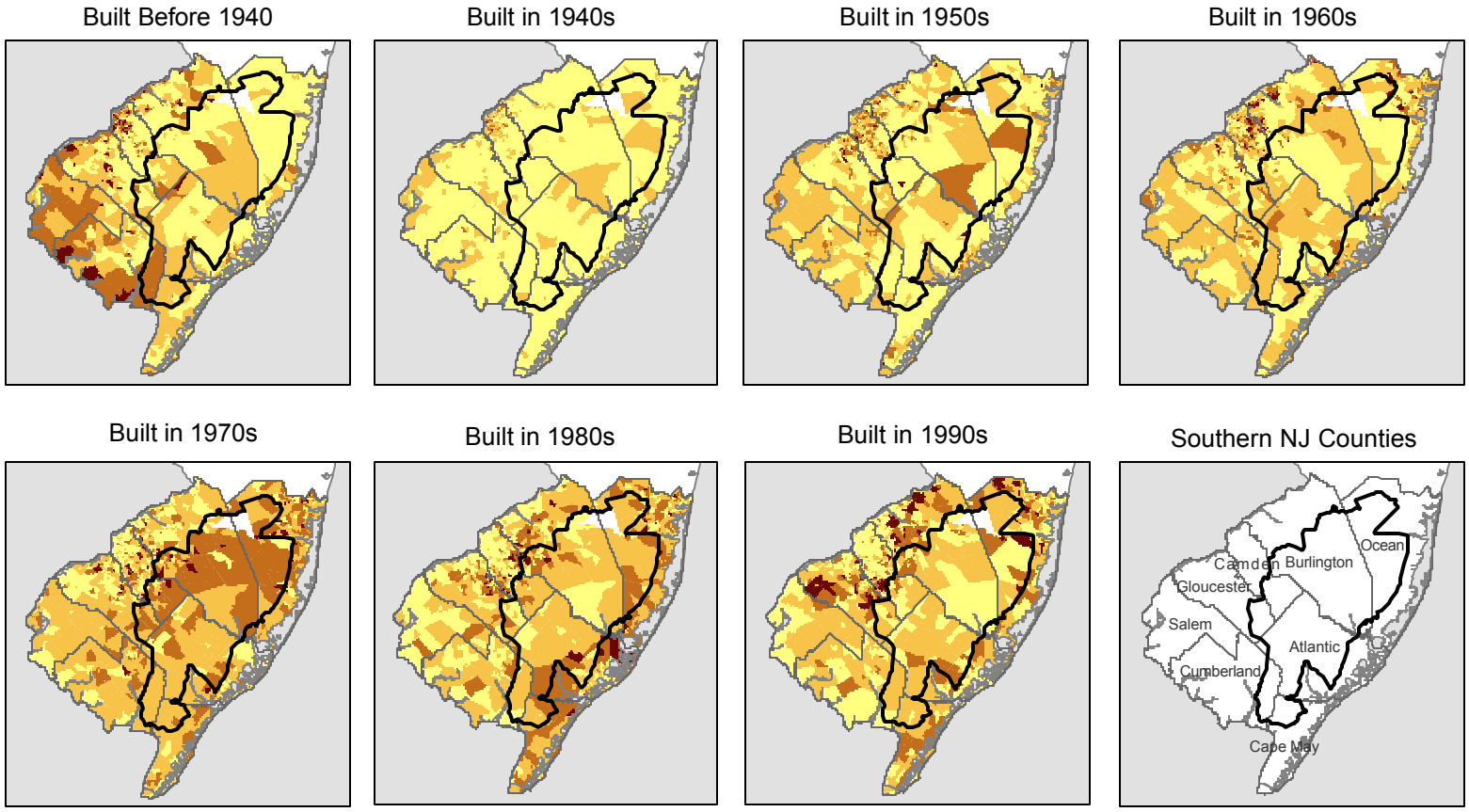
Appendix E. State-Designated Pinelands Management Areas



Appendix F

Southern New Jersey Housing Unit Construction

Percentage of Total Housing in 2000 Built in Each Decade



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