CLOSE TO HOME:

ANALYSIS OF HOUSEHOLDS BUYING HOUSES

IN NEW CASTLE COUNTY IN 1988

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CONTENTS

PREFACE

This was a complex project that benefited from the assistance of many organizations and individuals to whom I owe a great debt.

Jeffrey A. Raffel

INTRODUCTION

Many different decisions in New Castle County are based on expectations about where different types of individuals will locate within the county. School districts are interested in the number of families moving into their districts, the ages of the children in these new families, and whether the children will go to public or non-public school. Planners are interested in what geographical areas of the county are attractive to different types of people so they can assure appropriate levels of facilities and services for future growth. Realtors and homebuilders are interested in where individuals prefer to live and the reasons for these preferences so that they can respond to market demand.

Despite the great need to know who moves where in New Castle County and why, there has been little systematic information collected about this process. Nor is there much of a research literature in general on the reasons why people locate where they do. Current research focuses on why people move and where business firms move, but not the decision of where individuals chose to locate. Why a family moves from Wilmington to New Castle or from New Castle to Newark or why a family moving to Delaware chooses to purchase a home in northern New Castle County rather than the southern area has not been studied.

This study attempts to begin to fill this gap by exploring the reasons for location decisions by homebuyers in New Castle County in 1988.

To accomplish this goal, the College of Urban Affairs and Public Policy

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conducted a mailed survey of 2,789 households who purchased homes in New Castle County (which includes but is not limited to Wilmington) during 1988. The sample came from the New Castle County assessment office. The survey, based on David Varady's work in the Cincinnati metropolitan area, was administered from September through December, 1989. The response rate was 37 percent. (See Appendix 1 for further information about the research procedures utilized in this study, Appendix 2 for a copy of the questionnaire, and Appendix 3 for the statistical appendix.)

Respondents were asked about their migration history, their location decision-making process, their mobility plans, and their background characteristics. (Individual data were collected on the head of the household.) Respondents were asked about their views of all five school districts in the county and three nearby school districts in Maryland and Pennsylvania.

The better to understand the criteria that respondents used in their housing search, we asked about the importance of 21 different factors, including "close to work," "near schools," and "quality of government services." Each respondents was asked to indicate whether it was "not important" in their decision, "somewhat important," "important," or "very important."

The survey results were linked to relevant information from the county's property characteristics file, including the acreage of the property, square footage of the house, and some house characteristics.

We begin by examining the demographic characteristics of those who bought homes in New Castle County in 1988.

THE DECISIONS OF HOMEBUYERS

Demographic Characteristics of Homebuyers

It is apparent that the socioeconomic status of those who bought homes in New Castle County in 1988 is quite high. Two-thirds of the head of households are professional or managers, a majority have graduated from college, and the mean household income is greater than $50,000 (Table 1).

While three-quarters of the households included a married couple, only about one-third included school-age children and about one-fifth included pre-school children. Almost half of the households had at least two adult workers. While almost one-third of the heads of households work in Wilmington, only 10.5 percent bought a house in the city.

The high socioeconomic status of homebuyers is even more apparent when we compare the characteristics of New Castle County homebuyers with those in the Cincinnati metropolitan area, where we have comparable data (Table 2). While the household size and average age of the respondents in Cincinnati and Wilmington and the corresponding suburbs were similar, the Delaware sample is much better educated, has higher income and higher status occupations, and paid far more on the average for houses. The difference primarily reflects the recent inflation in housing prices in New Castle County, which appears to have limited homebuyers to middle- and upper-class households in 1988, and the influx of upper-income executives tied to the expansion of the financial services industry. While the median household income of homeowners in 1988 in

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Table 1

Characteristics of 1988 Homebuyers* (N=2786)

Married	73.3%
Single	13.2%
Divorced, separated, widowed, other	13.5%
School age children in household	
None	66.5%
One or more	33.5%
Preschool children in household	
None	76.4%
One or more	23.6%
White	92.7%
Black	2.9%
Hispanic	0.1%
Asian	1.8%
Professional, managerial	65.7%
Other occupation	34.3%
College degree or more	56.7%
Less than college degree, others	43.3%
Household income under $80,000	81.7%
Household income $80,000 and over	12.9%
No income reported	5.4%
Median household income	$47,500
Mean household income	$50,330
Mean age	37.2
Work in Wilmington	32.9%
Work in suburbs	41.2%
Other (work outside of DE, do not work, NA)	25.9%
Workers in household	
None	5.4%
One	46.6%
Two	45.1%
Three or more	2.4%

*Data describes the head of household except where noted.
    Where percentages do not equal 100%, data were not ascertained.

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Table 2

Comparison of Demographic Characteristics
New Castle County vs. Hamilton County

| | New Castle County | | Hamilton County | |
	City	Suburbs	City	Suburbs
Attended college	87%	81%	48%	42%
Professional workers	69%	66%	38%	37%
Blue collar workers	7%	11%	30%	37%
Married	48%	77%	56%	72%
Children under 5	12%	25%	25%	34%
Children 5 to 18	18%	35%	29%	43%
White	87%	95%	86%	93%
Two or more adult workers	44%	48%	37%	37%
Household size	2.13	2.87	2.51	2.95
Age	37.2	37.2	38.7	38.4
Average household income	$46,696	$50,747	$33,423	$37,852

New Castle County has been estimated at $38,700 (Applied Economic Research, 1989), those who bought in New Castle County in 1988 had incomes almost $10,000 above this level. The New Castle County homebuyers were also more likely than those in Hamilton County to include two or more workers. Given the similarity in household size, the difference may well be related to the cost of housing in New Castle County, which for many households necessitates a dual income.

"Average" House Purchased

The most frequently purchased type of house in New Castle County in 1988 was a single family detached house with three bedrooms, a dining room, a family room on the first floor, and no den or study (Table 3). The house came with an electric range, built-in dishwasher, and now has a portable microwave. The mean sales price was $112,652, but this includes a number of houses which sold for a token dollar or $100. The median sales price was $100,000, and almost all were purchased under "plain vanilla" fee ownership. The average house has 1692 square footage of living space and was on .190 of an acre. The average house was built in 1977.

Few homes purchased varied from the traditional single-family detached house. While it is difficult to distinguish among townhouses, row homes, duplexes, triplexes, and other multiple family dwellings from self-reports, it is not difficult to conclude that few non-single family homes were sold in New Castle County in 1988. For example, only 13.4 percent of the sample reported that more than one family lived in their building.

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Table 3

Characteristics of Purchased House

Detached	68.9%
Attached	26.6%
One family in building	80.0%
Two families in building	3.5%
Three or more families in building	9.9%
Regular ownership	87.6%
Condominium	5.8%
One bedroom	1.1%
Two bedrooms	14.4%
Three bedrooms	45.9%
Four or more bedrooms	34.7%
No dining room	4.8%
Dining room	70.9%
Dining area	19.4%
No family room	20.1%
Family room on first floor	54.6%
Family room on lower level	17.0%
Family room elsewhere	3.0%
No den or study/library	51.2%
Den on first floor	19.1%
Den on lower level	9.0%
Den on second floor	10.4%
Den in other location	2.2%
One full bathroom	48.3%
Two full bathrooms	48.9%
Three or more full bathrooms	2.8%
No half bathrooms	35.7%
One half bathrooms	62.3%
Two half bathrooms	0.9%
Newly constructed (1988)	28.1%
Previously constructed (pre 1988)	71.9%
Living area (median square feet)	1692.0
Acreage (median)	0.190
Year built (median)	1977

Electric range	72.4%
Gas range	23.5%
No dishwasher	14.9%
Built-in dishwasher	77.3%
Portable dishwasher	3.7%
No microwave	9.4%
Built-in microwave	16.7%
Portable microwave	69.4%
Years expect to live in home-median	8
Sales price (mean)	$112,652
Sales price (median)	$100,000
Average commute (minutes)	20

*Data describes the head of household except where noted.
Where percentages do not equal 100%, data were not ascertained.

We asked respondents how close they were to living in their ideal home. About half of the 1988 homebuyers report that they had achieved their goal or had made great progress (Table 4). Few respondents place themselves in the bottom two categories. Given the socioeconomic characteristics of the homebuyers, the fact that they feel positive about their purchase is certainly not surprising. Nor is it surprising that on the average households expect to live in their recently purchased home for eight years. In fact, those who feel they have regressed, made no, little, or moderate progress plan to be in their houses for less time (7.05 years) than those who feel they have made great progress (10.77 years) or have reached their ideal (18.07 years).

By examining the housing characteristics of respondents who believe that they are making great progress or have achieved their goal of an ideal home, we can learn what characteristics comprise an ideal home. For example, while over half (54.4%) of those in detached homes are at or near their ideal, only 29.9 percent of those in attached homes feel that way (Table 5). The number of bedrooms was strongly related to being in one's ideal home. While 25 percent of those with one bedroom view their house as ideal, almost two-thirds with four or more bedrooms (64.4%) are as positive. Using this method the other characteristics related to judging one's home as ideal are having a dining room, having a family room above the lower level, and having a den, study or library. Those viewing their houses as ideal or close are more likely to have a range, built-in dishwasher, and built-in microwave. Homebuyers who view their homes as closer to the ideal are likely to have greater living area, more acreage, more total rooms, more full bathrooms, and

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Table 4

Reported Progress Achieved in Obtaining Ideal Home

No progress or regressed	3.1%
Little progress	15.9%
Moderate progress	33.0%
Great progress	32.3%
Achieved goal	13.6%
NA	2.1%
Total	100.0%

Table 5

Progress toward Ideal Home by Characteristics of Purchased House
Percentage Making Great Progess or Achieving Goal

Total	47.7%
Type	
Detached (1996)	54.4%
Attached (769)	29.9%
Number of families in building	
One (2319)	49.0%
Two (101)	40.6%
Three or more (287)	39.7%
Type of ownership	
Regular (2536)	47.8%
Condo (169)	45.6%
Number of bedrooms	
One (31)	25.8%
Two (416)	33.9%
Three (1330)	40.0%
Four or more (1005)	64.4%
Dining room	
None (138)	29.7%
Dining room (2052)	51.8%
Dining area (562)	36.6%
Both (21)	71.4%
Family room	
None (582)	32.8%
First floor (1580)	53.2%
Lower level (493)	47.4%
Other (65)	49.3%
First and lower (23)	56.5%
Den-study or library	
None (1482)	40.1%
First floor (552)	61.4%
Lower level (261)	49.8%
Second floor (300)	59.4%
Other (63)	49.2%
Range	
Electric (2097)	51.6%
Gas (681)	35.7%
Dishwasher	
None (431)	26.0%
Built-in (2240)	52.9%
Portable (106)	28.3%

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Microwave
  None (272)   40.0%
  Built-in (483)   65.2%
  Portable (2010)   44.3%
  Both (13)   84.6%

to have bought a more recently constructed house (Table 6). (New houses are more likely to have four as opposed to three bedrooms, to have a first floor family room, and to have an electric range, built-in microwave, and built-in dishwasher. See Appendix 3A.)

While it is useful to have a list of house characteristics that are related to the ideal home, it would be even more helpful to know which characteristics are the most related. We therefore examined all the variables that might be related to views of an ideal house simultaneously (using a multivariate statistical method, regression analysis) to determine the relative importance of these variables. We found that while all the variables identified above made a significant contribution to respondents' views of an ideal house, the type of home (single family or not), the size of the home (as measured by the number of bathrooms, living area, and the acreage), the presence of special rooms (family room and den) and whether the home was built in 1988 or not were the four factors most related to the vision of the ideal home (see Appendix 3B).

Those who felt that they had regressed or made no, little, or moderate progress on reaching their ideal home spent an average of $92,226 on their home. Those who reported reaching their ideal home or making a great deal of progress spent an average of over $134,000 on the purchase.

Preference for a Newly Constructed House

We also wanted to determine the factors that are related to households preferring a newly constructed house. In this sample, 35.8 percent of the

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Table 6

Progress toward Ideal Home by
House Characteristics (Means)

Level of Progress	Living area (Square feet)	Acreage	Year built
None or regressed (87)	1560.3	0.159	1958
Little (368)	1394.8	0.161	1961
Moderate (937)	1618.7	0.238	1966
Great/ideal (1279)	2064.1	0.405	1974

	# Rooms	# Full Baths	Sales Price*
None or regressed	6.2	1.3	$97,441
Little	6.1	1.3	$86,621
Moderate	6.5	1.4	$106,223
Great or achieved ideal	7.2	1.7	$150,005

*Houses selling for a token fee of $10 or less were eliminated from this analysis.

respondents preferred a newly constructed house. Almost two-thirds (62.2%) of those households with this preference bought a new house in 1988 (Table 7). Few of those who preferred a previously constructed house (2.9%) or who did not have a preference (12.3%) bought a new house. (We attempted to identify the characteristics of the homebuyers who were disappointed on this dimension; i.e., who preferred a new house but purchased a previously built house. No demographic differences were found, however.)

We used the multivariate technique of discriminant analysis to try to isolate the variables related to the preference for a new house. First we determined which background or demographic variables were independently related to preferring a newly constructed house. Those moving from the Wilmington suburbs were the most likely to seek a new house. Previous ownership, moving from outside the Wilmington area, and income level were also related. Age, educational level, occupation, and marital status were not related to this preference (see Appendix 3C). We then included attitudinal variables in our analysis. Those most concerned about housing characteristics such as style of houses, those preferring a suburban setting, and those concerned with changes in property values were more likely to seek a new house. (The results of a similar analysis of those who actually bought a new house were almost identical to these results.)

Location of Houses Purchased

In this report we use geocodes, representing the hundreds and planning districts in the county, to locate houses throughtout the county. The data base actually contains much more specific location data, too specific to

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Table 7

Preferences for Newly Constructed Houses
by Age of House Purchased

	Bought new house
Prefer newly constructed (987)	62.2%
Prefer previously constructed (729)	2.9%
Did not care or no answer (1041)	12.3%
Total (2757)	27.7%

analyze here. Hundreds represent a good but not perfect compromise between the specificity of location and the ability to aggregate responses to describe geographical areas. Thus, while Mill Creek Hundred is relatively homogeneous with respect to the type of house and population, Christiana Hundred includes suburban luxury homes as well as row homes in more urbanized Elsmere. We combined hundreds with few homebuyers in southern New Castle County as per the map in Figure 1.

Over one-quarter of the houses purchased in 1988 are in the Mill Creek Hundred area (Table 8). The New Castle and Brandywine areas were also popular areas. Locating houses by school districts, we find that two-thirds of the houses sold in 1988 were in the Red Clay or Christina school districts.

Previous situation

One-quarter of those who bought houses in New Castle County in 1988 moved from out of state (Table 9). Most of these households were from outside the Delaware area. The other buyers came from throughout the county. The City of Wilmington, Brandywine Hundred, and the Newark area supplied about one-third of the buyers.

Few buyers were from the Colonial or Appoquinimink School Districts.

A majority of buyers already owned single-family detached homes. One-quarter of the 1988 buyers had rented previously.

Comparing the household's previous home with their new home, we find

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FIGURE 1
New Castle County Planning Districts (Hundreds)*
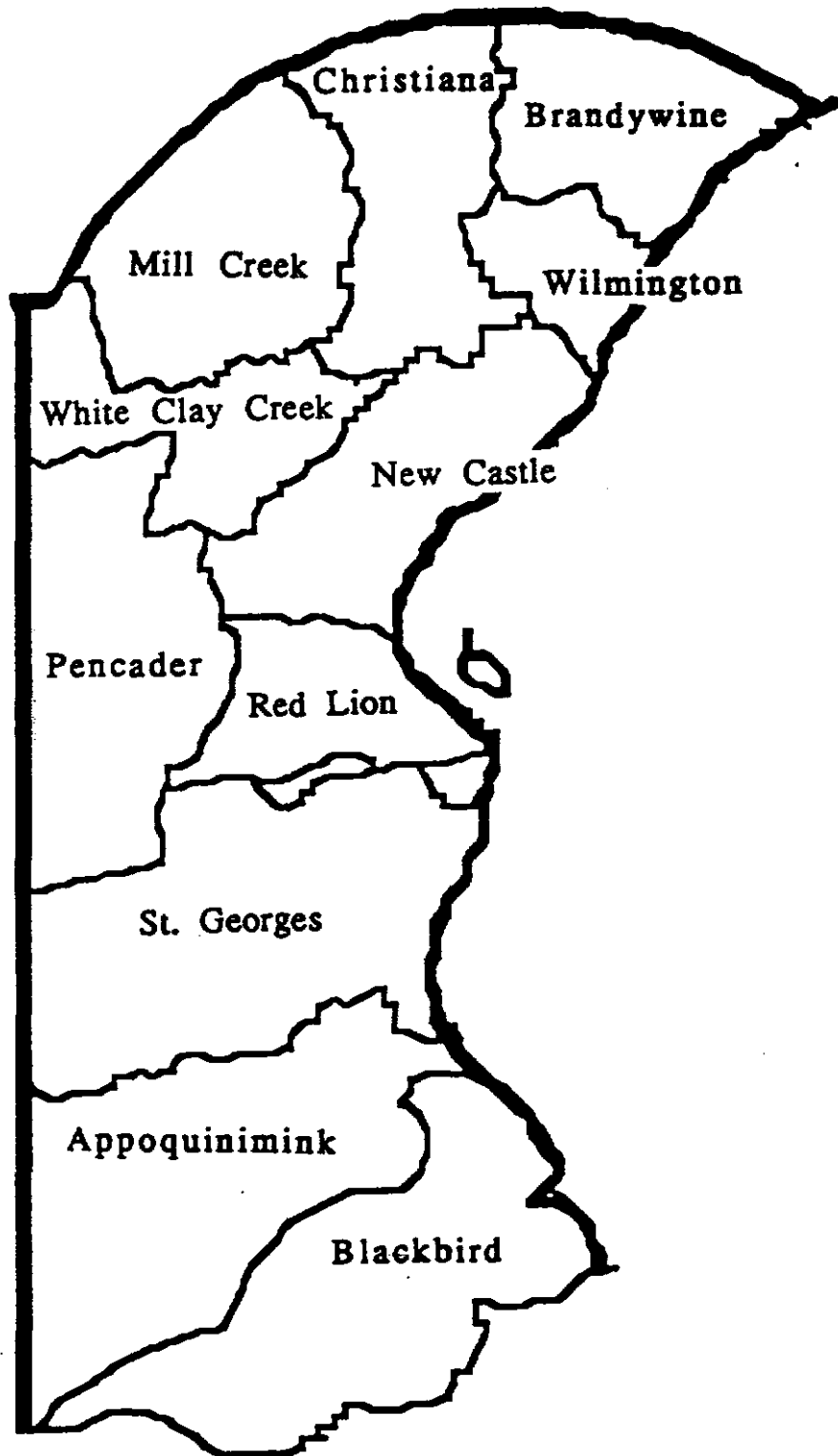
*Red Lion, St. Georges, Appoquinimink, and Blackbird combined into "Appoquinimink." City of Newark not included in hundreds.

Table 8

Location of 1988 Homebuyers

Area of New Castle County (Hundred)

Millcreek	27.5%
New Castle	14.4%
Brandywine	13.5%
Wilmington	10.5%
White Clay	10.4%
Pencader	7.6%
Newark	6.6%
Christiana	6.5%
Appoquinimink	2.9%
Total	**100.0%**

School district*

Christina	36.4%
Red Clay	34.4%
Brandywine	14.8%
Colonial	12.1%
Appoquinimink	2.4%
Total	**100.0%**

Table 9

Previous Situation of Household

Previous location

Outside DE area	16.8%
Brandywine Hundred	11.8%
City of Wilmington	11.3%
Greater Newark	10.8%
PA-MD-NJ close to DE	10.1%
Pike Creek Valley	8.1%
Greater New Castle	7.5%
Newport, Stanton, Elsmere	6.8%
City of Newark	6.2%
Glasgow-Bear area	4.8%
Greenville, Hockessin, Centerville Yorklyn	3.4%
Other	1.0%
Kent, Sussex County	0.9%
No answer	0.5%

Previous school district

Not in NCC	28.0%
Christina	18.8%
Red Clay	17.4%
Brandywine	12.3%
Colonial	6.7%
Appoquinimink	0.6%
Other	0.4%
NA	15.8%

Previous home

Detached	55.7%
Attached	36.9%
NA	8.4%

One family	64.9%
Two families	6.0%
Three or more families	21.3%
NA	7.8%

One bedroom	7.2%
Two bedrooms	20.9%
Three bedrooms	40.8%
Four or more bedrooms	24.5%
NA	6.7%

One full bath	50.8%
Two full baths	35.6%
Three or more full baths	6.9%
NA	6.7%

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Two story	36.9%
Ranch house	15.4%
Split or bi-level	11.2%
Other	7.2%
Cape cod	3.4%
Hillside ranch	1.3%
NA	24.6%
Colonial style	27.8%
Contemporary style	25.8%
Other	14.4%
NA	32.0%
Owned regular	57.3%
Rented	26.4%
Neither rented nor owned	7.6%
Owned condominium	2.5%
NA	6.1%
Years in previous home-median	4

Number of homes purchased and
   lived in (including this one)

1	34.8%
2	31.1%
3	16.7%
4	6.9%
5	3.7%
6 or more	2.6%
NA	4.0%

Number of new homes purchased
   and lived in

0	47.5%
1	30.4%
2	11.8%
3	4.0%
4	2.1%
NA	4.1%

that at least one-quarter of the households "moved-up" in number of bedrooms, ownership, and number of families in the building, or attached-detached status (Table 10). The major change was in the number of bedrooms. Over 40 percent of these homebuying households increased their number of bedrooms by their purchase. On the three other dimensions, about two-thirds of the households maintained their housing characteristics "position." Few households moved down on these dimensions.

Destinations and Origins

Few households moved great distances within the county; most remained in their previous area. For example, forty percent of those who bought in Brandywine Hundred were previously located in Brandywine Hundred (Table 11). This is 60 percent of those who moved from within New Castle County to Brandywine Hundred. Similarly, over 40 percent of those who bought in Newark were located in Newark or its surrounding area before. The difference between the unit of location in our survey and our data base makes it hard to determine precise measures of movement, but our analysis of moves across school districts confirms the generalization that most people who move within the county do not move very far.

Those who moved from outside the metropolitan area were most likely to move to Mill Creek. Of these households, 45 percent bought in Mill Creek in 1988. Brandywine is a distant second with 12.8 percent of the newcomers. Those moving from over Delaware's borders from nearby Pennsylvania, New Jersey, and Maryland were also most likely to buy in Mill Creek or Brandywine, although they did spread themselves somewhat more throughout the county.

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Table 10

Changes in House Characteristics*

	Stayed Same	Moved Up	Moved Down	Total
Attached-detached (N=2662)	64.0%	24.2%	11.8%	100.0%
Families in building (N=2602)	69.9%	23.1%	7.0%	100.0%
Number of Bedrooms (N=2697)	41.5%	41.9%	16.6%	100.0%
Ownership (N=2611)	64.5%	35.5%	0.0%	100.0%

*Improvements in housing characteristics are defined as follows:
+moving from attached to detached home
+moving from multiple to single family home
+increasing the number of bedrooms
+moving from non-ownership to ownership status

Table 11

Current Location of Homebuyers by Previous Location

Current Location

Previous Location	Brandywine (N=377)	Christiana (N=182)	Millcreek (N=768)	White Clay (N=291)	New Castle (N=403)	Pencader (N=213)	Appoquin (N=80)	Newark (N=183)	Wilmington (N=292)	Total (N=2789)
City of Wilmington	12.2%	17.6%	6.4%	6.9%	5.0%	5.2%	0.0%	1.1%	45.2%	11.2%
Brandywine Hundred	39.8%	11.5%	6.6%	6.9%	6.2%	4.2%	3.8%	4.4%	14.7%	11.8%
Greenville-Hockessin Centerville	2.4%	6.0%	6.4%	0.7%	1.0%	0.5%	0.0%	2.2%	4.1%	3.3%
Pike Creek Valley	1.9%	6.0%	16.7%	5.5%	6.0%	4.7%	2.5%	9.3%	2.7%	8.0%
Newport-Stanton Elsmere	2.4%	25.3%	8.3%	4.5%	5.7%	5.6%	5.0%	3.3%	3.1%	6.7%
Greater New Castle	1.3%	7.7%	3.9%	8.9%	21.1%	10.8%	18.8%	2.2%	2.4%	7.5%
Within Newark	1.6%	3.8%	3.4%	11.3%	7.4%	11.3%	1.3%	25.1%	0.7%	6.3%
Greater Newark	2.7%	2.7%	7.0%	26.1%	12.2%	20.2%	25.0%	18.0%	4.5%	10.9%
Glasgow-Bear area	1.3%	1.6%	3.1%	5.8%	8.9%	14.6%	13.8%	4.4%	0.0%	4.8%
Kent/Sussex Counties	0.5%	0.0%	0.8%	0.6%	2.2%	0.0%	5.0%	0.0%	1.0%	1.0%
PA-MD-NJ Close to DE	17.0%	4.9%	7.8%	10.7%	11.4%	9.4%	11.3%	8.2%	8.9%	10.0%
Outside area	16.2%	12.1%	28.1%	11.7%	9.7%	13.1%	7.5%	20.2%	11.3%	17.1%
Other	0.7%	0.8%	1.5%	0.4%	3.2%	0.4%	6.0%	1.6%	1.4%	1.4%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Given the finding that households generally do not move very far, it is not surprisingly to find that households searched first and foremost for housing in their previous location. Those who bought in New Castle County visited an average of seven communities and reported considering several places throughout the county--but not much outside of the county or the state--before buying (Table 12). A majority of those from all areas of the county except the Newport area looked in their area before buying (Table 13). Those in Brandywine Hundred and Pike Creek Valley were the most likely to have searched near home.

We used factor analysis to determine the underlying pattern of these searches. Factor analysis is a multivariate statistical technique that helps the analyst to identify separate patterns of attitudes or behavior.

The areas grouped together were:

(1) Newport/Stanton/Elsmere, Greater New Castle, Greater Newark, Glasgow

(2) Wilmington, Brandywine vs. Elkton/Cecil County, Newark

(3) Southern Chester County, Southern Delaware County

(4) Greenville/Centerville/Hockessin, Pike Creek Valley

(5) Kent County, Sussex County

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Table 12

Percentage of Homebuyers Considering Each Area

Pike Creek Valley	31.9%
Brandywine Hundred	29.3%
Greater Newark	28.4%
Greenville-Hockessin-Centreville Yorklyn	23.4%
Glasgow-Bear area	20.8%
City of Wilmington	18.8%
Greater New Castle	17.6%
City of Newark	15.0%
Newport-Stanton-Elsmere	13.2%
This community only	12.8%
Southern Chester County	8.1%
Elkton/Cecil County	5.8%
Southern Delaware County	5.4%
Kent/Sussex County	2.1%

Table 13

Previous Location of Homebuyers by Areas Considered

Previous Location

Areas Considered	Wilmington (N=312)	Brandywine Hundred (N=330)	Greenville Hockessin Centreville (N=92)	Pike Creek Valley (N=223)	Newport Elsmere Stanton (N=186)	Greater New Castle (N=209)	City of Newark (N=175)	Greater Newark (N=303)	Glasgow Bear area (N=135)	PA-MD-NJ Close to Delaware (N=280)	Outside Delaware Area (N=476)
City of Wilmington	53.5%	28.2%	21.7%	13.5%	9.7%	9.1%	9.1%	6.6%	3.7%	16.4%	20.2%
Brandywine 100	33.3%	71.2%	19.6%	12.1%	19.4%	12.9%	13.7%	11.9%	9.6%	37.5%	43.7%
Greenville-Centerville-Yorklyn	16.7%	21.2%	54.3%	41.7%	18.3%	9.6%	17.1%	12.9%	13.3%	21.8%	41.6%
Pike Creek Valley	25.0%	18.5%	33.7%	73.1%	36.0%	22.0%	30.9%	34.3%	24.4%	23.9%	42.2%
Newport-Stanton-Elsmere	15.4%	11.5%	8.7%	10.3%	41.9%	14.8%	12.6%	12.5%	12.6%	12.9%	7.1%
Greater New Castle	13.1%	10.0%	6.5%	9.0%	18.8%	55.5%	15.4%	20.8%	24.4%	15.4%	16.6%
Within Newark	6.1%	3.6%	6.5%	17.9%	10.8%	12.0%	50.3%	28.4%	17.8%	10.4%	15.5%
Greater Newark	12.8%	17.0%	8.7%	27.4%	25.8%	34.0%	44.6%	59.4%	45.9%	25.7%	27.5%
Glasgow-Bear area	7.7%	13.0%	3.3%	15.7%	21.0%	34.4%	25.7%	42.2%	56.3%	15.7%	15.3%
Southern Chester County	4.8%	10.3%	7.6%	8.1%	3.8%	1.9%	4.0%	4.0%	4.4%	16.8%	15.5%
Southern Delaware County	2.2%	6.7%	0.0%	3.6%	0.5%	3.3%	2.9%	2.0%	0.0%	19.6%	9.0%
Elkton-Cecil County	0.3%	4.2%	4.3%	4.0%	3.2%	3.3%	8.6%	10.9%	10.4%	8.9%	7.8%

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(See Appendix 3D) These results mean that those households who considered one community or subarea in a factor or group were likely to consider another community within the factor. For example, households that considered Newport/Stanton/Elsmere were likely to also consider Greater New Castle, Greater Newark, and Glasgow. Factor three is more complex. It suggests that those who considered Brandywine Hundred also were likely to consider the City of Wilmington. However, they were unlikely to consider the City of Newark or Elkton/Cecil County.

This analysis suggests six submarkets for homes in the New Castle County general area. What defines or leads to these submarkets? Factor analysis does not tell us; on this we must speculate from the patterns. These factors appear to represent the following underlying variables: Factor 1-desire for middle-class, modestly priced housing; Factor 2-location from Wilmington; Factor 3-willingness to live in Pennsylvania; Factor 4-desire for upper middle-class housing; and Factor 5-willingness to live in southern Delaware.

Information source

One-third of the 1988 homebuyers report that the most important information source that they used in their decision was "driving around and seeing alternatives" (Table 14). Not quite as many cite real estate agents as their most important source. Few cite newspaper or magazines as their most important source. There were no differences in citation of these sources by demographic variables. Those who bought a new house, however, are more likely to have cited driving around than those who bought a previously built house

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Table 14

Most Important Information Source

Driving around	33.0%
Real estate agent	28.5%
Word-of-mouth	11.4%
Newspaper of magazine	7.6%
Combination and other	15.8%
NA	3.7%
Total	**100.0%**

(47.3 vs. 29.1%), and those who bought a previously built house are much more likely to report that a real estate agent was their major source of information than those who bought a new house (34.6 vs. 18.5%).

Having described the characteristics of those who bought homes in New Castle County in 1988 and having examined the characteristics of those homes, we now focus more directly on the home-buying decision. Below we examine the role that location criteria played in these decisions.

THE DECISION PROCESS: LOCATION CRITERIA

Homebuying and Location Criteria

Why do households chose to locate in a particular area or buy a specific house?

Respondents were presented with twenty-one criteria and asked to indicate how important each was in their purchase and location decision. Table 15 indicates the percentages who view these various factors, including the location and quality of schools, as important in their location decision. In New Castle County the most important reasons for locating were the overall appearance of the area (89.8%), good housing prices (81.8%), expected changes in property values (71.2%), and style of houses (75.1%). The emphasis in New Castle County in 1988 was clearly on housing characteristics and housing price appreciation.

The next set of criteria chosen by homebuyers were safety (68.8%), suburban setting (60.2%), and being close to work (53.0%). Criteria related to the schools do not come into play until we reach the forty percent concern level. Not quite a majority (45.5%) did view the quality of local schools as important or very important; over one-third (35.5%) viewed living near schools as important or very important in their decision.

To examine the relative importance of location criteria in another way, we asked respondents which of the criteria was the most important in their

Table 15

Percentage Selecting Location Criteria as Very Important or Important

Appearance of area	89.7%
Good housing prices	81.8%
Style of houses	75.1%
Changes in property values	71.2%
Safety	68.8%
Prefer suburban setting	61.2%
Close to work	52.9%
Quality of schools	45.5%
Large lots	40.7%
Near stores	37.7%
Low taxes	36.7%
Near friends and relatives	36.2%
Near schools	35.4%
Lived nearby and liked it	33.8%
Quality of governmental services	33.4%
Near people like me	29.2%
Near mix of people	18.5%
Near churches and synagogues	18.4%
Prefer urban setting	16.0%
Accessability to child care	12.8%
Near public transportation	10.2%

decision.   The criterion of good housing prices was selected as the most important criterion by the largest percentage, over 20 percent (Table 16). The appearance of the area, property value changes, and proximity to work were the next most selected criteria.

It is instructive to compare the results in Delaware to those in the Cincinnati/Hamilton County study (Table 17).   Examining the responses of only suburbanites, we find that those in Delaware were far more likely to stress change in property values (71% vs. 48%) than those in Hamilton County.   Those in New Castle County were less likely to stress all the access criteria, presumably a function of the easier transportation situation in Delaware and perhaps also a function of the smaller number of working class people in the Delaware sample.

New Castle County respondents were about 20 percent less likely than those who bought homes in the Hamilton County suburbs to report that the location or quality of schools was important to them.   This is partly a function of the fact that fewer Delaware suburban homebuyers had children than those in Hamilton County (35% vs. 44%).   It may also reflect a greater use of non-public schools in Delaware than in Hamilton County.

Comparing the responses of those who bought in the cities of Cincinnati and Wilmington again indicates the large difference in views on property values and difference in importance of the location and quality of schools.

We conducted a factor analyses of responses to the set of housing and locational choice criteria to determine whether there was a preference

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Table 16

Percentage Selecting Location Criterion as Most Important

Good housing prices	21.0%
Overall appearance of area	9.9%
Expected changes in property values	8.6%
Close to work	8.5%
Style of houses	7.0%
Lived nearby and liked it	6.8%
Near friends and relatives	5.1%
Quality of local schools	3.6%
Other	11.2%
NA	18.3%
Total	100.0%

Table 17

Proportions of City and Suburban Respondents
in New Castle County and Hamilton County
Considering Various Locational Criteria
Important or Very Important

	New Castle County		Hamilton County	
	City (N=292)	Suburbs (N=2497)	City (526)	Suburbs (1062)
Near to work	62.0%	52.0%	53.0%	51.0%
Near to friends	39.0%	36.0%	53.0%	50.0%
Near people "like me"	30.0%	29.0%	32.0%	33.0%
Near stores	32.0%	38.0%	44.0%	43.0%
Near public transportation	21.0%	9.0%	38.0%	15.0%
Good housing prices	79.0%	82.0%	81.0%	81.0%
Style of house	61.0%	77.0%	75.0%	70.0%
Large lot	10.0%	44.0%	29.0%	47.0%
Overall appearance	81.0%	91.0%	85.0%	90.0%
Near school	16.0%	38.0%	32.0%	58.0%
Lived nearby before	37.0%	34.0%	53.0%	55.0%
Safety	70.0%	69.0%	81.0%	82.0%
Urban setting	48.0%	12.0%	34.0%	16.0%
Suburban setting	12.0%	67.0%	34.0%	64.0%
Near churches	18.0%	18.0%	32.0%	28.0%
Access to childcare	9.0%	13.0%	17.0%	16.0%
Change in property values	72.0%	71.0%	51.0%	48.0%
Near a mix of people	33.0%	17.0%	26.0%	16.0%
Low taxes	26.0%	38.0%	42.0%	36.0%
Quality of schools	22.0%	48.0%	38.0%	67.0%
Quality of govt. services	30.0%	34.0%	40.0%	36.0%

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for neighborhood and housing characteristics.

The factor analysis of the Delaware homebuyers resulted in the identification of seven factors. The first Delaware factor can be interpreted as a concern for proximity to, and the quality of, services (see Appendix 3E). This factor not only includes child-centered services, it also includes a concern for the quality of government services in general (which may include child services like recreational services). The second factor can be interpreted as an interest in suburban house attributes, such as lot size and house styles. The third factor is centered on an interest in costs or economic value as indicated by the importance of good housing prices and low taxes; the fourth a preference for localism or neighborhoods; the fifth a concern for property values and the types of people in the neighborhood; the sixth a quest for accessibility to jobs and entertainment; and the seventh a preference for type of setting—urban or suburban.

The similarity of the factor analyses with that conducted on the Cincinnati data suggests that we can generalize about the structure of attitudinal dimensions of location choice. Costs, governmental services, housing characteristics, localism, accessibility, and setting are considerations in the choice of buying a home in the city or suburbs.

We assigned each location criterion to one of the seven factors and then calculated the average percentage of respondents in each area of the county who viewed the criteria within each factor as "very important" or "important" (Table 18). This helps us to describe each area more completely and to highlight the factors that were stressed by those who bought in each area.

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Table 18

Current Location of Homebuyers by Location Criteria

Percentage Viewing Criterion as Very Important or Important

	Brandywine (N=377)	Christiana (N=182)	Millcreek (N=768)	White Clay (N=291)	New Castle (N=403)	Pencader (N=213)	Appoquin (N=80)	Newark (N=183)	Wilmington (N=292)	Total (N=2789)
Quality of schools	54.6%	40.7%	49.6%	49.1%	40.2%	43.7%	57.5%	55.2%	21.6%	45.5%
Quality of governmental services	14.6%	12.6%	11.7%	13.1%	15.6%	12.7%	13.8%	12.0%	9.2%	12.8%
Near churches and synagogues	23.6%	20.3%	18.6%	13.1%	20.3%	13.1%	16.3%	16.4%	18.2%	18.4%
Near schools	37.7%	34.6%	37.9%	39.9%	35.7%	32.9%	38.8%	44.8%	16.4%	35.4%
Access to child care	14.6%	12.6%	11.7%	13.1%	15.6%	12.7%	13.8%	12.0%	9.2%	12.8%
Subtotal	29.0%	24.2%	25.9%	25.7%	25.5%	23.0%	28.0%	28.1%	14.9%	25.0%
Style of houses	76.4%	59.9%	79.8%	81.1%	76.7%	71.4%	75.0%	82.5%	60.6%	75.1%
Large lots	36.9%	34.1%	44.1%	43.6%	45.2%	51.6%	85.0%	43.2%	10.3%	40.7%
Appearance of area	91.0%	82.4%	94.7%	93.8%	85.1%	89.2%	90.0%	91.8%	81.2%	89.7%
Subtotal	68.1%	58.8%	72.9%	72.8%	69.0%	70.7%	83.3%	72.5%	50.7%	68.5%
Low taxes	39.5%	35.2%	30.9%	44.0%	46.2%	44.1%	38.8%	32.2%	25.7%	36.7%
Good housing prices	72.9%	78.6%	76.7%	92.1%	91.3%	90.6%	85.0%	80.3%	78.8%	81.8%
Subtotal	56.2%	56.9%	53.8%	68.1%	68.8%	67.4%	61.9%	56.3%	52.3%	59.3%
Near friends and relatives	44.0%	51.1%	34.2%	29.6%	36.5%	30.5%	21.3%	32.2%	39.4%	36.2%
Lived nearby and liked it	44.0%	42.3%	33.6%	30.6%	28.3%	25.8%	23.8%	32.2%	36.6%	33.8%
Safety	74.8%	68.1%	66.5%	69.4%	66.5%	66.7%	71.3%	70.5%	69.5%	68.8%
Subtotal	54.3%	53.8%	44.8%	43.2%	43.8%	41.0%	38.8%	45.0%	48.5%	46.3%
Near people like me	31.0%	27.5%	35.5%	23.0%	25.3%	21.6%	20.0%	30.1%	30.1%	29.2%
Near mix of people	18.3%	12.6%	16.8%	15.8%	16.9%	16.4%	15.0%	21.3%	32.9%	18.5%
Changes in property values	70.0%	59.9%	75.1%	75.9%	68.5%	74.2%	63.8%	65.6%	71.9%	71.2%
Subtotal	39.8%	33.3%	42.5%	38.2%	36.9%	37.4%	32.9%	39.0%	45.0%	39.6%

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	Brandywine (N=377)	Christiana (N=182)	Millcreek (N=768)	White Clay (N=291)	New Castle (N=403)	Pencader (N=213)	Appoquin (N=80)	Newark (N=183)	Wilmington (N=292)	Total (N=2789)
Near stores	43.5%	36.3%	37.9%	39.2%	39.0%	35.2%	6.3%	47.0%	32.2%	37.7%
Close to work	66.3%	59.9%	50.3%	47.8%	52.9%	44.1%	22.5%	47.5%	61.6%	52.9%
Near public transportation	15.4%	14.8%	6.4%	6.9%	8.7%	3.8%	5.0%	12.0%	21.2%	10.2%
Subtotal	41.7%	37.0%	31.5%	31.3%	33.5%	27.7%	11.3%	35.5%	38.3%	33.6%
Prefer urban setting	11.4%	11.5%	9.5%	13.1%	14.1%	14.6%	22.5%	14.2%	47.6%	16.0%
Prefer suburban setting	68.4%	53.8%	72.9%	67.4%	66.7%	66.7%	61.3%	53.6%	12.3%	61.2%
Subtotal (net)	57.0%	42.3%	63.4%	54.3%	52.6%	52.1%	38.8%	39.4%	-35.3%	45.2%

The most important pull of Brandywine area was proximity--to friends and relatives, to former homes, and to stores, work, and public transportation. People who chose to live in Brandywine wanted to be close. Christiana households were the least concerned with people and changes in property values but the most concerned with proximity to friends and relatives and their previous home.

Households in the White Clay, New Castle, and Pencader areas were very concerned about costs. They sought low taxes and good housing prices to a greater degree than those in other areas of the county. Appoquinimink buyers were the most interested in the attributes of houses--their style, the size of the lots, and the general appearance of the area. They were the least concerned about access to anything including work and stores.

Wilmington buyers preferred an urban setting and were the least concerned about services, suburban house attributes, and prices. Mill Creek and Newark respondents were the least distinctive on these factors, generally being in the midrange on these dimensions.

Another way to examine the pull of each area is by the location criteria that were judged to be most important by buyers in each area (Table 19). Consistent with the results reported above, buyers in White Clay, New Castle, and Pencader were the most likely to view good housing prices as their most important location criterion. Few in Brandywine, Mill Creek, or Appoquinimink selected this criterion. A proximity criterion was cited by 30 percent of the Brandywine buyers for their choice. Mill Creek buyers were the most likely to

Table 19

Current Location of Homebuyers by Most Important Location Criterion

	Brandywine (N=377)	Christiana (N=182)	Millcreek (N=768)	White Clay (N=291)	New Castle (N=403)	Pencader (N=213)	Appoquin (N=80)	Newark (N=183)	Wilmington (N=292)	Total (N=2789)
Good housing prices	11.4%	20.3%	11.7%	34.4%	34.2%	30.0%	12.5%	20.2%	19.2%	20.6%
Appearance of area	11.9%	8.2%	14.2%	9.3%	7.7%	9.9%	6.3%	8.7%	6.2%	10.3%
Changes in property values	6.9%	6.0%	12.2%	6.9%	6.5%	7.5%	6.3%	7.1%	12.3%	8.9%
Close to work	10.3%	9.9%	5.7%	7.9%	9.2%	7.0%	3.8%	7.7%	13.4%	8.3%
Lived nearby before and liked it	11.1%	8.8%	6.5%	6.2%	4.7%	6.1%	5.0%	7.1%	6.2%	6.9%
Style of houses	6.4%	6.0%	9.2%	6.2%	4.7%	6.1%	3.8%	10.4%	4.5%	6.8%
Near friends/relats.	8.0%	9.9%	4.2%	3.1%	3.0%	3.8%	3.8%	5.5%	6.8%	5.1%
Other criteria, NA	34.0%	30.9%	36.3%	26.0%	30.0%	29.6%	58.5%	33.3%	31.4%	33.1%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

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cite the appearance of the area. Households that bought in Newark report doing so most often because of good housing prices and the style of houses. Wilmington buyers were more likely to select the criteria of close to work and property value changes.

Household Characteristics by Geographical Area

While there is variation across the geographical areas of suburban New Castle County in the demographics of 1988 homebuyers, the major differences across the county are among the City of Wilmington, the Appoquinimink area, and suburban New Castle County. Wilmington buyers include a higher percentage of households without children, non-marrieds, minorities, and people who work in the central business district (CBD) of the city and have a short commute to work (Table 20). Appoquinimink is on the other extreme. In this area of the county households are the most likely to have school-age children, include married couples, be white, and have the longest commute to work.

Newark attracted those with school-age children, and, with Brandywine and Mill Creek, those with professional or managerial occupations, high income, and college degrees. Christiana and New Castle attracted younger households, while Brandywine attracted older households.

The higher socioeconomic status of households in Newark, Brandywine, and Mill Creek is associated with the higher average sales prices in these three areas (Table 21). A majority of households in these three areas and Appoquinimink report that they have achieved their housing goal or have made

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Table 20

Current Location of Homebuyers by Household Characteristics

	Brandywine (N=377)	Christiana (N=182)	Millcreek (N=768)	White Clay (N=291)	New Castle (N=403)	Pencader (N=213)	Appoquin (N=80)	Newark (N=183)	Wilmington (N=292)	Total (N=2789)
Number in household	2.80	2.56	2.96	2.95	2.75	2.82	3.11	2.98	2.12	2.79
School aged children										
None	69.0%	74.7%	61.2%	65.3%	68.0%	64.8%	56.3%	55.2%	82.5%	66.5%
One or more	31.0%	25.3%	38.8%	34.7%	32.0%	35.2%	43.7%	44.8%	17.5%	33.5%
Number employed full-time										
One	45.9%	39.0%	50.0%	45.4%	45.9%	45.1%	48.8%	44.8%	47.3%	46.6%
Two or more	48.0%	52.8%	44.5%	52.5%	47.2%	53.5%	47.5%	45.9%	43.5%	47.5%
Other	6.1%	8.2%	5.5%	2.1%	6.9%	1.4%	3.7%	9.3%	9.2%	5.9%
Marital status										
Married	75.9%	76.4%	78.1%	76.6%	71.7%	71.8%	83.8%	82.0%	47.6%	73.4%
Other	24.1%	23.6%	21.9%	23.4%	28.3%	28.2%	16.2%	18.0%	52.4%	26.6%
Race										
White	93.9%	96.7%	94.9%	92.1%	89.3%	94.8%	100.0%	92.9%	84.6%	92.7%
Other	6.1%	3.3%	5.1%	7.9%	10.7%	5.2%	0.0%	7.1%	15.4%	7.3%
Occupation										
Professional and managerial	71.9%	53.8%	75.9%	60.8%	48.9%	58.7%	48.8%	77.5%	68.5%	65.7%
Other	28.1%	46.2%	24.1%	39.2%	51.1%	41.3%	51.2%	22.5%	31.5%	34.3%
Education										
College degree or more	65.0%	46.7%	70.3%	50.1%	34.0%	37.6%	30.0%	72.7%	64.4%	56.5%
Other	35.0%	53.3%	29.7%	49.9%	66.0%	62.4%	70.0%	27.3%	35.6%	43.5%
Place of employment										
Wilmington CBD	17.5%	11.0%	13.4%	6.2%	8.9%	6.1%	7.5%	9.3%	34.2%	13.6%
Wilmington outside CBD	20.7%	28.0%	20.7%	15.8%	16.9%	17.8%	16.3%	14.8%	19.9%	19.3%
NCC outside Wilmington	24.9%	36.3%	44.0%	51.9%	46.7%	54.0%	48.8%	49.2%	23.3%	41.2%
Pennsylvania	24.4%	8.8%	7.7%	9.6%	8.4%	7.5%	3.8%	7.1%	8.6%	10.3%
Average commute										
Minutes	20.5	17.0	24.6	21.6	21.2	25.4	31.5	22.6	16.7	22.1
Age										
Under 29	18.1%	36.8%	15.3%	29.2%	32.0%	24.9%	18.8%	13.1%	27.4%	22.8%
30-39	40.3%	30.8%	44.5%	46.0%	38.7%	43.2%	50.0%	41.0%	37.3%	41.4%
40-49	21.0%	12.1%	25.7%	17.2%	17.1%	20.7%	15.0%	29.0%	17.5%	20.7%
50 or older	19.8%	17.6%	13.3%	6.2%	10.5%	11.2%	16.2%	13.6%	15.4%	13.6%
Income										
Mean household	$54,102	$46,171	$57,591	$45,680	$40,740	$46,187	$49,778	$56,135	$46,697	$50,322
$80,000 and over	17.5%	14.3%	20.4%	3.8%	2.5%	4.2%	11.3%	16.9%	14.4%	12.9%

Table 21

Current Location of Homebuyers by Characteristics of Purchased Home

	Brandywine (N=377)	Christiana (N=182)	Millcreek (N=768)	White Clay (N=291)	New Castle (N=403)	Pencader (N=213)	Appoquin (N=80)	Newark (N=183)	Wilmington (N=292)	Total (N=2789)
Sales price	$126,441	$102,216	$147,479	$91,220	$77,714	$85,553	$92,244	$132,645	$92,187	$112,651
Progress toward ideal home										
Achieved goal or great progress	57.6%	40.1%	55.2%	45.8%	35.9%	47.4%	61.3%	54.7%	30.2%	47.7%
Moderate progress or less	41.1%	58.8%	42.7%	54.2%	61.6%	52.1%	38.7%	42.6%	68.1%	50.7%
Years expect to live in house	9.9	9.9	9.4	8.7	8.6	9.8	16.4	10.7	7.2	9.4
Living area (sq.ft.)	1891.7	1605.9	2166.8	1646.6	1423.5	1668.7	1643.3	1986.4	1546.1	1801.0
Acreage	0.268	0.307	0.400	0.244	0.203	0.326	1.410	0.328	0.063	0.304
Year built	1959	1953	1979	1979	1973	1979	1964	1976	1935	1969
Number of rooms	6.9	6.3	7.4	6.5	6.3	6.5	6.5	7.0	6.4	6.8
Number of full baths	1.6	1.3	1.8	1.5	1.4	1.4	1.4	1.7	1.3	1.6
Newly constructed	8.2%	7.5%	36.5%	37.0%	36.3%	34.1%	38.6%	45.9%	6.0%	28.1%

great progress toward that goal. In fact households in Appoquinimink expect to live in their recently purchased home for an average of over 16 years. Households in Wilmington appear to be the most mobile. Less than one-third report coming close to their housing goal, and the mean expected length of stay was only 7.2 years, more than two years below the mean for the county. Consistent with these and previous findings, a majority of households in Brandywine, Mill Creek, Appoquinimink, and Newark reported that this home was ideal or that they had made great progress toward that goal (Table 22).

White Clay, New Castle, and Pencader--where homebuyers stressed good prices as a location criterion--were comparable to Wilmington and Appoquinimink in sales prices.

While slightly under one-third of the respondents cited a real estate agent as their most important information source for their decision, few Appoquinimink buyers did so (Table 22). Appoquinimink, as well as Newark and Pencader buyers, were more apt to report that they found driving around as their most important source of information. Appoquinimink buyers were the most interested in a newly constructed house; Brandywine, Christiana, and Wilmington buyers were the least.

Table 22

Progress Toward Ideal Home by Homebuyer Location

Percentage Reporting Great Progress or Achieving Goal

Appoquinimink (80)	61.3%
Brandywine (377)	57.6%
Mill Creek (768)	55.2%
Newark (183)	54.6%
Pencader (213)	47.4%
White Clay (291)	45.7%
Christiana (182)	40.1%
New Castle (403)	36.0%
Wilmington (292)	30.1%
Total (2789)	47.7%

Previous Residence and Homebuying

We analyzed the results of the survey to determine the differences that homebuyers from different areas exhibited. How do those moving from the City of Wilmington differ from those moving from Brandywine Hundred or from outside of Delaware? Since we have shown how short most moves are, the answers to these questions are generally consistent with our findings about the nature of households that moved to particular areas of the county.

Households from different areas of the county differ somewhat in what criteria they view as important in the search process. For example, those who lived in Wilmington were more likely to seek proximity to work, public transportation, and a mix of people (Table 23). They also were more likely to seek an urban setting and less likely to seek to live in an area with houses with large lots and other suburban attributes. Those who originated in the Greenville area were more likely to view the appearance of the area as important and to seek to live near "people like me." They were less likely to seek good housing prices and low taxes.

Those from over the Delaware border were twice as likely to view low taxes as an important criterion than their counterparts moving within the Wilmington area (60% vs. about 30%). This large difference suggests a major reason for Delaware's attractiveness to those in nearby states and, perhaps, for attracting new households in general to Delaware.

Households moving from the Greenville-Pike Creek Valley areas were

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Table 23

Previous Location of Homebuyers by Location Criteria

Percentage Viewing Criteria as Very Important or Important

	Wilmington (N=312)	Brandywine Hundred (N=330)	Greenville Hockessin Centreville (N=92)	Pike Creek Valley (N=223)	Newport Elsmere Stanton (N=186)	Greater New Castle (N=209)	City of Newark (N=175)	Greater Newark (N=303)	Glasgow Bear area (N=135)	PA-MD-NJ Close to Delaware (N=280)	Outside Delaware Area (N=476)
Close to work	56.7%	53.6%	48.9%	58.3%	47.3%	47.4%	57.1%	44.9%	51.9%	56.4%	54.6%
Near friends and relatives	38.8%	41.2%	45.7%	35.9%	51.1%	45.9%	45.1%	33.0%	35.6%	30.4%	21.6%
Near people like me	30.1%	30.9%	41.3%	30.5%	24.7%	24.4%	26.9%	26.1%	23.7%	28.2%	32.6%
Near stores	39.4%	33.6%	30.4%	40.8%	39.8%	35.4%	41.7%	32.3%	34.1%	37.1%	42.0%
Near public transport.	20.5%	12.7%	5.4%	6.3%	14.5%	9.6%	10.3%	6.6%	3.0%	8.6%	7.4%
Good housing prices	80.8%	79.7%	68.5%	81.6%	84.9%	84.2%	86.3%	88.4%	84.4%	84.3%	76.1%
Style of houses	69.6%	74.2%	77.2%	82.1%	73.7%	75.6%	76.6%	78.9%	70.4%	77.1%	73.3%
Large lots	29.2%	37.0%	34.8%	38.6%	43.5%	47.4%	40.6%	44.6%	54.1%	40.7%	42.2%
Appearance of area	85.3%	90.3%	94.6%	94.2%	89.2%	88.0%	82.9%	91.1%	92.6%	90.0%	91.6%
Near schools	29.5%	29.4%	30.4%	32.7%	42.5%	41.1%	41.7%	39.3%	37.0%	36.1%	35.1%
Lived nearby/liked	39.4%	39.7%	53.3%	48.9%	39.8%	41.1%	46.3%	39.3%	50.4%	11.8%	10.1%
Safety	72.8%	70.6%	67.4%	68.2%	70.4%	66.5%	68.6%	68.6%	70.4%	66.1%	66.8%
Prefer urban setting	31.7%	12.4%	9.8%	9.9%	14.5%	15.3%	17.1%	16.2%	11.1%	16.1%	13.4%
Prefer suburban setting	40.1%	64.2%	60.9%	68.2%	66.1%	67.0%	59.4%	64.4%	69.6%	62.5%	60.5%
Near churches/syn.	17.0%	17.0%	14.1%	16.6%	22.6%	18.2%	14.3%	15.8%	15.6%	20.0%	22.3%
Access to child care	16.0%	12.7%	8.7%	10.8%	16.1%	11.0%	14.9%	12.9%	18.5%	11.4%	10.3%
Changes in property values	71.5%	72.7%	65.2%	76.2%	68.3%	68.4%	70.9%	70.6%	70.4%	71.4%	71.6%
Near mix of people	27.9%	17.3%	17.4%	18.8%	16.1%	12.4%	18.9%	14.5%	13.3%	17.5%	20.4%
Low taxes	29.8%	31.5%	21.7%	32.3%	31.7%	37.3%	38.3%	30.7%	30.4%	60.0%	42.0%
Quality of schools	36.5%	43.3%	40.2%	39.9%	43.5%	46.4%	48.6%	47.5%	45.9%	50.0%	51.7%
Quality of governmental services	31.1%	32.4%	26.1%	32.7%	37.6%	31.6%	33.1%	30.0%	36.3%	37.9%	35.7%

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somewhat more likely to prefer newly constructed housing (Table 24). They were also near the top of those who report that their major information source was driving around. Not surprisingly, those from out of state were the most likely to report depending on a real estate agent.

Residential Choice Criteria

While we have identified the factors that play a role in the decision about buying a house and the percentage of households that report different factors as being important, we would like to combine demographic with attitude factors the better to understand specific location decisions. We have done this for one decision--locating in the City of Wilmington or not--to indicate what is possible with this data base. We use the statistical method of discriminant analysis to accomplish this.

Those more likely to buy a house in the Wilmington suburbs as opposed to the city are married, have one or more children, have owned previously, and work in the suburbs (see Appendix 3F). Those moving from outside the Wilmington area or moving from the Wilmington suburbs are the most likely to buy in the suburbs. Age and income are not related to this decision.

Including the residential attitudes better helps us to predict whether householders moved to the city or suburbs in New Castle County. In New Castle County we can predict 83 percent of the cases correctly with objective variables and 89 percent, an additional six percent, with residential attitudes added.

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Table 24

Previous Location of Homebuyers by Characteristics of House Purchased and Decision Process*

	Wilmington (N=312)	Brandywine Hundred (N=330)	Greenville Hockessin Centreville (N=92)	Pike Creek Valley (N=223)	Newport Elsmere Stanton (N=186)	Greater New Castle (N=209)	City of Newark (N=175)	Greater Newark (N=303)	Glasgow Bear area (N=135)	PA-MD-NJ Close to Delaware (N=280)	Outside Delaware Area (N=476)
Age of house preferred											
New	21.8%	30.0%	45.7%	47.5%	30.1%	35.9%	37.7%	43.2%	43.7%	40.4%	36.3%
Previously constructed	37.8%	25.5%	17.4%	17.9%	33.3%	27.8%	24.0%	23.1%	20.7%	24.6%	26.7%
Did not care	40.4%	44.2%	35.9%	33.2%	36.0%	35.9%	37.7%	32.7%	35.6%	34.3%	36.6%
Type of current home											
Detached	51.6%	61.2%	65.2%	69.1%	76.3%	79.9%	70.3%	79.2%	87.4%	71.4%	79.4%
Attached	46.5%	37.0%	33.7%	30.5%	23.7%	20.1%	29.1%	20.5%	11.9%	27.1%	20.2%
Number of families in building											
One	84.3%	76.1%	79.3%	74.4%	91.4%	88.0%	80.0%	86.5%	88.9%	84.3%	83.2%
Other	15.7%	23.9%	20.7%	25.6%	8.6%	12.0%	20.0%	13.5%	11.1%	15.7%	16.8%
Number of bedroom											
Four or more	28.2%	31.2%	39.1%	35.4%	31.2%	26.8%	28.0%	32.7%	35.6%	36.8%	55.9%
Three	51.3%	47.3%	38.0%	48.0%	49.5%	52.6%	56.6%	55.8%	52.6%	46.8%	35.1%
Other	20.5%	21.5%	22.9%	16.6%	19.3%	20.6%	15.4%	11.5%	11.8%	16.4%	9.0%
Most important information source											
Driving around	29.2%	33.9%	44.6%	39.0%	33.9%	36.4%	36.0%	41.3%	46.7%	32.5%	26.9%
Real estate age	31.7%	28.5%	20.7%	23.3%	24.7%	20.1%	26.9%	26.4%	24.4%	30.0%	43.7%
Newspaper or magazine	8.0%	10.9%	9.8%	11.7%	5.9%	11.0%	10.3%	9.2%	6.7%	6.8%	2.5%
Word of mouth	16.0%	11.8%	15.2%	8.1%	17.2%	11.5%	10.9%	11.2%	8.9%	12.5%	9.5%
Other	15.1%	14.9%	9.7%	17.9%	18.3%	21.0%	15.9%	11.9%	13.3%	18.2%	17.4%

In New Castle County those seeking an urban setting are more likely to locate in the city. In addition, those stressing people as well as property values are more likely to have bought a city home. People seeking cosmopolitan lifestyles are more likely to locate in the city.

We find that housing characteristics, such as lot size and style of houses, are highly related to suburban choice. A concern for neighborhood, however, which is related to city choice in other settings, is not related in Delaware. Those concerned about living near friends and relatives and who have lived near the area and liked it are no more likely to locate in the city than suburbia.

Those concerned with accessibility are more likely to locate in the city. The items in this factor include a concern for locating close to work, near stores, and with good access to public transportation. We also find that those concerned with economic value, as measured by attitudes about good prices and low taxes, are more likely to select to live in the suburbs. The relationships for both of these factors, however, are quite small. Our research indicates that those with a greater concern for access to and the quality of government services are more likely to locate in the suburbs.

CONCLUSIONS

Entitling this report "Close to Home" helps us to focus on a number of conclusions and issues raised in this report.

Not quite half of those who bought houses in New Castle County in 1988 believe that they have made great progress in buying their ideal home or indeed have bought it. In general the 1988 homebuyers are affluent, educated, and in white collar positions, and have spent an average of $112,000 on their home. Many of those who made purchases moved up in their house characteristics.

We have inductively found that the ideal home is one that is a single-family home, with four bedrooms, a family room on a main floor, a dining room, and has a den, study, or library. The ideal home is new and has much living area and is on a large lot. The most important location criterion in New Castle County in 1988 was a concern about good housing prices. Compared to the Cincinnati area, where similar work has been done, many more households were concerned about changes in property values. The importance attached to these criteria, as well as other location criteria, varied across New Castle County.

The search for housing took place close to home for most homebuyers in New Castle County in 1988. Those moving within the county tended to search where they already lived. Few looked outside the borders of the county.

There is a mirror image to our findings about the demographics of buyers. The high socioeconomic status of those who bought homes makes one question where those in less positive situations found housing. Few black households bought houses in New Castle County in 1988. The equity implications of this study are not positive, but the study only focuses on a particular year.

This research provides those within the county with a data base for future comparisons and analysis. We have examined who bought in the City of Wilmington as compared to its suburbs; the data exists to examine other choices. We have examined the characteristics and attitudes of buyers in a particular year; comparisons as circumstances change would be helpful. We have analyzed who searched and bought in New Castle County; those who searched in the county but bought elsewhere have not been surveyed. We have made some progress in understanding the forces that affect location decisions in New Castle County, but we are not yet all the way home.

Appendix 1

Methodology

Approximately 9,000 residential transfers were identified in New Castle County in 1988 from the county's assessment file. We attempted to remove transfers to corporations and businesses and transfers for the purpose of renting from this file. Questionnaires were then mailed to 7,500 households on September 15, 1989.

Given limited funds, we could not mail out additional questionnaires to non-respondents at the level required to reduce non-response to an insignificant level. Furthermore, we could not determine the number of property transactions that were not appropriately in our sample; e.g., business transactions, refinancing. We thus decided to ensure that we had the best possible understanding of the sampling frame. A one-in-ten random sample was drawn from the 7,500 households. Of the 749 in this sample, 262 had returned written questionnaires in the first wave. We mailed a second questionnaire to the 487 non-respondents in our sampling frame sample and followed up with another mailing and, where possible, telephone calls the better to determine the nature of this sample.

In all 2,789 written questionnaires of 1988 homebuyers were returned, a 37 percent response rate. Using the 1-in-10 sample we estimate that 12.6 percent of the original sample, or 945 addressees, should not have been in the original sample. A majority of these respondents did not buy a home in 1988 but rather changed their title or refinanced. We thus have a response rate of 2,789 out of an estimate of 6,555 valid homebuyers, or 42.5 percent.

A comparison of our 1-in-10 sample (N=495) with the total sample of written respondents less those in the 1-in-10 sample (N=2,402) does indicate an undercount of black and lower-status respondents. In the overall sample there were 2.9% black vs. 4.0% in the 1-in-10 sample. In the overall sample there were 56.9% with college degrees vs. 53.3% in the 1-in-10 sample. There was a corresponding difference in income. We found no differences in marital status. The differences between the 1-in-10 and complete sample were so small that we decided not to use weights in the analysis.

University of Delaware

September, 1989

Dear New Castle County Homebuyer:

We need your help! It has been eight years since the 1980 U.S. Census provided information on New Castle County, and it will be several years before the results of the 1990 census are released. Various local government and non-government agencies, including local school districts, need up-to-date information on homebuyers to establish priorities in planning for the future needs of our area.

For this reason, your family is being asked to participate in a brief survey. The information you provide will be considered strictly confidential and will be released solely in the form of statistical totals. While this questionnaire contains an identification number, it will be used in determining those areas of the county from which questionnaires are returned. No individual data will be released.

Please take a few minutes to complete the survey and return this form to the College of Urban Affairs and Public Policy at the University of Delaware in the enclosed postage paid envelope within the next 10 days. Simply follow the instructions to complete the form. (If you want to explain or comment on any of your answers, please write your comments in the left margin or on the last page.)

If you have any questions, feel free to call me at 451-1685.

Thank you very much for your cooperation.

Sincerely,

Jeffrey A. Raffel

Jeffrey A. Raffel, Ph.D.
Professor

New Castle County Homebuyers Survey

Directions: Please circle the number that represents your best answer to the question. Please circle only one answer except where indicated.

1. Do you live in the house you bought in 1988, do you live there and rent part of it to another family, or do you live somewhere else and rent the entire house?

   1. Live in that house
   2. Live there and rent part to another family
   3. Live elsewhere and rent entire house
   4. Other (*Please specify*) _____

2. Where did you live before you bought this home?

   1. Within City of Wilmington
   2. Brandywine Hundred (north of Wilmington)
   3. Greenville - Hockessin - Centerville - Yorklyn
   4. Pike Creek Valley
   5. Newport - Stanton - Elsmere
   6. Greater New Castle (south of Wilmington)
   7. Within Newark
   8. Greater Newark (including Ogletown, Christiana)
   9. Glasgow - Bear area
   10. Kent County, DE (*Skip to Question 4*)
   11. Sussex County, DE (*Skip to Question 4*)
   12. Pennsylvania, Maryland, or New Jersey, close to Delaware (*Skip to Question 4*)
   13. Outside the Delaware area (*Skip to Question 4*)
   14. Other (*Please specify*) _____

3. If you previously lived in New Castle County, what school district did you live in?

   1. Appoquinimink
   2. Brandywine
   3. Christina
   4. Colonial
   5. Red Clay
   6. Don't Know

4. Please circle the appropriate information about your *previous* home below each category.

Type of home:	Number of families in building:	Number of bedrooms:	Number of full bathrooms:
1. Detached from other homes	1. One	1. One	1. One
2. Attached to others	2. Two	2. Two	2. Two
	3. Three or more	3. Three	3. Three or more
		4. Four or more	

If house,
Number of living levels:
1. Ranch
2. Hillside ranch
3. Split or bi-level
4. Cape Cod
5. Two-story
6. Other (*please specify*)

If house,
Style of home:
1. Colonial
2. Contemporary
3. Other (e.g., Spanish, Tudor —*please specify*)
_____

Type of ownership:
1. Owned regular (fee simple)
2. Owned condo
3. Rented
4. Neither (lived with family or friends)

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5. How many years did you live in your *previous* home? _____ years

6. Before purchasing your current home, which of the following areas did you consider? (*Please circle the numbers for all that apply.*)

    1. This community only
    2. City of Wilmington
    3. Brandywine Hundred (north of Wilmington)
    4. Greenville - Hockessin - Centerville - Yorklyn
    5. Pike Creek Valley
    6. Newport - Stanton - Elsmere
    7. Greater New Castle (south of Wilmington)
    8. Within City of Newark
    9. Greater Newark (including Ogletown, Christiana)
    10. Glasgow - Bear area
    11. Kent County, DE
    12. Sussex County, DE
    13. Southern Chester County, PA
    14. Southern Delaware County, PA
    15. Elkton/Cecil County, MD
    16. Other (*Please specify*) _____

7. Before purchasing your current home, in what Delaware school districts were the homes that you considered? (*Please circle as many as apply.*)

    1. Appoquinimink
    2. Brandywine
    3. Christina
    4. Colonial
    5. Red Clay
    6. Don't Know

8. What source of information was _most_ important to you when purchasing your home? (*Please circle only _one_ answer.*)

    1. Newspaper or magazine
    2. Real estate agent
    3. "Word of mouth" (includes family, friends, relatives)
    4. Neighborhood or civic organization
    5. Chamber of Commerce
    6. Convention and Visitors Bureau
    7. Corporate or business associates
    8. Driving around and seeing alternatives
    9. Renting this house before buying it
    10. Other (*Please specify*) _____

9. About how many communities (or developments or neighborhoods) did you visit before purchasing this home? _____

10. How many homes, including this home, have you purchased and lived in? _____

11. How many homes, if any, were newly constructed? _____

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12. Why did you choose this location? (*Use the list below to answer this question. Rate each reason by circling the number that indicates how important the reason was for you. For example, if "close to work" was very important, circle 4. If it was not important at all, circle 1. Rate each reason listed by circling a number.*)

		Not Important	Somewhat Important	Important	Very Important
a.	Close to work	1	2	3	4
b.	Near friends and relatives	1	2	3	4
c.	Wanted to live near people who were mostly like me	1	2	3	4
d.	Near stores	1	2	3	4
e.	Near public transportation	1	2	3	4
f.	Good housing prices	1	2	3	4
g.	Style of houses	1	2	3	4
h.	Large lots	1	2	3	4
i.	Overall appearance of area	1	2	3	4
j.	Near school(s)	1	2	3	4
k.	Lived nearby before and I/we liked it	1	2	3	4
l.	Safety	1	2	3	4
m.	Prefer an "urban" setting	1	2	3	4
n.	Prefer a "suburban" setting	1	2	3	4
o.	Near churches/synagogues	1	2	3	4
p.	Accessibility to child care	1	2	3	4
q.	Expected changes in property values	1	2	3	4
r.	Wanted to be near a mix of people	1	2	3	4
s.	Low taxes	1	2	3	4
t.	Quality of local schools	1	2	3	4
u.	Quality of governmental services	1	2	3	4

13. Please write the letter of the *most* important reason why you chose this location. _____

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14. Did you prefer a newly constructed house, a previously constructed house, or did you not care?

    1. Newly constructed   2. Previously constructed   3. Did not care

15. Generally speaking, how would you compare the quality of housing in the City of Wilmington with that in the suburbs with respect to each of the following characteristics? (*For each factor, indicate whether homes are better in the city, about the same, or better in the suburbs.*)

		City Better	No Difference	Suburbs Better
a.	Good housing prices	1	2	3
b.	Style of homes	1	2	3
c.	Large lots	1	2	3
d.	Overall appearance of the area	1	2	3

16. Generally speaking, how would you compare the quality of education in the public schools located in the City of Wilmington as compared to schools located in suburban areas?

    1. City schools are better   2. About the same   3. Suburban schools are better

17. If you could grade each of the following school districts, what grade would you give them? (*Please circle an answer for each school district.*)

a.	Appoquinimink	A	B	C	D	Fail	Don't Know
b.	Brandywine	A	B	C	D	Fail	Don't Know
c.	Christina	A	B	C	D	Fail	Don't Know
d.	Colonial	A	B	C	D	Fail	Don't Know
e.	Red Clay	A	B	C	D	Fail	Don't Know
f.	Kennett Consolidated, PA	A	B	C	D	Fail	Don't Know
g.	Chadds Ford, PA	A	B	C	D	Fail	Don't Know
h.	Cecil County, MD	A	B	C	D	Fail	Don't Know

18. What school district do you live in?

    1. Appoquinimink   2. Brandywine   3. Christina
    4. Colonial   5. Red Clay   6. Don't know

19. Generally speaking, how would you compare the quality of the public schools in your school district to nearby districts with respect to each of the following characteristics?

		Your District Better	No Difference	Other Districts Better	Don't Know
a.	Overall quality of education	1	2	3	4
b.	Quality of school facilities	1	2	3	4
c.	Discipline in the schools	1	2	3	4
d.	Quality of curriculum	1	2	3	4
e.	Quality of teachers	1	2	3	4

20. Most homebuyers have a goal of the type of dwelling they would eventually like tó have – i.e., their "ideal home." How much progress has your family made in achieving this goal if "1" means no progress, and "5" means you have attained your goal and are living in your ideal home?

    1. No progress
    2. A little progress
    3. A moderate amount of progress
    4. Great progress
    5. Achieved goal/am living in ideal home

21. Some local cities and towns are now considering providing financial incentives to attract homebuyers . We are interested in knowing what impact these programs might have had on choosing your current community. How likely would you have been to consider buying a comparable house in another city or town if that locality had offered:

	Extremely Likely	Very Likely	Somewhat Likely	Not too Likely
Tax abatement ($500 a year reduction in property taxes for first 5 years)	1	2	3	4
Tax abatement ($1000 a year reduction in property taxes for first 5 years)	1	2	3	4
Home financing at 1% below market rates (worth about $500 a year)	1	2	3	4
Home financing at 2% below market rates (worth about $1000 a year)	1	2	3	4

22. How many people are in your household?

    1. One   2. Two   3. Three   4. Four   5. Five or more

23. Please indicate the ages of any school-aged children you have and circle what type of school each attends. (*Please skip if none.*)

Age	Type of School		
___	Public	Parochial	Private
___	Public	Parochial	Private
___	Public	Parochial	Private
___	Public	Parochial	Private

24. Please indicate the ages of any preschool children you have and circle the type of elementary school you expect them to attend. (*Please skip if none.*)

Age	Type of School		
___	Public	Parochial	Private
___	Public	Parochial	Private
___	Public	Parochial	Private

25. How many years do you expect to live in your current home? _____ years

26. How many persons in your household are employed full-time?

    1. One   2. Two   3. Three   4. None (retired, no one working)

27. Are you male or female?

    1. Male   2. Female

28. What is your marital status?

    1. Single-never married   2. Divorced   3. Separated
    4. Widowed   5. Married

29. What is your race?

    1. White   2. Black   3. Hispanic
    4. Asian   5. Other

INFORMATION ON PRINCIPAL EARNER IN HOUSEHOLD

(For statistical purposes, the next five questions request information on the individual in the household who, at the present time, contributes the most income to the household. This may be a husband or wife or any adult living in the household.)

30. What is the occupation of the principal earner? *(List usual occupation if unemployed or the last job if retired.)*

    1.   Professional (e.g., engineer, teacher, lawyer)
    2.   Managerial/Administrative (e.g., bank officer, restaurant manager)
    3.   Clerical (e.g., secretary, bookkeeper, bank teller)
    4.   Sales (e.g., retail, insurance, real estate agent)
    5.   Service (e.g., fireman, security, restaurant personnel)
    6.   Laborer (e.g., construction, utility, maintenance worker)
    7.   Craftsman (e.g., machinist, welder, carpenter)
    8.   Operative (e.g., truck and bus driver, garage worker)
    9.   Other *(Please list)* _____

31. What is the highest grade completed by the principal earner?

    1.   Less than high school degree
    2.   High school degree
    3.   Some college
    4.   College graduate (bachelor's degree)
    5.   College beyond bachelor's degree

32. Where does that person work?

    1.   Central business district of Wilmington/downtown Wilmington
    2.   Wilmington outside downtown
    3.   New Castle County outside Wilmington
    4.   Kent or Sussex County, Delaware
    5.   Pennsylvania
    6.   New Jersey
    7.   Maryland
    8.   Home
    9.   Elsewhere *(Please specify)* _____

33. How many minutes on the average does it take that person to commute to work one way? _____

34. What is that person's age?

1.	Under 20	2.	20-29	3.	30-39	4.	40-49
5.	50-59	6.	60-69	7.	70-79	8.	80 and over

35. What was your *total household* income for 1988 before taxes?

1.	Under $15,000	2.	$15,000-19,999	3.	$20,000-24,999	4.	$25,000-29,999
5.	$30,000-34,999	6.	$35,000-39,999	7.	$40,000-44,999	8.	$45,000-49,999
9.	$50,000-59,999	10.	$60,000-69,999	11.	$70,000-79,999	12.	$80,000 and over

36. Please circle the appropriate information about your *current* home below each category.

DESCRIPTION OF HOME

Type of home:
1. Detached from other homes
2. Attached to others

Number of families in building:
1. One
2. Two
3. Three or more

Type of ownership:
1. Regular (fee simple)
2. Condo

DESCRIPTION OF ROOMS

Number of bedrooms:
1. One
2. Two
3. Three
4. Four or more

Dining:
1. None
2. Dining room
3. Dining area

Family room:
1. None
2. On first floor
3. On lower level
4. Other location

Den, library, or study:
1. None
2. On first floor
3. On lower level
4. On second floor
5. Other location

DESCRIPTION OF APPLIANCES

Range:
1. Electric
2. Gas

Dishwasher:
1. None
2. Built-in
3. Portable

Microwave:
1. None
2. Built-in
3. Portable

This is the end of the survey. Thank you very much for your cooperation.

PLEASE RETURN THE SURVEY IN THE ENCLOSED POSTAGE-PAID ENVELOPE

7

Appendix 3A

Characteristics of
New and Previously Constructed
Houses

	Previously Constructed (N=1948)	New (N=763)
Detached	72.3	70.5
Attached	26.8	29.4
One family	85.2	79.4
Two families	3.5	4.1
Three or more families	8.1	14.5
Regular ownership	92.3	90.0
Condo ownership	4.2	8.3
One bedroom	1.1	.8
Two bedrooms	14.3	15.2
Three bedrooms	52.0	37.1
Four or more bedrooms	32.3	46.9
Dining room	73.0	76.4
Dining area	19.9	19.5
Both	.6	1.0
None	5.9	2.9
Family Room		
First floor	50.7	72.6
Lower level	21.9	7.6
Other	3.5	2.1
None	22.3	16.9
Den, Study, or Library		
First floor	19.6	19.4
Lower level	10.8	6.4
Second floor	9.5	14.0
Other	2.4	2.0
None	53.0	54.0
Electric range	69.8	87.7
Gas range	29.7	12.2
Built in dishwasher	73.3	97.2
None or portable	26.1	2.7
Built in microwave	12.7	27.7
Portable microwave	75.4	65.5
Both	.5	.4
None	11.1	6.2

Appendix 3B

Regression Analysis of Progress
toward Ideal Home

Variables Significant in Stepwise Regression

	Beta	Significance
Living area	.184	.0000
Bathroom count	.125	.0002
Single family	.088	.0011
Newly constructed	.082	.0025
Family room	.067	.0097
Acreage	.063	.0241

Multiple R = .382
R^2 =.146
Significance = .0000

Appendix 3C

Discriminant analysis results - factors affecting the choice of newly constructed house (v62)

Characteristics	Background Characteristics	Plus residential attitudes
Age 20 to 29 years	a	a
Age 50 years or more	a	a
Married	a	a
Education	a	a
Income	.54	a
Two or more workers	a	a
High white-collar occ.	a	a
Blue-collar occupation	a	a
Black	a	a
Previously owned	.51	.30
Newly formed household	a	a
From suburbs	.80	a
From outside metro area	.47	a
Work in suburbs	a	a
# of children	a	a
# of private school children	a	a
v46-styles of houses	-	.52
v51-safety	-	-.28
v53-prefer suburban setting	-	.42
v55-accessability to child care	-	-.23
v56-expected property value	-	.48
Wilks lambda	.9684	.9166
Chi square	54.81	148.99
Significance	.0000	.0000
Canonical correlation	.1775	.2887
Eigenvalue	.0325	.0909
Percent of cases correctly classified	58.16%	60.89%
N of cases	1,716	1,716

a. Variable was not entered into the discriminant equation because the F level of the tolerance was insufficient for further computation.

Appendix 3D

Factor Loadings for Areas Considered

Factors

Area searched	One	Two	Three	Four	Five
Newport-Stanton-Elsmere	0.65				
Greater New Castle	0.71				
Greater Newark	0.71				
Glasgow	0.52				
Wilmington		-0.61			
Brandywine		-0.56			
Elkton, Cecil County		0.47			
Newark		0.41			
South Chester County			0.80		
South Delaware County			0.80		
Greenville-Centerville-Hockessin				0.73	
Pike Creek Valley				0.82	
Kent County					0.72
Sussex County					0.75

**Factor Loadings for Importance Items in New Castle County--
Seven-Factor Principal-Components Solution with Varimax Rotation**

<u>Factors</u>

<u>Characteristic</u>	<u>One</u>	<u>Two</u>	<u>Three</u>	<u>Four</u>	<u>Five</u>	<u>Six</u>	<u>Seven</u>
Near schools	.77						
Near churches	.57						
Access to child care	.67						
Quality of government services	.41						
Style of homes		.75					
Large lots		.59					
Overall area appearance		.76					
Good housing prices			.75				
Low taxes			.74				
Near friends and relatives				.75			
Lived nearby and liked it				.79			
Safety				.39			
Near people like me					.61		
Prefer a mix of people					.67		
Changes in property values					.44		
Close to work						.74	
Near stores						.63	
Near public transportation						.48	
Prefer urban setting							.81
Prefer suburban setting							.64

Appendix 3F

Discriminant Analysis Results (New Castle County)--
Factors Affecting the Likelihood of Choosing a Suburban Location

Characteristics	Background Characteristics	Plus Residential Attitudes
Age 20 to 29 years	a	a
Age 50 years or more	a	a
Married	.33	.18
One or more children	.18	.07
Education	-.33	-.25
Income	a	a
Two or more workers	a	a
Parochial school children	-.14	-.05
High white collar occupation	.14	.07
Blue collar occupation	a	a
White	.19	.12
Moved from suburban	1.02	.64
Moved from outside Wilmington metropolitan area	.87	.57
Previously owned	.21	.08
Newly formed household	a	a
Work in suburbs	.29	.22
Service proximity/quality	--	.15
Housing characteristics	--	.39
Economic value	--	.09
Neighborhood	--	a
People and property values	--	-.19
Accessibility	--	-.09
Urban setting	--	-.58
Quality of schools	--	.17
Suburban schools better	--	.04
Wilks lambda	.8122	.6749
Chi square	357.70	674.60

70

Significance	.0000	.0000
Canonical correlation	.4333	.5701
Eigenvalue	.2311	.4816
Percent of cases correctly classified	83.00%	88.52%
N of cases	1,727	1,727

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a. Variable was not entered into the discriminant equation because the F level of the tolerance was insufficient for further computation.