LAND MARKET TRENDS
IN THE PINELANDS

PINELANDS COMMISSION

New Lisbon, New Jersey

ALAN MALLACH ASSOCIATES

Trenton, N.J. & Philadelphia, Pa.

1980

LAND MARKET TRENDS IN THE PINELANDS

TABLE OF CONTENTS

LAND MARKET TRENDS IN THE PINELANDS

I INTRODUCTION

This report represents a preliminary effort to identify the major features and trends in the land market affecting the Pinelands region. Through an analysis of trends and patterns during recent years, it is anticipated that it will be possible to identify different patterns of land activity in the Pinelands, in terms of time period and geographic subarea, and therby anticipate potential future development pressures and directions affecting the region.

The principal source of information for this report is the analysis of vacant land transactions, as annually assembled by the New Jersey Division of Taxation, for 1965, 1969, and 1972 through 1978*. Although the data does not include acreage data**, we feel, nonetheless, that as applied in this report, it is capable of yielding highly valuable information. In addition, where appropriate, we have utilized other information, such as building permit records.

---

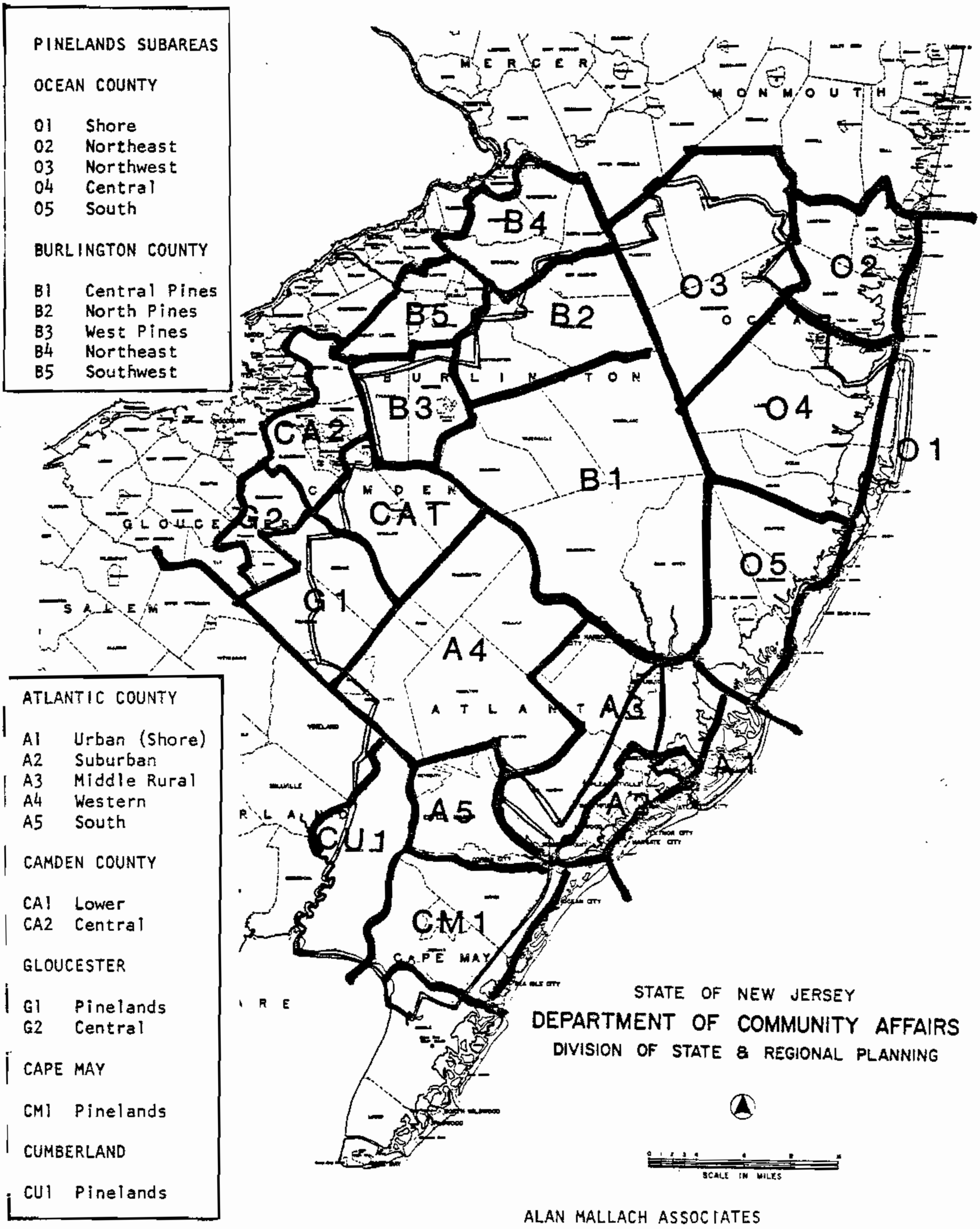
*after completion of this report, data on land transactions was made available by the Division of Taxation for 1979. This data has been added, wherever it was reasonably feasible to do so, to the tables appearing in this report. In addition, an appendix (Appendix I) dealing with the implications of the added 1979 data has been provided.

**Acreage data on land transactions is only available through the process of (a) obtaining the block and lot number of the land involved in the transaction through reference to the original SR-1A form, and (b) crossreferencing that information to the ownership data in municipal tax records. This can also be done through use of the REDI (Real Estate Data, Inc.) compilations of that information. Such an analysis will be done for selected municipalities and made available separately.

A division of the Pinelands, as well as adjacent areas outside the Pinelands, into subareas for analysis has been made, and is shown on the map on the following page. The purpose of these subareas is to identify areas of generally common ground in terms of current development patterns, or factors affecting growth and development, as well as to provide a basis for the comparison of Pinelands areas with adjacent outside areas. It should be noted that by drawing the lines in such a way that subareas do not contain both Pinelands and non-Pinelands municipalities (with one exception, noted below) some anomalies from a development perspective result. The only significant one, in our judgement, is the inclusion of Mt. Laurel in the same subarea as the Mt. Holly area, rather than with Evesham and Medford; the latter two are in the Pinelands, which Mt. Laurel is not. It should also be noted that Brigantine has been placed in the same subarea as the balance of the Atlantic County shore, an exception to the rule noted above*. Despite its inclusion statutorily in the pinelands, it is a shoreline community from a development perspective; furthermore, it is, quite logically, included in the shore subregion by the Atlantic County Planning Board.

These subareas will be used extensively in this report. In addition to illustrating the difference in land market activity between different areas influenced by different growth factors, the subareas are large enough to permit a level of trend analysis which would be impossible if attempted on a municipality by municipality basis.

*Pinelands municipalities, for purposes of this analysis, include those which are entirely or in large part within the Pinelands, as well as a few modest municipalities which, although largely outside the Pinelands, are closely linked to Pinelands municipalities, including Berlin Borough and Township, and Pemberton Borough. Municipalities such as Dover or Vineland, which are almost entirely outside the Pinelands, are not considered Pinelands municipalities.


PINELANDS SUBAREAS
OCEAN COUNTY
01 Shore
02 Northeast
03 Northwest
04 Central
05 South
BURLINGTON COUNTY
B1 Central Pines
B2 North Pines
B3 West Pines
B4 Northeast
B5 Southwest
ATLANTIC COUNTY
A1 Urban (Shore)
A2 Suburban
A3 Middle Rural
A4 Western
A5 South
CAMDEN COUNTY
CA1 Lower
CA2 Central
GLOUCESTER
G1 Pinelands
G2 Central
CAPE MAY
CM1 Pinelands
CUMBERLAND
CU1 Pinelands
MERCER
MONMOUTH
BURLINGTON
CAMDEN
SALEM
ATLANTIC
CAPE MAY
B4
B5
B2
B3
B1
O1
O2
O3
O4
O5
CA2
CA1
G2
G1
A4
A3
A1
A2
A5
CU1
CM1
STATE OF NEW JERSEY
DEPARTMENT OF COMMUNITY AFFAIRS
DIVISION OF STATE & REGIONAL PLANNING
SCALE IN MILES
ALAN MALLACH ASSOCIATES

II PRINCIPAL FINDINGS

Before providing a detailed discussion of the data assembled for this report, it is valuable to present in succinct form the principal findings derived from the analysis of land market data for the Pinelands region:

(1) contrary to what appears to be a widespread impression, land market activity in the Pinelands in recent years has not increased, relative to the peak years in the early 1970's.*

The peak year for land activity in the Pinelands was 1973. The increase in activity which has taken place during the past three years (1976-1978) has not yet brought activity back to the 1973 level. This is shown in Table 1, which compares the total volume of transactions in Pinelands municipalities, in current and constant dollars**.

(2) There are significant variations by area within the Pinelands in terms of land market activity, both in terms of overall level and recent trends.

As Table 2 on the following page shows, the different counties in the Pinelands show signifcant differences in their growth patterns. While the general pattern of decline from the 1973 peak (1974 in Ocean County) is apparent across the region, subsequent developments vary widely. The most sigificant recent increase has been in Atlantic County. As will be shown later, the increase in land market activity in the Pinelands municipalities of that county is significantly less than that which has been taking place in the shore area. Ocean County, however,

*It is worth noting that, generally speaking, the volume of land transactions declined between 1978 and 1979, often significantly. The only major exception to this was in Atlantic County.

**Current dollars refer to the current value of the dollar for any given year; constant dollars are adjusted to reflect a common value, in this case the value of the dollar in 1967. The overall Consumer Price Index has been used to adjust the value of the dollar, in the absence of any specific index that bears a direct relationship to land values.

TABLE 1: TOTAL VALUE OF VACANT LAND TRANSACTIONS IN PINELANDS REGION

year	deflator (1967=100)	current dollars	constant dollars
1965	94.4	2,355,000	2,492,000
1969	109.8	4,933,000	4,492,700
1972	125.3	14,279,000	11,395,800
1973	133.1	22,552,500	16,944,000
1974	147.7	21,050,000	14,251,900
1975	161.2	15,415,000	9,562,700
1976	170.5	17,599,000	10,322,000
1977	181.5	24,130,000	13,294,800
1978	195.1	28,111,000	14,408,500
1979	221.0	30,395,000	13,753,400

SOURCE: New Jersey Division of Taxation. Analysis by Alan Mallach Associates

continues to be the principal area of land market activity, accounting for roughly 50% of the value of transactions, from year to year. Finally, as will be discussed in detail below, there are significant variations, as well as shifts over time, between different subareas within each county. An example of this would be the significant increase in the share of the southern subarea in Ocean County of total countywide transactions; from representing less than 2% of the dollar value of county transactions in 1969, the southern subarea came to represent 26% of the total by 1978, largely attributable to activity in one municipality, Stafford Township.

TABLE 2: DOLLAR VALUE OF LAND TRANSACTIONS IN PINELANDS REGION BY COUNTY
(VALUES IN CURRENT DOLLARS ONLY)

	atlantic	burlington	camden	cape may	cumberland[1]	gloucester	ocean[2]	TOTAL
1965	594,000	350,000	147,000	218,500	48,000	150,000	737,000	2,355,000
1969	836,000	1,270,000	182,000	479,500	28,000	271,000	1,866,500	4,933,000
1972	1,313,500	3,317,500	461,000	1,512,000	77,000	499,000	7,099,000	14,279,000
1973	2,787,500	5,342,500	732,500	2,830,000	110,000	987,500	9,762,500	22,552,500
1974	2,955,000	3,442,500	470,000	1,195,000	95,000	1,055,000	11,837,500	21,050,000
1975	2,327,500	4,615,000	725,000	1,732,500	227,500	635,000	5,152,500	15,415,000
1976	2,651,500	3,950,000	390,000	1,647,500	20,000	1,117,500	7,822,500	17,599,000
1977	3,885,000	3,692,500	515,000	2,152,500	37,500	837,500	13,010,000	24,130,000
1978	5,940,000	5,495,000	345,000	3,197,500	95,000	902,500	12,136,000	28,111,000
1979	9,000,000	4,582,500	635,000	3,065,000	122,500	1,402,500	11,587,500	30,395,000

(1) includes Maurice River Township only

(2) does not include any transactions in Dover Township

SOURCE: NJ Division of Taxation. Analysis by Alan Mallach Associates

(3) A disproportionate share of all land transactions take place in a small number of highly active municipalities.

In 1978, four municipalities (Stafford, Manchester, Jackson, and Lacey) accounted for 78% of the dollar value of land transactions in the Pinelands municipalites of Ocean County; three municipalities (Evesham, Medford, and Tabernacle) represented 82% of the value of land transactions in the Pinelands municipalities of Burlington County. The most active municipalities are shown in Table 2A on the next page.

The above findings are strictly factual, in that they do not include any significant interpretative conclusions. A number of conclusions, requiring interpretation of the data, and therefore subject to discussion, can also be drawn:

(4) the actual volume of vacant land activity in the Pinelands is modest, relative to the availability of land, or the image of land activity widely held.

Outside the 'active' municipalities, which represent only a handful of the Pinelands communities, the amount of land involved in vacant land transactions is generally modest, and appears to be significantly less than the amount of land available for sale. Although we do not have statistical data on this point, it was confirmed informally by all presumably knowledgable individuals with whom it was discussed.

An illustration, applied to the five Central Pinelands municipalities of Burlington County, is appropriate. In the table below we have distinguished, somewhat arbitrarily on the basis of the dollar value of the transaction, between three levels of transaction, characterized as 'lots', 'acreage', and 'large acreage'*. Although one must allow for the somewhat arbitrary nature

*For these purposes, transactions involving less than $20,000 were considered to be 'lots', between $20,000 and $99,999 to be 'acreage', and over $100,000 to be 'large acreage'. In the middle category, there was only one transaction noted over $29,999.

TABLE 2A: VACANT LAND TRANSACTIONS IN ACTIVE MUNICIPALITIES IN PINELANDS REGION 1973-1978

	1973	1974	1975	1976	1977	1978	TOTAL	% in 77-78
Egg Harbor	455,000	605,000	262,500	272,500	547,500	977,500	3,120,000	48.9%
Galloway	595,000	400,000	325,000	580,000	682,500	1,312,500	3,895,000	51.2
Hamilton	422,500	312,500	535,000	602,500	590,000	1,325,000	3,787,500	50.6
Evesham	1,027,500	480,000	1,382,500	490,000	932,500	1,525,000	5,837,500	42.1%
Medford	1,407,500	990,000	627,500	1,345,000	635,000	2,257,500	7,262,500	39.8
Pemberton	1,330,000	200,000	572,500	792,500	580,000	322,500	3,797,500	23.8
Tabernacle	432,500	387,500	540,000	585,000	390,000	735,000	3,070,000	36.6
Upper	607,500	577,500	1,130,000	792,500	1,075,000	1,920,000	6,102,500	49.1%
Beachwood	392,500	660,000	487,500	750,000	592,500	225,000	3,112,500	26.3%
Berkeley	570,000	1,262,500	720,000	962,500	1,135,000	930,000	5,580,000	37.0
Jackson	1,697,500	2,305,000	875,000	737,500	1,627,500	1,251,500	7,706,500	37.4
Lacey	2,917,500	625,000	1,335,000	1,672,500	1,612,500	1,310,000	9,472,500	30.9
Ltl. Egg Harbor	515,000	1,212,500	592,500	542,500	655,000	602,500	4,120,000	30.5
Manchester	137,500	870,000	497,500	702,500	3,147,500	1,322,500	6,677,500	66.9
Stafford	1,435,000	2,127,500	912,500	1,977,500	3,557,500	5,624,500	15,634,500	58.7

SOURCE: New Jersey Division of Taxation. Analysis by Alan Mallach Associates of the analysis, it is apparent that there is very little largescale land activity taking place, in an area where the inventory of privately owned land is immense. It is likely that in the entire area, only a few hundred acres were involved in transactions of raw acreage during the year.

This does not mean, however, that development pressure and development activity, in terms of housing construction, does not exist, or will not continue. Indeed, it appears very likely that a reason for the modest level of land transactions in many areas in recent years is that earlier land market activity (such as in the early 1970's) has created a backlog of vacant land in the lands of developers and builders. As a result, considerable development activity could take place over the coming years without any need for major new purchases of vacant land by developers or speculators.

TABLE 3: CHARACTERIZED LAND TRANSACTIONS IN CENTRAL PINELANDS MUNICIPALITIES 1978

	LOTS		ACREAGE		LARGE ACREAGE	
	#	$ value	#	$ value	#	$ value
Bass River	3	22,500	1	25,000		
Shamong	6	60,000				
Tabernacle	22	275,000	10	260,000*	1	200,000**
Washington	6	25,000	1	25,000		
Woodlands	17	102,500				
TOTAL	54	485,000	11	310,000	1	200,000

*this total includes 9 transactions in the range from $20,000-$29,999. Given the increasingly suburban character of parts of Tabernacle Township, some of these may be 'lot' sales rather than 'acreage'.
**value given only as 'over $100,000' in data. In our analysis we have given a consistent value of $200,000 to all such transactions.

SOURCE: NJ Division of Taxation. Analysis by Alan Mallach Associates

(5) overall, there is evidence of only a limited shift in land activity away from the edges and into the inner Pinelands.

One question of particular importance in terms of the future growth pressures on the Pinelands is whether there is evidence that the more suburbanized areas, on the edges of the Pinelands, which have absorbed a large part of the region's growth during recent years, are becoming more fully developed, as a result of which development pressures have by necessity increased in the inner reaches of the Pinelands.

The evidence strongly suggests that this has not taken place. The vacant land market in areas inside the Pinelands such as Medford and Evesham, or outside such as Dover (Ocean), Washington (Gloucester) and Cherry Hill, continues to dominate the region. Not only do they continue to be growth centers, but more significantly, their rebound from the mid-1970's decline in many cases exceeds that of the central Pinelands communities. From 1977 to 1978, Evesham and Medford increased their share of total dollar value of land transactions in the Burlington County Pinelands from 42% to 69%. Both vacant land activity and housing construction remain consistently strong in these communities. Using another indicator, major land sales (total value of the transaction over $50,000), we find in Camden County that between 1976 and 1978 there were 19 such transactions in Cherry Hill, but only 4 such transactions in the five municipalities ofLower Camden County.

(6) the volume of vacant land transactions, rather than anticipating housing development, tends to parallel or to lag behind housing development.

This is a preliminary finding, but one of potential significance. Based on preliminary results, it would appear that an increase in housing production in an area triggers an increase in vacant land transactions in that area, rather than vice versa. This is illustrated by the two graphs on the following page, where housing production (as represented by building permits issued) and vacant land transactions, in constant dollar volume, are compared.

In essence, we have converted both building permit totals and dollar value of land transactions into ratios, in which the value (or number) for 1972 is held at 1.00; for example, the number of building permits issued in the Central subarea in 1972 was 2,501, and in 1973, 2,128. The ratio value for 1973 building permits, therefore is 2128 ÷ 2501, or 0.85. The actual figures are given in the table below.

TABLE 4: VALUES FOR GRAPH 1 (RATIOS WHERE 1972 VALUE = 1.00)

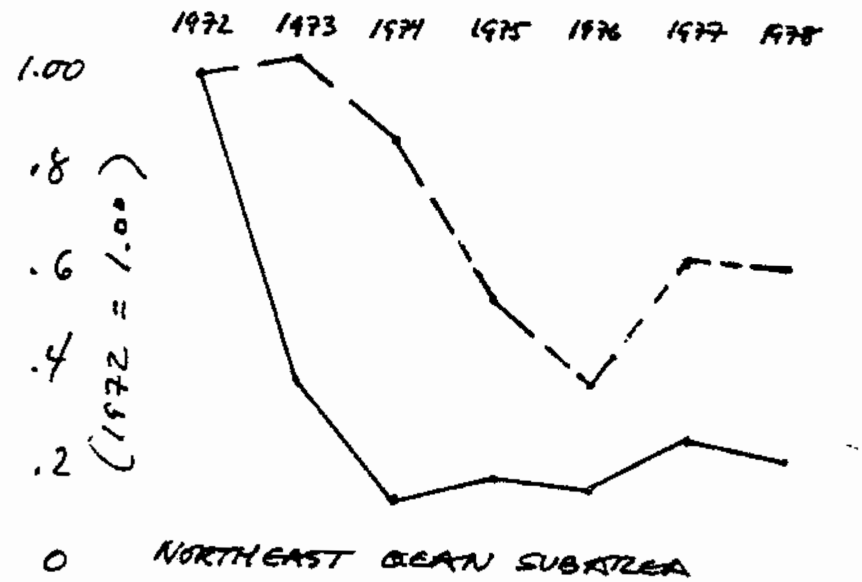
	Northeast		Central	
	BUILDING PERMITS	VACANT LAND	BUILDING PERMITS	VACANT LAND
1972	1.00	1.00	1.00	1.00
1973	.39	1.03	.85	.99
1974	.14	.87	.37	.93
1975	.19	.55	.33	.50
1976	.18	.38	.45	.62
1977	.27	.62	.53	.59
1978	.22	.61	.59	.45

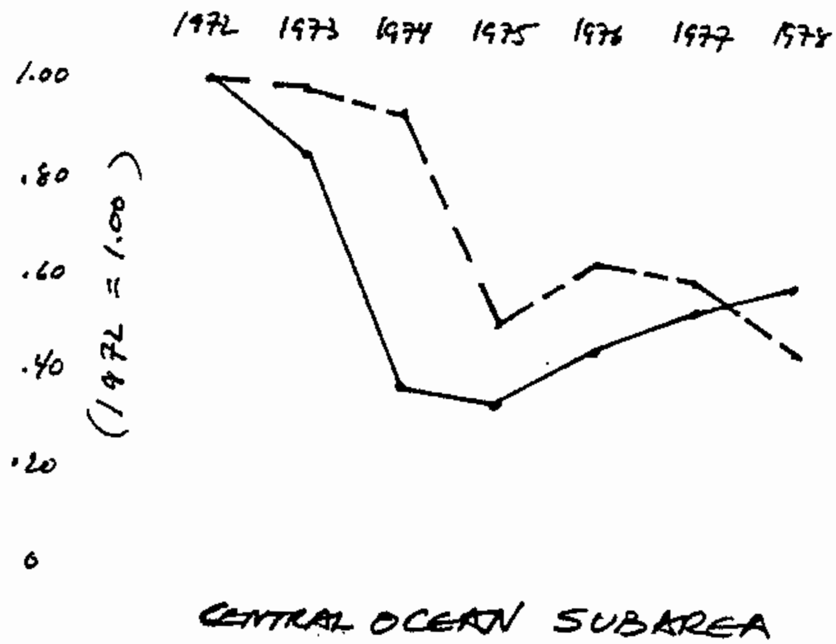
The graphs show a consistent lag in vacant land transactions behind building permits, of approximately two years in the Northeastern part of the county, and one year in the Central area. In the former, the building permit decline takes place from 1972 to 1974, stablizes in 1974, at which time permits begin to rise, although slowly. The value of vacant land transactions, however, remains largely stable until 1974, and only after permit-issuing has 'bottomed out', does it begin to decline, from 1974 to 1976; the increase in vacant land transactions in 1977-1978, in turn, reflects the increase in building permit

GRAPH 1: PARALLEL MOVEMENT OF HOUSING PRODUCTION (BUILDING PERMITS) AND VACANT LAND TRANSACTIONS (VALUE IN CONSTANT DOLLARS) IN TWO OCEAN COUNTY SUBAREAS 1972-1978

____________ housing production

----------- vacant land dollar volume





NOTE: see text for explanation of graph

issuing in 1975-1976*. The same pattern is apparent in the Central subarea, but the lag is one, rather than two, years. One sees a similar pattern in Burlington County, where the number of land transactions we have classified as major (value over $50,000), increased steadily from 1972 to 1975, before declining to reflect

TABLE 5: MAJOR VACANT LAND TRANSACTIONS IN BURLINGTON COUNTY PINELANDS 1972-1978

	Central Pines	North Pines	West Pines	TOTAL
1972	1	2	4	7
1973	3	1	7	11
1974	4	1	6	11
1975	5	4	9	18
1976	3	1	6	10
1977	3	1	2	6
1978	1	1	13	15

a downturn beginning in 1973. Also of interest in Table 5 is the fact that, in 1978, when the number of major transactions increased, the increase was entirely in the West Pines subarea, which is the suburban area of Evesham and Medford. There has been no increase in major land activity in other parts of the Pinelands in Burlington County**.

*The fact that the value of vacant land transactions has tended to remain closer to 1.0 than the number of building permits during this period is strongly suggestive of an increase in the value of land per unit, or of overall land value appreciation, in the Northeastern subarea. There is less evidence of such appreciation during this period in the Central subarea.

**This conclusion is consistent with informal comments by some of our respondents; indeed, some noted that many of the individuals or firms that made large land purchases in the mid-1970's in the Central Pinelands have been unable, for various reasons, to develop, and would be readily willing to dispose of their holdings today.

III MAJOR LAND TRANSACTIONS

The analysis of major land transactions, of which a part is shown above, is of some interest because it is strongly suggestive of pressure for future development activity. In other words, it is argued that a circular process takes place in the relationship between the land market and the development process; increases in development activity trigger land purchases; land purchases, in turn, given suitable development conditions, encourage additional development. Thus the increase in vacant land transactions in Evesham and Medford, for example, increases the likelihood that the development activity in those communities will be sustained over the coming years*. Furthermore, it should be noted that with the exception of Burlington County, the amount of large scale land purchase activity is consistently greater in the fringe areas immediately outside the Pinelands, than in the Pinelands proper. The West Pines area of Burlington County (Evesham and Medford) shares the development features of fringe areas in other counties.

Within the Pinelands, the pattern of large scale lard aquisition suggests future development interest in the following areas:

- Galloway Township in Atlantic County
- Evesham and Medford in Burlington County
- Upper Township in Cape May County
- Jackson, Manchester, and Stafford Townships in Ocean County

During the past two years, these seven Townships are responsible for 62 of

*This does not mean that development cannot take place without such recent transactions; on the contrary, the inventory of land held for potential development is more than adequate throughout the Pinelands.

TABLE 6: MAJOR LAND TRANSACTIONS BY SUBAREA FOR PINELANDS AND FRINGE 1972-1979
(NUMBER OF TRANSACTIONS OF $50,000 OR MORE)

	1972	1973	1974	1975	1976	1977	1978	1979
ATLANTIC								
shore	1	2	1	1	3	14	19	22
suburban	1	1	2	0	1	1	3	6
middle rural	2	1	1	0	0	2	5	16
western	0	2	2	1	1	1	1	17
south	0	0	0	0	0	1	0	0
PINELANDS	2	3	3	1	1	4	6	37
FRINGE	2	3	3	1	4	15	22	24
BURLINGTON								
central pines	1	3	4	5	3	3	1	0
north pines	2	1	1	4	1	1	1	2
west pines	4	7	6	9	6	2	13	17
northeast	1	0	1	0	0	0	0	0
southwest	1	1	4	0	3	1	2	2
PINELANDS	7	11	11	18	10	6	15	19
FRINGE	2	1	5	0	3	1	2	2
CAMDEN								
Pinelands	2	2	0	3	1	2	1	3
Fringe	10	18	10	3	11	6	17	28
CAPE MAY								
Pinelands	0	5	2	3	3	3	9	8
CUMBERLAND								
Pinelands	0	0	0	1	0	0	0	0
GLOUCESTER								
Pinelands	0	1	3	1	3	0	0	4
Fringe	2	6	2	1	8	11	10	8
OCEAN								
shore	5	9	6	7	2	10	16	50
northeast	16	24	25	22	9	22	21	41
northwest	3	11	9	1	1	14	8	6
central	7	9	13	2	5	6	3	11
south	1	5	9	4	5	7	6	9
PINELANDS	11	25	31	7	11	27	17	26
FRINGE	21	33	31	29	11	32	37	91
TOTAL								
PINELANDS	22	47	50	34	29	42	48	97
FRINGE	37	63	51	34	37	65	88	153

SOURCE: NJ Division of Taxation. Analysis by Alan Mallach Associates

the total. These seven municipalities, which include some of the largest in the region, nonetheless make up only 21% of the vacant land inventory* in the Pinelands.

IV COUNTY AND SUBAREA ANALYSIS

The following sections of the report are devoted to a county by county assessment of land market trends, in which the particular features or trends affecting each subarea are separately discussed.

A. Atlantic County

As noted earlier, Atlantic County is the one county in the Pinelands where the volume of vacant land transactions in 1978 significantly exceeds any previous year, in dollars adjusted for inflation, as well as current dollars.

*Based on the data in the State & Regional Planning Division Housing Allocation study report, and excluding farmlands and publically held lands.

TABLE 7: DOLLAR VOLUME OF VACANT LAND TRANSACTIONS IN ATLANTIC COUNTY

A. current dollars

	pinelands	balance	pinelands %
1965	594,000	1,043,500	36.3%
1969	836,000	2,152,000	28.0%
1972	1,313,500	1,076,000	55.0%
1973	2,787,500	1,755,000	61.4%
1974	2,955,000	1,387,500	68.0%
1975	2,327,500	732,500	76.1%
1976	2,651,500	950,000	73.6%
1977	3,885,000	3,525,500	52.4%
1978	5,940,000	6,092,500	49.4%
1979	9,000,000	5,345,000	62.7%

B. constant dollars (1967=100)

	pinelands	balance
1965	628,600	1,104,200
1969	761,400	1,959,900
1972	1,048,300	858,700
1973	2,094,300	1,318,600
1974	2,000,700	939,400
1975	1,443,900	454,400
1976	1,555,100	557,200
1977	2,140,500	1,942,400
1978	3,044,600	3,122,800
1979	4,265,400	2,533,200

SOURCE: NJ Division of Taxation. Analysis by Alan Mallach Associates

Although this pattern is particularly noticeable in Atlantic City and its immediate environs, the increase in land transactions presumably atributable to the effects of casino gambling is affecting the Pinelands region of the county as well. The table below, which shows the more recent 1975-1978 trends by subarea, shows, howver, that there is a substantial difference between the subareas in terms of their impact, up to this point.

TABLE 7A: VALUE OF VACANT LAND TRANSACTIONS BY SUBAREA IN ATLANTIC COUNTY 1975 TO 1978 ($000)

	1975	1976	1977	1978	CHANGE 75-78
urban subregion	$ 605	$1208	$3513	$5313	+ 778.1%
suburban subregion	275	317	783	1570	+ 470.9%
middle rural subregion	640	865	1278	2428	+ 279.4%
western subregion	1295	1105	1580	2478	+ 91.4%
southern subregion	245	108	258	245	-0-

So far, the impact of casino development has been greatest in closest proximity to Atlantic City, with the value of lard transactions on Absecon Island increasing by 1978 to nearly 900% of its 1975 level. The increase is significant as well in the largely developed suburban communities facing the bay*, and in those parts of the Pinelands region most immediately accessible to Atlantic City, most notably Galloway Township. The increase in land activity in the western subarea is almost entirely attributable to increased activity in Hamilton Township. On the mainland, Hamilton, Galloway, and Egg Harbor Townships tend to dominate the land market.

*This, in turn, appears to be associated with an increase in infill development of single family house subdivisions, between five and fifteen units per development, often selling for $100,000 and more, in these communities, particularly Linwood and Northfield.

The future implications of this picture are ambiguous, since much depends on both the nature of the expansion triggered by casino development, and the regulatory programs adopted by local government and by the Pinelands Commission. As table 7B shows, from a standpoint of land availability, two points are clear; first, that land is in short supply outside the Pinelands in Atlantic County, and second, that within the Pinelands, the middle subarea in which Galloway and Egg Harbor Townships are located is amply provided with land for potential development. Although this figure may be reduced somewhat on the basis of various

TABLE 7B: VACANT DEVELOPABLE LAND IN ATLANTIC COUNTY BY SUBAREA

	acres	% of county total
Shore (urban)	1,881	0.9%
Suburban	2,964	1.4%
Middle Rural	66,183	31.1%
Western	117,157	55.0%
Southern	24,881	11.7%
PINELANDS	208,899	98.0%
BALANCE	4,167*	2.0
	213,066	100.0%

*Brigantine (in the Pinelands) has been subtracted from the Shore total given above

SOURCE: Division of State & Regional Planning, Revised Statewide Housing Allocation Report for New Jersey (1978)

environmental considerations (the only such excluded in the above are wetlands and lands with more than 12% slope), it should be noted that it excludes land under farmland assessment, which totaled 29,530 acres in 1978, all but 34 of which was in the Pinelands part of the County.

B. Burlington County

In contrast to Atlantic County, land market activity in Burlington County presents a picture of little significant investment in recent years. Even without adjustment for inflation, 1978 vacant land dollar values are substantially below peak years in the early and middle 1970's in all subareas except for the West Pines area of Medford and Evesham. This reflects, to a large degree a decline in development activity generally in most of this county, and an only limited recovery from the housing market collapse of 1974. There are some inconsistencies in this picture, however, which will be noted below.

The most notable inconsistencies are found in Shamong and Tabernacle Townships, where there has been a steady and significant increase in the number of building permits issued in each of the past five years, without any parallel increase in the volume of land market activity. The increase in permit issuing is fairly directly attributable to the recent inclusion of these two townships within the Philadelphia suburban ring; in other words, houses are now being constructed in those townships as substantial residences for affluent households in the Philadelphia SMSA*. At the same time, it would appear that the inventory of vacant land held for development or investment, presumably resulting from transactions taking place for the most part in the early 1970's, is adequate to sustain the growth that is taking place.

This leads to a conclusion that is most probably applicable to many parts of the Pinelands region. Should the demand for housing increase, the amount of land already in the hands of potential developers and builders should be more than ample to accomodate any likely future development. This is, indeed, what

*Subdivisions in these townships, including houses selling from $80,000 to well over $100,000, are widely advertised in the Philadelphia newspapers.

TABLE 8: DOLLAR VALUE OF VACANT LAND TRANSACTIONS IN BURLINGTON COUNTY BY SUBAREA (1 OF 3)

	1965	1969	1972	1973	1974
central pinelands	36,500	239,500	620,500	992,500	1,450,000
northern pinelands	163,500	288,000	940,000	1,810,000	482,500
western pinelands	150,000	742,500	1,757,000	2,540,000	1,510,000
PINELANDS TOTAL	350,000	1,270,000	3,317,500	5,342,500	3,442,500
northeast fringe	36,000	146,500	297,500	440,000	225,000
southwest fringe	98,000*	146,000	373,500	352,500	680,000
FRINGE TOTAL	134,000	292,500	671,000	792,500	905,000
pinelands %	72.3%	81.3%	83.2%	87.1%	76.9%

central pinelands	Bass River, Shamong, Tabernacle, Washington, Woodland
northern pinelands	New Hanover, Pemberton, Southampton, Wrightstown
western pinelands	Eve sham, Medford, Medford Lakes
northeast fringe	Chesterfield, Mansfield, North Hanover, Springfield
Southwest fringe	Easthampton, Hainesport, Lumberton, Mt. Holly, Mt. Laurel, Westhampton

*data for Mt. Laurel not included for 1965

TABLE 8: DOLLAR VALUE OF VACANT LAND TRANSACTIONS IN BURLINGTON COUNTY BY SUBAREA (2 OF 3)

	1975	1976	1977	1978	1979
central pinelands	1,087,500	1,070,000	1,267,500	995,000	687,500
northern pinelands	1,355,000	962,500	752,500	667,500	692,500
western pinelands	2,172,500	1,917,500	1,672,500	3,832,500	3,202,500
PINELANDS TOTAL	4,615,000	3,950,000	3,692,500	5,495,000	4,582,500
northeast fringe	102,500	192,500	155,000	230,000	372,500
southwest fringe	392,500	765,000	487,500	392,500	575,000
FRINGE TOTAL	495,000	957,500	632,500	622,500	947,500
pinelands %	90.3%	80.5%	85.4%	89.8%	82.9%

TABLE 8: DOLLAR VALUE OF VACANT LAND TRANSACTIONS IN BURLINGTON COUNTY BY SUBAREA (3 OF 3)

DOLLAR VALUES ADJUSTED FOR INFLATION (1967 = 1.00)

	inflator	central pinelands	northern pinelands	western pinelands	northeast fringe	southwest fringe
1965	0.945	38,600	173,000	158,700	38,100	103,700
1969	1.098	218,100	262,300	676,200	133,400	133,000
1972	1.253	495,200	750,200	1,402,200	237,400	298,100
1973	1.331	745,700	1,359,900	1,908,300	330,600	264,800
1974	1.477	981,700	326,700	1,022,300	152,300	460,400
1975	1.612	674,600	840,600	1,347,700	63,600	243,500
1976	1.705	627,600	564,500	1,124,600	112,900	448,700
1977	1.815	698,300	414,600	921,500	85,400	268,600
1978	1.951	510,000	342,100	1,964,400	117,900	201,200
1979	2.210	311,100	313,300	1,449,100	168,600	260,200

SOURCE: New Jersey Division of Taxation. Analysis by Alan Mallach Associates has taken place in many areas in recent years. As noted, the peak years for land market activity were in the early 1970's, during which period not only were there substantial land transactions, but also many submissions of large scale developments for approval throughout the Pinelands. Actual construction, however, whether or not initiated, tended to decline with the collapse of the housing market in 1974-1975. In recent years, as housing production has risen once again, a large part of the development activity represents continuation of construction in developments approved in the early 1970's. Examples of this in Burlington County include Kings Grant in Evesham, and Larchmont in Mt. Laurel. The same pattern is noticeable in a number of Ocean County communities as well.

The development taking place in Evesham, Medford, Shamong and Tabernacle in the Pinelands, and Mt. Laurel outside the Pinelands, represents the only evidence of growth in the area under study. The balance of the Pinelands fringe area, including both of the subareas shown on the tables, have shown little activity in recent years; a pattern of sporadic developer/investor interest in some of the municipalities in the Mt. Holly area in the early 1970's does not appear to have been sustained. Similarly, the northeastern fringe subarea appears too remote from existing population centers or economic activity to afford any development interest at this time*. Within the Pinelands, there has been a significant decline in activity in the North Pines subarea, an area which is heavily influenced by Fort Dix. Again, after considerable activity in the early 1970's, particularly in Pemberton Township, both land and building activity have declined, in large part as a result of the gradual decline in the scale of operations at Fort Dix.

*The Trenton area, to which this subarea is accessible, is not generating any appreciable development pressure at this time. It is interesting, however, to speculate why development pressure is not stronger in the Mt. Holly area, which is at least as accessible as Shamong or Tabernacle from the Philadelphia area.

C. Camden and Gloucester Counties

The Pinelands areas of these two counties show similar development and land market activity patterns; both are within the perimeter of suburban development, but remain outside the principal centers of such development in each county. In Camden County, the principal areas for land activity tend to be in Gloucester Township (Blackwood) and Cherry Hill; in Gloucester County, in Washington Township (Turnersville) and the townships to the north.

TABLE 9: DOLLAR VALUE OF VACANT LAND TRANSACTIONS IN PINELANDS MUNICIPALITIES IN CAMDEN AND GLOUCESTER COUNTIES*

	Camden Pinelands	Gloucester Pinelands
A. Current Dollars		
1965	147,000	149,500
1969	182,000	271,000
1972	461,000	499,000
1973	732,500	987,500
1974	470,000	1,055,000
1975	725,000	635,000
1976	390,000	1,117,500
1977	515,000	837,500
1978	345,000	907,500
1979	635,000	1,402,500
B. Constant Dollars (1967=100)		
1965	155,600	158,200
1969	165,800	246,800
1972	367,900	398,200
1973	550,300	741,900
1974	318,200	714,300
1975	449,800	393,900
1976	228,700	655,400
1977	283,700	461,400
1978	176,800	465,100
1979	287,300	634,600

*it should be noted that these figures refer to the entirety of these municipalities, some of which are only in part (particularly Monroe and Franklin) in the Pinelands.

In many ways, lower Camden County, and Winslow Township in particular, is an extreme example of land development (housing construction) activity taking place at significant, and increasing, levels, with little parallel activity in the area of vacant land transactions. Despite the generally modest, and declining, level of land market transactions in that area, as shown in Table 9, building permit issuing has been sustained in Winslow Township at a level of nearly 300 per year during the past five years, since 1974, a level not drastically below that of Cherry Hill Township, where land transactions have been running at a dollar volume seven times that of Winslow Township. Some of this difference can plausibly be attributed to the significant difference in land values in the two municipalities; that, however, is in large part cancelled out (in terms of the land transactions/housing production relationship) by the significantly higher density of typical development in Cherry Hill than in Winslow Township.

A reasonable hypothesis, which has been suggested in part above, is that this relationship (high volume of building permits/low level of land transactions) is to be found in communities where a large part of current building activity is made up of 'building out' previously obtained approvals. Thus, although there may be substantial current building activity, there is less indication of long-term future development interest. This is suggested as a hypothesis for further study, rather than a definitive conclusion.

The picture is not dramatically different in Gloucester County; the disparity between land transactions and housing construction is, however, far less. Activity is principally in Monroe Township, which can reasonably be considered one of the 'active' Pinelands municipalities in terms of land market activity, although not at a scale comparable to the major growth centers in Ocean County.

A comparison of housing production levels with land availability in

Camden and Gloucester Counties suggests, at least at a theoretical level, that a large part of the housing and related demand for land in these two counties could potentially be met without reference to those parts of the counties in the Pinelands. This subject is discussed in greater detail in the report on Population Trends and Demand Pressures, but it should be noted that at present, considerable vacant land exists in Camden County (in Cherry Hill, Gloucester, and Voorhees Townships) and in Gloucester County (Deptford, Washington, and West Deptford Townships) in close proximity to existing centers of population and employment. There are additional municipalities in Gloucester County, such as Logan or Mantua Townships, which are not appreciably more remote than the earlier-mentioned townships.

Although from a standpoint of simple land availability these municipalities can accomodate a large amount of growth, it is unknown, of course, whether their land use policies are, or can be expected to be in the future, meaningfully responsive to housing demand. Based on historical evidence, this is unlikely. Furthermore, we are not aware of any leverage that the Pinelands Commission has available to ensure that these municipalities will indeed accomodate more intensive growth than has been the case up to now.

D. Cape May County

The Pinelands area in Cape May County presents the opposite picture from that discussed above with regard to lower Camden County; a large and increasing volume in land sales activity which has not, at least to this point, been well reflected in housing production. This is principally concentrated in Upper Township, where land transactions have averaged over $1 million per year for the past five years. During the same period, building pemits in Upper Township have typically run at a modest level of 100-200 permits per year.

TABLE 10: DOLLAR VOLUME OF VACANT LAND TRANSACTIONS IN PINELANDS MUNICIPALITIES IN CAPE MAY COUNTY

	Upper, Dennis and Woodbine	Middle
1965	113,000	105,000
1969	269,500	210,000
1972	742,500	769,500
1973	1,322,500	1,507,500
1974	820,000	375,000
1975	1,187,500	545,000
1976	1,310,000	337,500
1977	1,422.500	730,000
1978	2,465,000	732,500
1979	3,065,000	732,500

The interesting additional aspect, illustrated in Table 11, is that there has been a significant shift in the center of gravity within the area; it will be noted that from 1965 to 1973, the value of land transactions in the two clusters of municipalities* was almost precisely comparable. Since 1974, however, while Middle Township has experienced a pattern of gradual decline not unlike many municipalities noted earlier, the increase in the value of transactions in Upper Township and vicinity has been dramatic.

The evidence of the data above, as well as informal comments obtained,

*within the three municipalities, Upper Township accounts for the great majority of transactions (78% in 1978). The land market in Woodbine is negligible.

strongly suggest that the shift observed is attributable at least in part to the growing importance of Atlantic City as a center of economic activity, as a result of casino development. Outside Atlantic County, Upper Township is the most readily accessible municipality to Atlantic City (via the Garden State Parkway and Atlantic City Expressway), and contains substantial resources of vacant land, well over 8,000 acres of vacant and farmland. The large volume of vacant land transactions generally, and particularly with regard to the level of current building activity, and the large number of major transactions that have taken place (15 vacant land sales over $100,000 during the past four years, of which 9 took place in 1978), indicate that Upper Township is a major center of land investment or speculation activity, in anticipation of future development prospects. It is a community definitely deserving additional study.

E. Ocean County*

Ocean County represents by a substantial margin the largest land market in the Pinelands, as well as the largest center of housing development activity. In addition, as will be discussed below, it exhibits a development pattern in recent years that is far more idiosyncratic and irregular, particularly in terms of geographic spread, than is true of any other part of the Pinelands. As we have noted, the greatest part of the development activity in the Pinelands in Burlington, Camden, and Gloucester Counties is readily explicable in terms of the gradual spread of suburbanization outward from the center of the Philadelphia SMSA. In similar vein, development pressures in Atlantic and Cape May Counties are linked generally to Atlantic City, and specificially to the economic activity surrounding casino development. Activity in Ocean County shows no such pattern; the municipality with the largest volume of land activity in recent years,

*We have dispensed with a separate discussion of Cumberland County's Pinelands; this represents one municipality, Maurice River Township, in which there is no evidence of development pressure at present or in the near future.

Stafford Township, is located at a considerable remove from other centers of development activity. The key, if there is one, to understanding development

TABLE 11: DOLLAR VALUE OF VACANT LAND ACTIVITY IN OCEAN COUNTY

	Pinelands municipalities	Balance of County
A. Current Dollars		
1965	737,000	4,023,500
1969	1,866,500	5,650,500
1972	7,099,000	11,469,000
1973	9,762,500	12,865,000
1974	11,837,500	11,202,500
1975	5,152,500	7,892,500
1976	7,822,500	6,008,500
1977	13,010,000	10,620,000
1978	12,136,000	12,457,500
1979	11,587,500	20,845,000
B. Constant Dollars (1967=100)		
1965	779,900	4,257,700
1969	1,699,900	5,146,200
1972	5,665,600	9,153,200
1973	7,334,700	9,665,700
1974	8,014,200	7,584,600
1975	3,196,300	4,896,100
1976	4,588,000	3,524,000
1977	7,168,000	5,821,200
1978	6,220,400	6,385,200
1979	5,243,200	9,432,100

activity in Ocean County is found in the nature of the 'leading' development types - retirement communities and second home communities - which are locationally far less determined than are the suburban developments characteristic of the Camden and Burlington County Pinelands. Indeed, it is arguable that the economics of such largescale development may even work against proximity to existing development, in view of the benefits to be obtained from the lower land costs available in more remote locations.

During the 1960's, as can be seen in Table 13, land market activity was largely concentrated in the Shore and Northeastern subareas in Ocean County,

TABLE 12: DOLLAR VALUE OF VACANT LAND TRANSACTIONS IN OCEAN COUNTY BY SUBAREA (1 OF 3)

	1965	1969	1972
shoreline	1,661,500	2,078,500	2,610,500
northeast	2,306,500	3,518,500	8,688,000
northwest	179,000	277,000	1,576,000
central	394,500	1,507,000	4,343,000
south	219,000	136,500	1,350,500
TOTAL	4,760,500	7,517,500	18,568,000
percentage distribution			
shoreline	34.9%	27.6%	14.1%
northeast	48.5%	46.8%	46.8%
northwest	3.8%	3.7%	8.5%
central	8.3%	20.0%	23.4%
south	4.6%	1.8%	7.3%

TABLE 12: DOLLAR VALUE OF VACANT LAND TRANSACTIONS IN OCEAN COUNTY BY SUBAREA (2 OF 3)

	1973	1974	1975	1976	1977	1978	1979
shoreline	3,245,000	2,280,000	1,725,000	1,472,000	2,737,500	4,075,000	8,660,000
northeast	9,515,000	8,872,500	6,145,000	4,483,500	7,755,000	8,277,500	12,177,500
northwest	3,150,000	3,465,000	795,000	1,557,500	5,022,500	2,921,500	2,990,000
central	4,585,000	4,777,500	2,817,500	3,667,500	3,685,000	3,012,500	4,307,500
south	2,132,500	3,645,000	1,562,500	2,650,000	4,430,000	6,307,000	4,297,500
TOTAL	22,627,500	23,040,000	13,045,000	13,831,000	23,630,000	24,593,500	32,432,500
percentage distribution							
shoreline	14.3%	9.9%	13.2%	10.6%	11.6%	16.6%	26.7%
northeast	42.1%	38.5%	47.1%	32.4%	32.8%	33.7%	37.5%
northwest	13.9%	15.0%	6.1%	11.3%	21.3%	11.9%	9.2%
central	20.3%	20.7%	21.6%	26.5%	15.6%	12.2%	13.3%
south	9.4%	15.8%	12.0%	19.2%	18.7%	25.6%	13.3%

shoreline — Barnegat Light, Bay Head, Beach Haven, Lavallete, Long Beach, Mantoloking, Point Pleasant Beach, Seaside Heights, Seaside Park, Ship Bottom, Surf City.
northeast — Brick, Dover, Island Heights, Lakewood, Point Pleasant
northwest — Jackson, Lakehurst, Manchester, Plumstead
central — Beachwood, Berkeley, Barnegat, Lacey, Ocean, Ocean Gate, Pine Beach, South Toms River
south — Eagleswood, Little Egg Harbor, Stafford, Tuckerton

TABLE 12: DOLLAR VALUE OF VACANT LAND TRANSACTIONS IN OCEAN COUNTY BY SUBAREA ADJUSTED FOR INFLATION (3 of 3)

year	inflator (1967=1.0)	value in constant $	number of transactions	average value per transaction
1965	0.945	$ 5,037,500	1239	$4066
1969	1.098	6,846,500	1611	4250
1972	1.253	14,818,800	2873	5158
1973	1.331	17,000,400	2441	6965
1974	1.477	15,599,200	1758	8873
1975	1.612	8,092,400	1236	6547
1976	1.705	8,112,000	1480	5481
1977	1.815	13,019,300	1963	6632
1978	1.951	12,605,600	2071	6087
1979	2.210	14,675,300	1677	8751

outside the Pinelands. The movement of market activity into the Pinelands subareas took place largely in the late 1960's and early 1970's; with the exception of a modest increase in th market share into the southern subarea, there has been no significant change in the distribution of land market activity since the early 1970's. The same has largely been true with regard to permit issuing activity, although the decline of the share in the more heavily developed Northeastern subarea is more pronounced; as noted earlier, a disproportionate increase in land value can obscure a declining trend in terms of total development volume.

LAND MARKET (34)

One significant trend, however, has been the shifting centers of activity within the county, particularly since the early 1970's. Many of the Townships where development was particularly active in the early 1970's have not resumed large-scale development activity since the recent (post 1977) upturn in the housing market. At least three municipalities which were highly active centers of development in the earlier period - Lacey, Little Egg Harbor, and Barnegat (Union) Townships - have experienced only modest recent development activity. These three municipalities are also experiencing only modest interest in terms of vacant land activity, although the continuing number of small lot sales in the first two cited tends to obscure the decline in significant land market activity. Each of these municipalities, and particularly Barnegat, appears to be experiencing the 'building out' phenomenon, of construction resulting from earlier approvals on which implementation was deferred. This is corroborated by a recent, unrelated, study, which attempted to inventory current and planned development activity within the potential housing market area of Atlantic City*. This study identified no 'planned/proposed' projects (projects in which no construction had yet taken place) in either Lacey or Little Egg Harbor Township, and only one, a senior citizens community, in Barnegat Township. The study also noted that, of nearly 2,000 units in developments under construction in Barnegat Township, only 550 remained to be constructed. In any event, these three municipalities, which accounted for 23% of the building permits issued in the County in 1973, accounted for only 9% of the total in 1978.

At the same time, two municipalities, by virtue of either more central location or other factors, Berkeley and Manchester, have been able to maintain

Evaluation of the Effects of Casino Hotel Development on the Demand for Housing in The Atlantic City Market Area, Economics Research Associates (1979) a level of housing production in recent years equivalent to the highest levels of the early 1970's. As a result, they have come to dominate the countywide housing market, representing 39% of all building permits issued in 1978. Indeed, this represents a modest decline, resulting from the increasing market in other municipalities - Berkeley and Manchester accounted for 54% of County permits in 1976, and 42% in 1977. These two municipalities, in conjunction with Stafford Township, accounted for 75% of all permits issued in the Pinelands munilipalities of the county during 1978.

Land market trends vary somewhat in these three key municipalities, although the patterns are obscured by the large number of individual lot sales taking place in all three municipalities, particularly in Stafford Township, which tend to blur the picture of land acquisition for development or for investment**. Still, it is important to notice that in Manchester and in Stafford Townships, each has had eleven transactions at over $50,000 in the past two years. Berkeley Township has had only two, and generaly speaking, has not experienced a level of land market activity comparable to the other two municipalities, particuarly Stafford, where there have been 27 such transactions since 1972. We do not, at this time, have an explanation for the level of land market activity that has taken place in Stafford Township during the past five years, and which has begun to trigger high levels of permitting activity during the past two years, to over 800

*Berkeley and Manchester Township are the only municipalities in the Pinelands which have consistently sustained such a high level of growth in recent years (roughly 1,000+ units per year), and most probably the only such municipalities in New Jersey. In addition, they are the only municipalities showing major growth at that level during the 1971-1973 boom period to return consistently to that level of activity after the 1974-1976 housing market collapse. It is a remarkable record of activity.

**Another complicating factor, emerging from our initial look at actual real estate transaction records, is that many 'vacant land sales' are sales which include the contract purchase of a house on the lot, as yet unbuilt. This is not an unusual practice in develoments in Ocean County and elsewhere. Needless, to say, it tends to distort evaluation of land values involved in these transactions.

building permits issued in 1978. In 1978, both the dollar volume and total number of vacant land transactions in Stafford Township significantly exceeded that in any other municipality in the Pinelands region. This is another community worth careful study in the future.

It should be noted as well that a number of municipalities, apparently as suited or unsuited for development as those noted above, have experienced little development activity in recent years. These include Ocean Township, Eagleswood Township, and Plumstead Township. It should also be noted that Jackson Township, which has experienced modest development and land activity, appears to be showing a significant increase in land market activity in 1977-1978, both in terms of total volume and the number of large transactions (9 transactions over $50,000 during the two year period).

The implications of these patterns for future development in Ocean County are uncertain, particularly since, as noted above, the historic pattern of development has not followed a consistent thread in relationship to metropolitan centers or prior development nodes *. Although there is no evidence of significant new activity at present, there is no reason, given past experience, in the absence of regulatory constraints, for further development not to happen in communities such as Lacey or Little Egg Harbor. The proximity of the latter to Atlantic City, in fact, would increase its development potential. This notwithstanding, it is apparent that the proximity of at least three municipalities - Jackson, Berkeley,

*Indeed, the course of development in Ocean County has been characterized by what is referred to as 'leapfrogging', a pattern of development where each new development tends to be widely separated by open country from its predecessors. This is a logical outgrowth from the nature of the development in the county, particularly retirement communities, which are not closely linked to other facilities or services; it should also be noted that much, if not all, the development in the county is linked to the linear system created by the Garden State Parkway and Route 9.

and Manchester - to existing heavily developed areas to the north and east, would make them particularly attractive areas for sustained development, as is already the case in Berkeley and Manchester. Both municipalities contain ample resources of vacant land, and are close to Dover Township, which has become the commercial and service center of the region. It is more difficult to project the future of development in Stafford Township, since the underlying reasons for the development taking place there at present are less well understood.

CONCLUDING NOTE

The foregoing analysis describing land market and development activity in the Pinelands contans within it many policy implications; although these implications will be fully broought forth in the next phase of work for the Pinelands Commission, it is appropriate to touch on them briefly at this point.

Different parts of the Pinelands fit into different regions, and fill different roles relative to their region, from a development perspective:
(1) Parts of the Pinelands in Burlington, Camden, and Gloucester Counties are an integral, although still secondary, part of the suburban ring of the Philadelphia SMSA. In the case of Evesham and Medford Townships, the entirety, or the greater part, of these municipalities is clearly within the band of suburban development. In others, such as Shamong, Tabernacle, Winslow, and Monroe Townships, the municipalities are on the perimeter of development, and are still in large part undeveloped.

There is no question that, in theory, future development likely to take place in this part of the Pinelands (with the possible exception of Evesham and Medford) could be accomodated in non-Pinelands parts of the SMSA. From a proportionate standpoint, the number of units produced in these municipalities is not a major factor in the region. It is likely, however, that their share would increase in the future, in the absence of regulatory constraints. If, however, growth was diverted to other parts of the SMSA, outside the Pinelands, the implications could be problematical. First, a large part of that area, in particular in Gloucester County, is outstanding farmland, which could easily be lost as a result. Second, since the Pinelands Commission has no leverage over the land use policies of non-Pinelands municipalities, the effects could be worse, taken as a whole, that those of carefully controlled, clustered, growth within selected parts of the Pinelands.

(2) Although only modest development has taken place up to now in Pinelands municipalities in Atlantic and Cape May Counties, these areas appear central to the future development of the region emanating from Atlantic City. It is not possible to conceive of a reasonable solution to the housing needs that will be generated in the coming decade as a result of casino development that does not utilize at least some land area in the Pinelands, most likely parts of Egg Harbor, Galloway, and Hamilton Townships in Atlantic County, and Upper Township in Cape May County. The importance of this is exemplified in the increased pace of land transactions in these municipalities, as well as the growing number of planned or proposed land developments in them.

(3) the Pinelands municipalities in Ocean County continue to represent the princiipal resource for housing development, particularly but not exclusively for senior citizens, in the county, and perhaps in central New Jersey. It is hard to imagine how development could be significantly diverted from these communities without either or both reducing the supply, or significantly increasing the cost, of housing. Land in the rapid growth communities of the early 1970's to the north - Dover and Brick Townships - appears to be less readily available and

more expensive. Areas in Monmouth County are both significantly more expensive, currently subject to highly restrictive land use regulations, and in any event, in large part prime farmland acrage. In short, it would appear unlikely that there will be an alternative to continued, but controlled, development in the Pinelands communities of Ocean County.

APPENDIX I: A NOTE ON LAND TRANSACTIONS IN THE PINELANDS IN 1979

As noted previously, data from the Division of Taxation on land market transactions for 1979 was obtained after the report was completed. The 1979 figures, however, were added to the tables throughout the report, and this appendix has been prepared to reflect some of the implications of the 1979 transactions data.

The most important conclusion derived from the data is as follows: <u>in all parts of the Pinelands with the exception of Atlantic County, 1979 showed a visible falling off in the level of land market activity from 1978</u>. Since the 1978-1979 period was one of double digit inflation, a moderate decline in current dollar levels represents a significant decline in constant dollars. This pattern strongly suggests that in most of the Pinelands, where as noted earlier, the demand for vacant land was not in any event massive, the Pinelands Moratorium may well have had an impact on the extent of vacant land transactions. As we discuss below, however, there is no evidence of any impact of the Moratorium in Atlantic County, where the demand for vacant land is strongest.

As Table 7 illustrates, the value of vacant land transactions in the Pinelands municipalities of Atlantic County* increased from $5.9 million in 1978 to $9.0 million in 1979, an increase of 52% in one year. This increase took place not only in the identified growth centers of the county, such as Galloway and Hamilton Townships, but also in Mullica Township, a more remote community little affected by development up to now. Egg Harbor Township, on

*This includes the entirety of Galloway and Egg Harbor Townships, parts of which are outside the Pinelands. A more detailed review indicates, however, that land activity is taking place largely without reference to the Pinelands boundary.

the other hand, showed no comparable growth, suggesting the possibility that land assembly has already largely taken place. It is also worth noting that, in

TABLE A-1: LAND TRANSACTIONS 1978 AND 1979 IN SELECTED ATLANTIC COUNTY TOWNSHIPS

	1978	1979	change 78-79
Egg Harbor	$ 977,500	$1,027,500	+ 5.1%
Galloway	1,312,500	2,277,500	+73.5%
Hamilton	1,325,000	2,277,500	+71.9%
Mullica	632,500	1,267,500	+100.4%

SOURCE: NJ DIVISION OF TAXATION

Atlantic County, the share of total land transaction volume taking place within the Pinelands municipalities increased from 49% in 1978 to 63% in 1979, the reverse of the trend taking place in other counties*.

The situation was the opposite in Burlington and Ocean Counties, the two other major growth centers in the Pinelands. Table 8 presents data on land transactions in Burlington County; in constant dollars, all three Pinelands subareas showed a marked decline in activity from 1978, although the center of activity remained in the West Pines area of Medford and Evesham. As the table shows, however, vacant land activity in the North and Central Pines subareas had been gradually declining over a number of years, and by 1979 was a 'soft' market under any circumstances. Thus, it is important to stress that, to the degree that the Moratorium affected land sales, it reinforced an existing downward trend, rather than reversing any upward movement. There is no indication, in Burlington County of significant displacement of activity

*The casino boom triggered a great deal of activity in the non-Pinelands parts of the county during 1977 and 1978, resulting in major price increases in Atlantic City and its immediate environs. It is likely that these factors have contributed to greater developer interet in the Pinelands parts of the county by 1979.

from the Pinelands to other areas; such a pattern, under most circumstances, would require a number of years to become apparent.

Ocean County, on the other hand, shows just such a pattern, although it is impossible to tell to what degree it may be coincidental rather than significant. Between 1978 and 1979 land activity declined in the Pinelands section of the county, while rising significantly in the non-Pinelands areas, the northeastern part of the county (Brick, Dover and Lakewood) and the barrier islands. The total dollar volume of vacant land transactions in the barrier islands (Shore subarea) increased by 112% from 1978 to 1979, most of which, it appears, had to do with appreciation in the value of land, rather than an increase in the number of transactions or the acreage involved in the transactions. Here again, this pattern, as far as the Pinelands municipalities are concerned, does not represent a change in any trend, since indeed there was a comparable drop in activity from 1977 to 1978. The dramatic pattern is that of the increase in vacant land activity in the non-Pinelands municipalities, particularly those along the shore.

The increase in land activity along the shore is in part the product of an increase in the number of transactions, but more largely the result of a dramatic appreciation in the value of the land changing hands*. Table A-2 on the following page illustrates the increase in a number of Ocean County shore municipalities. The average value per transaction increased in nine of twelve municipalities, and increased, in one year, by more than 50% in seven of the twelve. It is hard to arrive at a compelling explanation for this phenomenon; similarly, it is not clear whether it should be considered a momentary, one year, event, or a trend of some significance.

*In view of the near total absence of large vacant parcels in these communities, we believe that it is safe to discount the idea that a significance change in the acreage involved in the transaction is responsible for the increase in cost.

TABLE A-2: OCEAN COUNTY SHORE MUNICIPALITIES SHOWING INCREASE IN VALUE PER VACANT LAND TRANSACTION 1978 AND 1979

	1978		1979	
	number of transactions	value per transaction	number of transactions	value per transaction
Barnegat Light	14	$24,300	25	$ 41,800
Bay Head	8	29,100	2	112,500
Beach Haven	12	27,900	14	67,900
Harvey Cedars	14	29,100	19	47,800
Lavallette	4	30,000	3	50,000
Mantoloking	4	117,500	5	130,000
Point Pleasant Beach	7	22,900	6	37,100
Seaside Heights	2	40,000	1	200,000
Ship Bottom	5	21,000	10	27,800
total	60		85	

NOTE: Municipalities not showing an increase in value per transaction were Long Beach Township, Seaside Park, and Surf City. The number of transactions, however, in these three communities, increased from 33 in 1978 to 76 in 1979.

SOURCE: NJ Division of Taxation

It should be noted, finally, as a possible indication of the effect of the Atlantic City boom outside the county, that a significant increase in activty took place in Little Egg Harbor Township in Ocean County, and activity was sustained in Upper Township in Cape May County, while increasing notably in Dennis Township, a municipality which had had little substantial activity until 1979.

In summary, the 1979 vacant land transaction data strongly suggest two significant trends. (1) There has been a significant increase in activity associated with the development of Atlantic City. In fact, during 1979, nearly half of all vacant land activity, measured by dollar volume, in the Pinelands took place within that area directly affected by Atlantic City development; i.e., Atlantic County and the immediately proximate areas in Cape May and Ocean Counties.

(2) activity declined in the balance of the Pinelands, a decline that was possibly made greater by the effects of the Pinelands Moratorium. The decline was most pronounced in the Burlington County area, although the central parts of the Ocean County Pinelands showed the same pattern. It must be stressed, however, that as noted in the body of the report, the lack of major vacant land activity does not necessarily parallel a decline in development pressure; the inventory of vacant land held for development is clearly capable of sustaining development at current levels throughout most parts of the Pinelands.