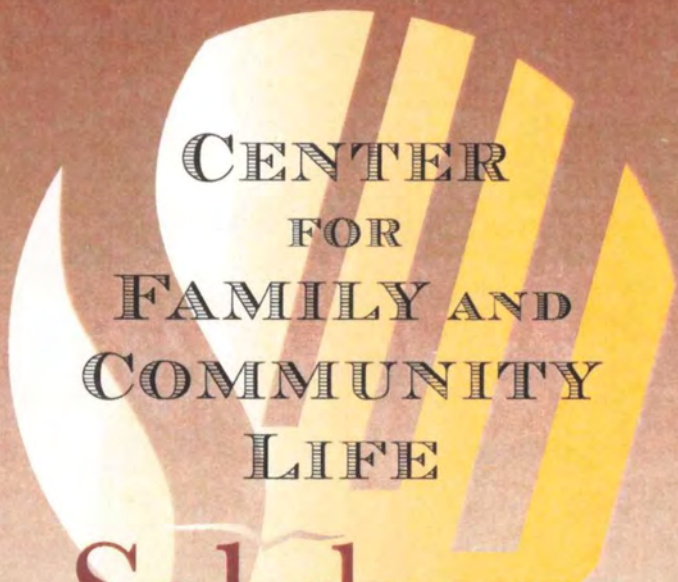


Worcester County Substandard Housing Study 2004

A survey and analysis of substandard housing
in unincorporated Worcester County.



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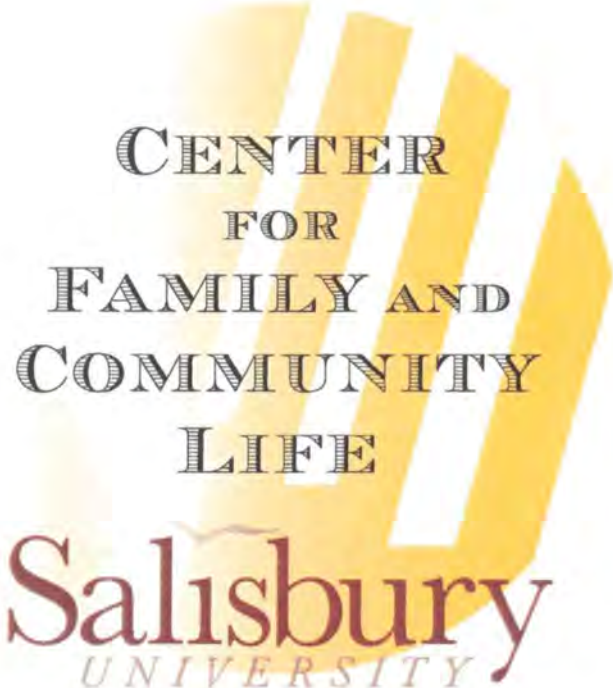
Prepared for:
The Worcester County Government

Prepared by
Center for Family and Community Life
Salisbury University

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INTRODUCTION

On March 10, 2004, the Worcester County Commissioners contracted the Center on Family and Community Life (CFCL) at Salisbury University to conduct a study of substandard housing in unincorporated or rural Worcester County. The study will provide an update to a 1985 housing study conducted by Dr. Marvin Tossey, of CFCL. The earlier study had been conducted for the Worcester County/Ocean City Housing Resources Board to estimate the potential impact of a county-wide property maintenance code on the availability of county rural housing. There was concern by some citizens that a county housing code would have the effect of displacing many low-income citizens from affordable but substandard housing.

To address the question, the first step was to evaluate the stock of occupied county housing using a model housing code. A scientific sample of 377 households was selected and the houses evaluated using the model code. From the sample findings, housing condition estimates were extrapolated to all the houses in the unincorporated part of the county. This provided an approximation of the number of houses that would likely be out of compliance with the code if one were implemented. Four levels of noncompliance were defined; each level was determined by the estimated cost that would be incurred to bring the housing unit into full compliance with the model code. The category most out of compliance (\$5000 or more of rehabilitation costs) was represented by 8.2% of the sample. That percentage applied to the entire rural housing stock meant that there were likely about 528 houses county-wide that would have had similar substandard characteristics. This is the best estimate of the number of houses in 1985 that were likely to be considered substandard using the operational definitions and methodology of this study.

On February 23, 2004, the Worcester County Commissioners requested proposals to identify and locate substandard housing in the unincorporated part of the county. The methodology utilized in 1985 can estimate the number of substandard houses in an area but cannot provide their specific locations. To do that one must do a "windshield survey" of the entire county which means a physical drive-by of each house in the county for a visual inspection and possible plotting on a map. A methodology that would meet the needs of the county's request had been developed by Dr. Tossey to do a substandard housing study in Talbot County in 1987. It was subsequently used for similar studies in Caroline County in 1989, Queen Anne County in 1990, Howard County in 1990, and again in Talbot County for a 15 year follow-up in 2002. The process involves two phases.

Phase I consists of a "windshield inspection" of all the housing units in the county. The purpose of this phase is to identify substandard units by looking at the exterior condition of each housing unit evaluating the condition of the roof, siding, and grounds. Each housing unit is assigned a composite score based on the following scale: 1 (satisfactory), 2 (needs minor repairs), or 3 (poor). Units with a combined score of 7 or more are then precisely identified by a GPS receiver. The data are entered into a computer located in the Salisbury University Department of Geography and Geosciences, which produces a point map and data file of the county identifying the location of each substandard unit. The map locates the position of each housing unit accurately within 10-15 feet.

During Phase II, surveyors conduct interviews with residents of all targeted households. This interview collects data on 19 specific items including the age of the house, size and structural condition of the unit, the availability of water, and the functional status of plumbing, heating, and electricity. In addition to the housing data, information is collected on the households of the occupied substandard units. These data include household size, race, age of occupants, and other variables. A copy of the survey instrument is located in the appendix.

This report is organized into three sections. The first is an analytical comparison of U.S. Census data from the time of the 1985 report (1980 census data) and the comparable 2000 data. The comparison provides a framework for understanding the differences between conditions found in 1985 and those found in 2004. The second section provides the findings of the new survey, and the third section discusses the findings.

SECTION I

A COMPARISON OF HOUSING CONDITIONS AND SELECTED POPULATION CHARACTERISTICS IN UNINCORPORATED WORCESTER COUNTY AND SELECTED TOWNS 1980 - 2000

Worcester County is Maryland's fifth largest county with 475 square miles of land and 106 square miles of water. In 1980 the county contained a total of 29,863 housing units. In twenty years that number has grown by 17,497 units to a total of 47,360 housing units in 2000. This represents a growth of nearly 58.6%. The county contains four towns/municipalities, Pocomoke City, Snow Hill Town, Berlin Town, and Ocean City Town as well as significant rural areas and a number of small unincorporated villages. In 1980, the four towns collectively had 21,477 housing units or 71.9% of the county total while the remaining 8,386 housing units were located in the unincorporated parts of the county. By 2000, the towns had 30,472 units or 64.3% of the county total while the unincorporated parts of the county grew to 16,888 units, an increase of more than 100.0%. Although both the towns and unincorporated areas have grown, the unincorporated areas have developed at a higher rate, increasing from 28.1% of the county total to 35.7%. Ocean City Town is by far the largest town in the county with 18,221 housing units in 1980 and 26,317 in 2000. It is important to consider that Ocean City is a popular tourist town, and, therefore, the majority of housing units are not occupied year around but are rented out during the summer months. However, if population size is compared among the towns, Ocean City remains the largest town in the county. The other towns in order of their size are Pocomoke, Berlin, and Snow Hill.

Both the 1980 U.S. Census and 2000 U.S. Census reported data on population, households, housing units, and other characteristics by Minor Civil Divisions (MCDs) and by town. In Worcester County there are eight MCDs and four towns. By subtracting data for the towns from the MCD data, one can ascertain characteristics of selected demographic data for the unincorporated parts of the county. This report will follow the above procedure to determine the demographics of the unincorporated areas of Worcester County. The respective MCDs and Towns are as follows:

<u>MCD Number and Name</u>	<u>Town</u>
1. Pocomoke	Pocomoke City
2. Snow Hill	Snow Hill Town
3. Berlin	Berlin Town
4. Newark	None
5. St. Martin	None
7. Atkinsons	None
8. Stockton	None
10. Ocean City	Ocean City Town

A. SELECTED POPULATION CHARACTERISTICS

Table 1 illustrates the total population in Worcester County by Minor Civil Division (MCD), towns, and unincorporated areas in 1980 and 2000 according to the U.S. Census, as well as the percent of change in population.

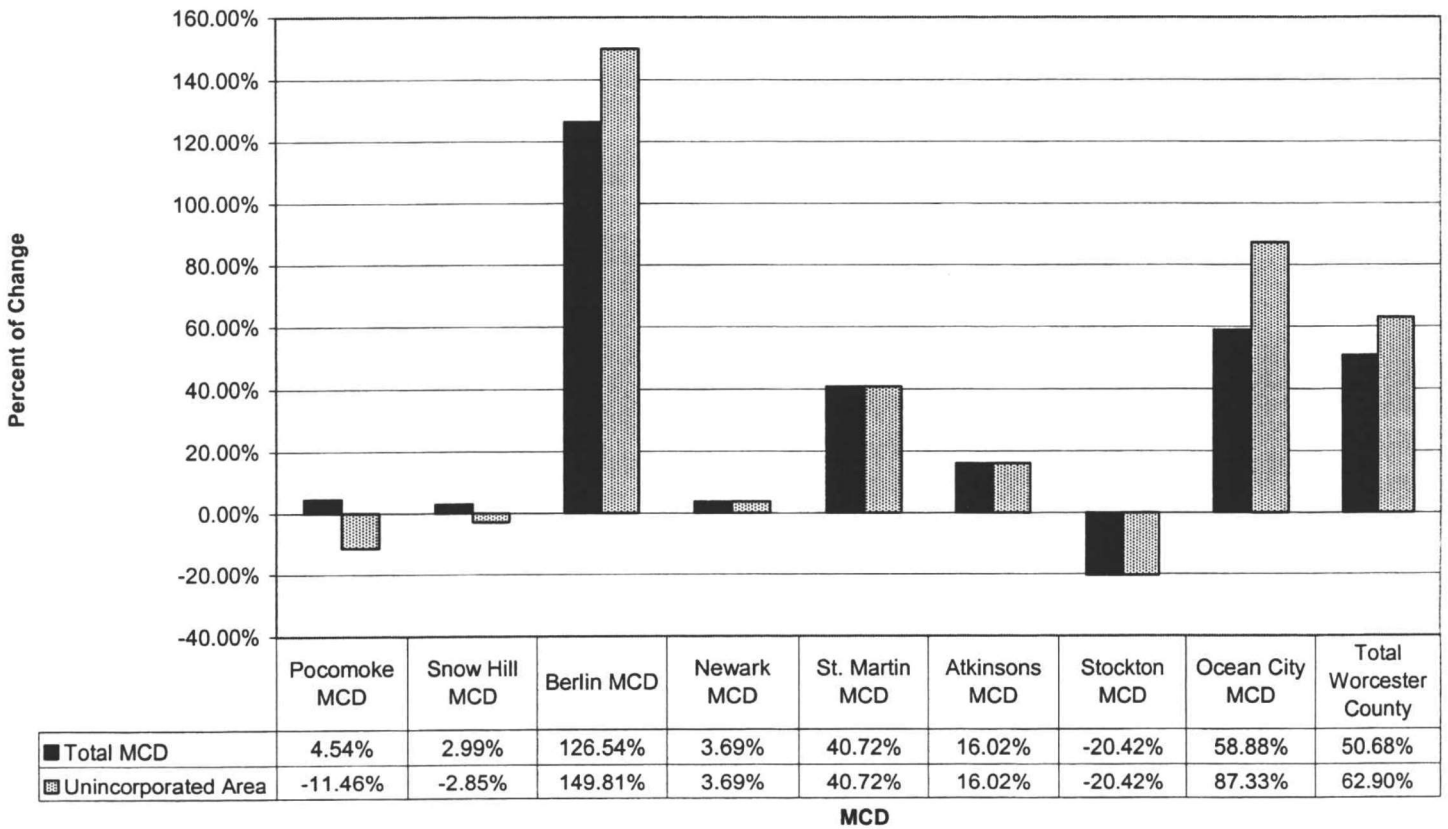
**TABLE 1
COMPARISON OF TOTAL POPULATION BY MINOR CIVIL DIVISION, TOWNS, &
UNINCORPORATED AREA OF WORCESTER COUNTY 1980 - 2000**

Minor Civil Division & Towns	Total Population 1980	Total Population 2000	Percent Change
Pocomoke MCD	5,922	6,191	4.54%
Pocomoke City	3,558	4,098	15.18%
Unincorporated Area	2,364	2,093	-11.46%
Snow Hill MCD	4,789	4,932	2.99%
Snow Hill Town	2,192	2,409	9.90%
Unincorporated Area	2,597	2,523	-2.85%
Berlin MCD	8,207	18,592	126.54%
Berlin Town	2,162	3,491	61.47%
Unincorporated Area	6,045	15,101	149.81%
Newark MCD (All Unincorporated Area)	895	928	3.69%
St. Martin MCD (All Unincorporated Area)	1,638	2,305	40.72%
Atkinsons MCD (All Unincorporated Area)	693	804	16.02%
Stockton MCD (All Unincorporated Area)	1,391	1,107	-20.42%
Ocean City MCD	7,354	11,684	58.88%
Ocean City Town	4,946	7,173	45.03%
Unincorporated Area	2,408	4,511	87.33%
Total Worcester County	30,889	46,543	50.68%
Total All Towns	12,858	17,171	33.54%
Total Unincorporated Areas	18,031	29,372	62.90%
State of Maryland	4,216,975	5,296,486	25.60%

Between 1980 and 2000 the total Worcester County Population grew from 30,889 to 46,543, an increase of 15,654 individuals, and at a rate of 50.68%. This is almost double the State of Maryland rate of 25.60% for the same time period. The rural population of Worcester County grew by 11,341, a rate of 62.90%, from 18,031 in 1980 to 29,372 in 2000, a higher rate than the county overall. The towns of Berlin and Ocean City exceeded Worcester County population growth rates as well as growth rates in the three categories of total county, total towns, and total unincorporated areas.

The Berlin MCD experienced the largest growth with a population increase of 126.54%, while the unincorporated area in Berlin grew even more with an increase of 149.81%. The Berlin Town area grew by 61.47%. An explanation for such high growth could be the area's close proximity to the town of Ocean City, a well known tourist attraction. The Ocean City MCD experienced a growth of 58.88% while the town grew by 45.03% and the unincorporated area grew by 87.33%. In contrast, the Stockton MCD experienced a negative growth with a decrease in population of 284 individuals or -20.42%. The unincorporated areas of Pocomoke and Snow Hill also declined in population during this time period. Chart 1 shows the percent of change in population for both Worcester County and the unincorporated areas.

**CHART 1
COMPARISON OF PERCENT CHANGE IN POPULATION 1980 - 2000**



Age of Population

Table 2a presents the county and MCD 1980 population breakdown into three age groupings: under age 18, 18–62, and age 62 and over. Table 2b illustrates the population breakdown by age in 2000. It should be noted that age categories changed slightly between 1980 and 2000, from “18-61” and “62 and over” in 1980 to “18-64” and “65 and over” in 2000.

TABLE 2a
POPULATION BY AGE GROUP OF UNINCORPORATED AREA AND WORCESTER
COUNTY 1980

MCD	Population Under 18 Years		Population 18 - 61		Population 62 and over		Total Population
	Number	Percent	Number	Percent	Number	Percent	
Pocomoke	1,628	27.5%	3,269	55.2%	1,025	17.3%	5,922
Unincorporated Area	640	27.1%	1,411	59.7%	313	13.2%	2,364
Snow Hill	1,329	27.8%	2,609	54.5%	851	17.8%	4,789
Unincorporated Area	788	30.3%	1,465	56.4%	344	13.2%	2,597
Berlin	2,224	27.1%	4,598	56.0%	1,385	16.9%	8,207
Unincorporated Area	1,605	26.6%	3,483	57.6%	957	15.8%	6,045
Newark*	258	28.8%	507	56.6%	130	14.5%	895
St. Martin*	463	28.3%	907	55.4%	268	16.4%	1,638
Atkinsons*	175	25.3%	400	57.7%	118	17.0%	693
Stockton*	416	29.9%	717	51.5%	258	18.5%	1,391
Ocean City	1,388	18.9%	4,696	63.9%	1,270	17.3%	7,354
Unincorporated Area	600	24.9%	1,370	56.9%	438	18.2%	2,408
Total Worcester County	7,881	25.5%	17,703	57.3%	5,305	17.2%	30,889
Total Towns	2,936	22.8%	7,443	57.9%	2,479	19.3%	12,858
Total Unincorporated Area	4,945	27.4%	10,260	56.9%	2,826	15.7%	18,031

* All unincorporated area

TABLE 2b
POPULATION BY AGE GROUP OF UNINCORPORATED AREA AND WORCESTER
COUNTY 2000

MCD	Population Under 18 Years		Population 18 - 64		Population 65 and over		Total Population
	Number	Percent	Number	Percent	Number	Percent	
Pocomoke	1,771	28.6%	3,442	55.6%	984	15.9%	6,191
Unincorporated Area	525	25.1%	1,242	59.3%	327	15.6%	2,093
Snow Hill	1,129	22.9%	2,998	60.8%	804	16.3%	4,932
Unincorporated Area	623	23.9%	1,567	62.1%	334	13.2%	2,523
Berlin	3,756	20.2%	10,690	57.5%	4,127	22.2%	18,592
Unincorporated Area	2,845	18.8%	8,822	58.4%	3,415	22.6%	15,101
Newark*	217	23.4%	570	61.4%	141	15.2%	928
St. Martin*	565	24.5%	1,422	61.7%	318	13.8%	2,305
Atkinsons*	182	22.6%	506	62.9%	118	14.7%	804
Stockton*	281	25.4%	663	59.9%	163	14.7%	1,107
Ocean City	1,647	14.1%	7,338	62.8%	2,699	23.1%	11,684
Unincorporated Area	836	18.5%	2,783	61.7%	891	19.8%	4,511
Total Worcester County	9,548	20.5%	27,629	59.4%	9,354	20.1%	46,543
Total Towns	3,474	20.2%	10,054	58.6%	3,647	21.2%	17,171
Total Unincorporated Area	6,074	20.7%	17,575	59.9%	5,707	19.4%	29,372

* All unincorporated area

The change in composition of the population by age group between 1980 and 2000 is presented in Table 2c. Although there was an increase in population in nearly all of the age categories, the table below shows the changed distribution of the population by age groups.

TABLE 2c
CHANGE IN COMPOSITION OF POPULATION BY AGE GROUP OF
UNINCORPORATED AREA AND WORCESTER COUNTY 1980 – 2000

MCD	Population Under 18 Years		Population 18 – 62 or (18 – 64)**		Population 62 and over (65 and over)**		Total Population	
	Number	Change in %	Number	Change in %	Number	Change in %	Number	% of Change
Pocomoke	143	1.1%	173	0.4%	-41	-1.4%	269	4.5%
Unincorporated Area	-115	-2.0%	-169	-0.4%	14	2.4%	-271	-11.5%
Snow Hill	-200	-4.9%	389	6.3%	-47	-1.5%	143	3.0%
Unincorporated Area	-165	-6.4%	102	5.7%	-10	0.0%	-74	-2.8%
Berlin	1,532	-6.9%	6,092	1.5%	2,742	5.3%	10,385	126.5%
Unincorporated Area	1,240	-7.8%	5,339	0.8%	2,458	6.8%	9,056	149.8%
Newark*	-41	-5.4%	63	4.8%	11	0.7%	33	3.7%
St. Martin*	102	-3.8%	515	6.3%	50	-2.6%	667	40.7%
Atkinsons*	7	-2.7%	106	5.2%	0	-2.3%	111	16.0%
Stockton*	-135	-4.5%	-54	8.4%	-95	-3.8%	-284	-20.4%
Ocean City	259	-4.8%	2,642	-1.1%	1,429	5.8%	4,330	58.9%
Unincorporated Area	236	-6.4%	1,413	4.8%	453	1.6%	2,103	87.3%
Total Worcester County	1,667	-5.0%	9,926	2.1%	4,049	2.9%	15,654	50.7%
Total Towns	538	-2.6%	2,611	0.7%	1,168	1.9%	4,313	33.5%
Total Unincorporated Area	1,129	-6.7%	7,315	3.0%	2,881	3.7%	11,341	62.9%

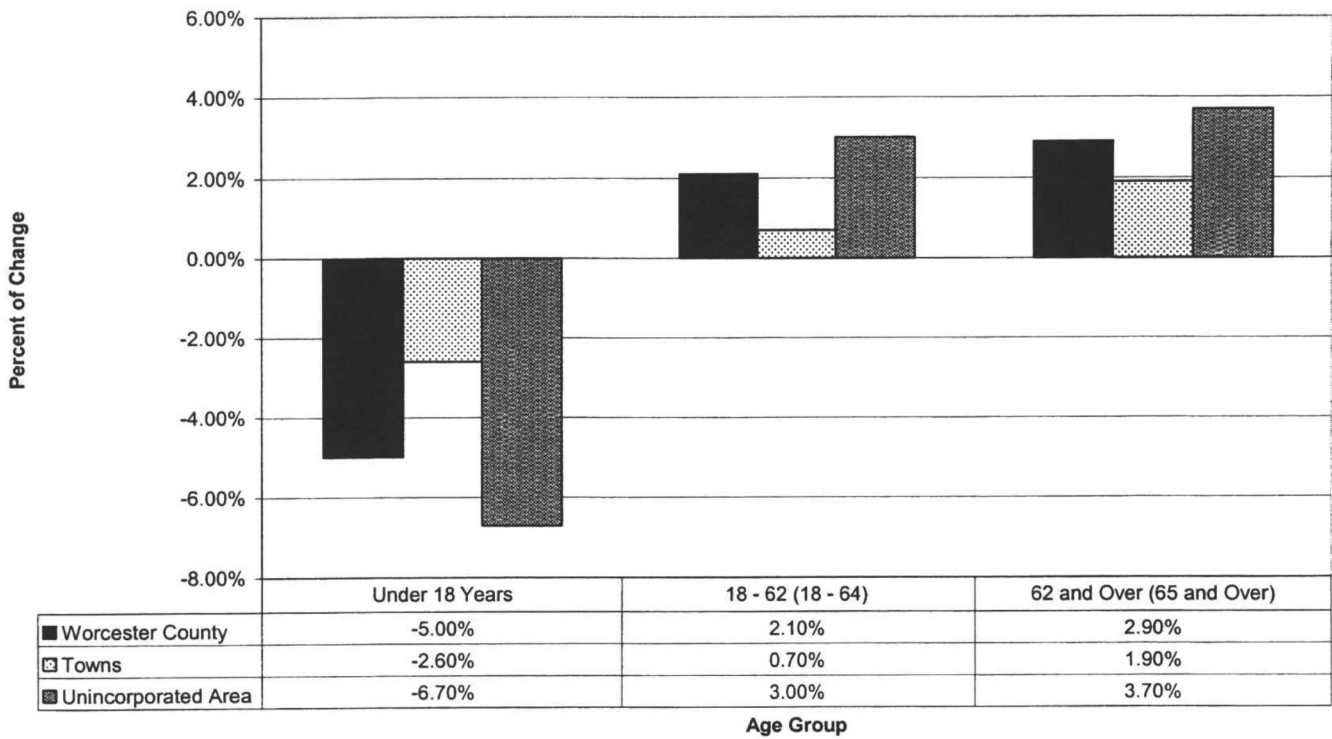
* All unincorporated area

** Age range changed from 1980 census to 2000 census. The 1980 census used 62 and over, the 2000 census used 65 and over.

In Worcester County, the population age group 18–64 increased in proportion to the rest of the population by 2.1%. The elderly population, age 65 and over, also increased in proportion by 2.9%, while the proportion of the population under age 18 decreased by 5.0% between 1980 and 2000. The age distribution depicts a rise in the elderly population in the county. In 1980, 17.2% of the county population was age 62 and over, in 2000 the percentage of individuals 65 and over was calculated at 20.1%. Even with an increase in the age category from 62 and over in 1980 to 65 and over in 2000, the percentage of elderly individuals still increased by 2.9%. Berlin and Ocean City experienced the greatest growth in the proportion of the elderly population for this time period. On the other hand, the overall percentage of individuals under the age of 18 decreased from 25.5% of the population in 1980 to 20.5% in 2000. This age group decreased in proportion to the rest of the population in all towns and unincorporated areas with the exception for Pocomoke MCD, which experienced an increase of 1.1% in the proportion of individuals under 18.

A comparison of the change in composition of population by age groups from 1980 to 2000 is presented in Chart 2.

**CHART 2
COMPARISON OF PERCENT CHANGE IN COMPOSITION OF POPULATION BY AGE GROUP
FROM 1980 - 2000**



Population by Race

Table 3 illustrates the change in county and MCD population in terms of race. The racial data, however, are difficult to interpret because of changes in racial categories between the 1980 U.S. Census and the U.S. Census in 2000. In 1980, individuals were given discrete racial categories to select from; therefore a person with a Caucasian father and an African-American mother would have to select from the categories white, black, or other on the census form. In 2000, the person could still select white or black; however, additional categories including “some other race” or “two or more races” are subsumed in the “other” category in Table 3. The additional category means that even though the number and composition of the population might have remained unchanged, the percentages could change because of how people classified themselves.

TABLE 3
COMPARISON OF POPULATION BY RACE OF UNINCORPORATED AREA AND
WORCESTER COUNTY 1980 - 2000

MCD	White		Black		Other**		Total Population	
	1980	2000	1980	2000	1980	2000	1980	2000
Pocomoke	63.4	57.3	35.9	40.2	0.7	2.5	5,922	6,191
Unincorporated Area	59.5	70.2	39.7	28.2	0.8	1.6	2,364	2,093
Snow Hill	62.3	64.5	37.3	33.9	0.4	1.5	4,789	4,932
Unincorporated Area	60.7	72.6	38.9	25.9	0.4	1.3	2,597	2,523
Berlin	68.6	84.1	30.8	13.6	0.6	2.3	8,207	18,592
Unincorporated Area	69.3	88.8	30.2	9.4	0.5	1.0	6,045	15,101
Newark*	70.2	80.6	29.7	16.8	0.1	2.5	895	928
St. Martin*	73.3	89.3	25.8	9.0	1.0	1.7	1,638	2,305
Atkinsons*	95.4	96.5	4.6	2.5	0.0	0.9	693	804
Stockton*	54.1	69.9	54.6	28.7	0.3	1.5	1,391	1,107
Ocean City	94.9	94.8	4.2	3.0	0.9	2.2	7,354	11,684
Unincorporated Area	89.8	94.0	9.6	3.8	0.5	3.2	2,408	4,511
Total Worcester County	73.2	81.0	26.2	16.6	0.6	2.4	30,889	46,543
Total Towns	77.9	72.7	21.3	24.5	0.4	3.2	12,858	17,171
Total Unincorporated Area	69.8	86.0	29.7	12.0	0.5	2.0	18,031	29,372

* All unincorporated area

** In 2000 "Other" also includes "Two or More Races"

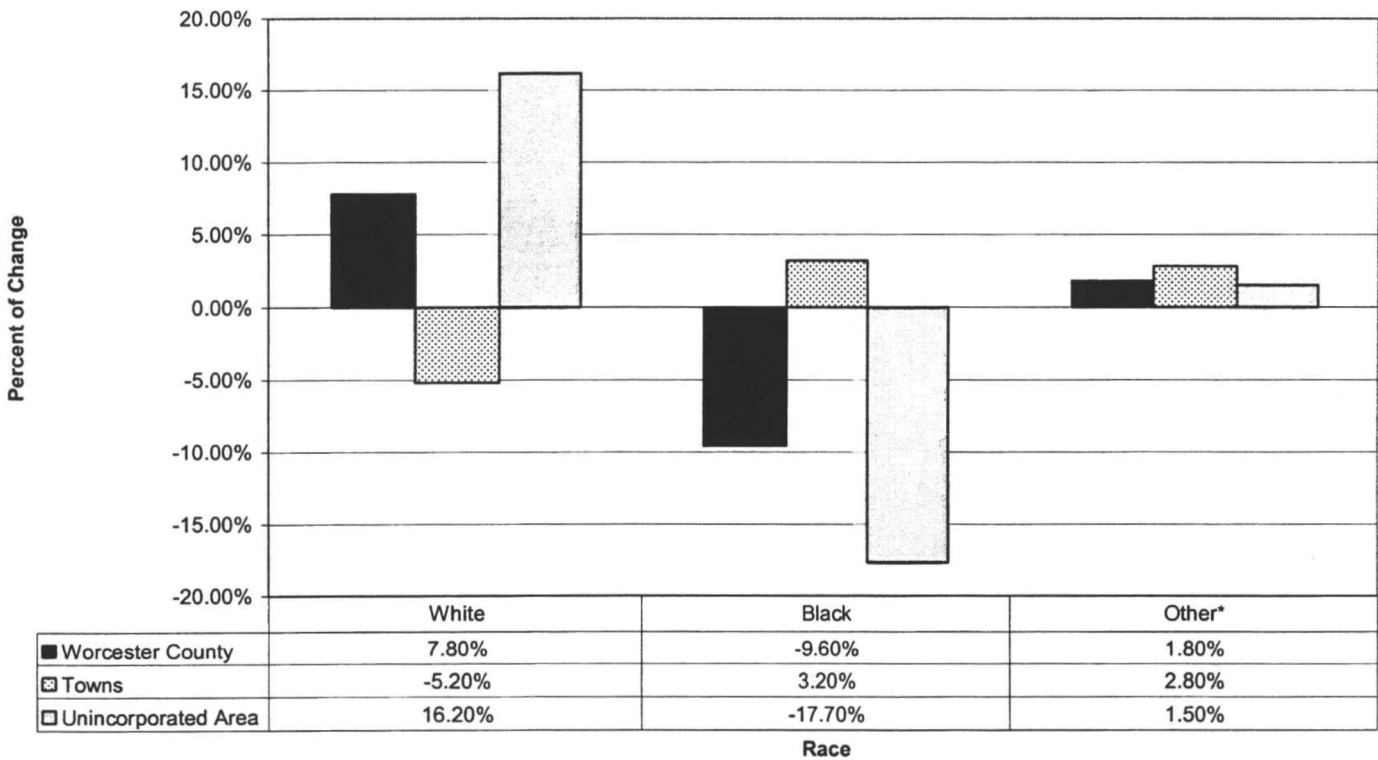
The table indicates that the percentage of African-Americans in the county, as a whole, decreased from 26.2% of the population in 1980 to 16.6% in 2000 and in rural areas from 29.7% of the rural population to 12.0%. Part of the 9.6% overall decrease in the county percentage and the 17.7% decrease in the unincorporated area may result from people who reported themselves as African-American on the 1980 census yet reported themselves as "some other race" or "two or more races" on the 2000 census. It is also possible that the 1.8% increase in the "other" racial category from 1980 to 2000 results from the same option.

Though there is no way to way to definitively determine how much of the apparent reduction in the county's African-American population is real and how much is due to the reclassification on census forms, it is clear that there has been a real decrease in the county's rural African-American population between 1980 and 2000. This is illustrated by fact that the number of African-Americans in the county's unincorporated area decreased by 1,832 from 5,360 individuals in 1980 to 3,528 in 2000, while the number of individuals who classified themselves as "other," which includes "two or more races," only increased by 495 to a total of 591 individuals in 2000. Therefore, it may be assumed that there was at least a reduction of 1,241 African-Americans (4.2% of the county's unincorporated population) even if we assume that all of the 591 "others" were composed of individuals who classified themselves as African-American on the 1980 census and then selected "two or more races" in 2000.

On the county level, the African-American population decreased by 358 individuals from 8,100 in 1980 to 7,742 in 2000, while the number of individuals who classified themselves as “other” increased by 953 to a total of 1,149 in 2000, making it impossible to determine if a reduction in the county’s African-American population actually occurred. In conclusion then, there appears to have been a sizable reduction in the number and percentage of African-Americans in the rural parts of the county between 1980 and 2000, but county-wide the apparent population decline could be attributed to the change in census classifications. However, as a percentage of the county’s total population the percentage of African-American’s decreased in rural areas and in the county overall.

Chart 3 shows a comparison of the percent of change in the population’s racial composition from 1980 to 2000 in the unincorporated area, towns, and total Worcester County.

**CHART 3
COMPARISON OF PERCENT CHANGE IN COMPOSITION OF POPULATION BY RACE FROM
1980 - 2000**



* In 2000 “Other” also includes “Two or More Races”

B. SELECTED HOUSING CHARACTERISTICS

Housing Tenure

A comparison of total housing units and occupied housing units from 1980 and 2000 is presented in Table 4.

**TABLE 4
COMPARISON OF HOUSING UNITS AND TOTAL OCCUPIED UNITS BY MINOR
CIVIL DIVISION, TOWNS, & UNINCORPORATED AREA OF WORCESTER
COUNTY 1980 - 2000**

Minor Civil Division & Towns	Total Housing Units 1980	Total Housing Units 2000	Percent Change	Total Occupied Units 1980	Total Occupied Units 2000	Percent Change
Pocomoke MCD	2,424	2,668	10.1%	2,178	2,417	11.0%
Pocomoke City	1,526	1,764	15.6%	1,356	1,596	17.7%
Unincorporated Area	898	904	0.7%	822	821	-0.1%
Snow Hill MCD	1,800	2,020	12.2%	1,663	1,816	9.2%
Snow Hill Town	865	964	11.4%	800	862	7.8%
Unincorporated Area	935	1,056	12.9%	863	954	10.5%
Berlin MCD	4,037	10,573	161.9%	2,975	7,761	160.9%
Berlin Town	865	1,427	65.0%	796	1,347	69.2%
Unincorporated Area	3,172	9,146	188.3%	2,179	6,414	194.4%
Newark MCD (All Unincorporated Area)	323	409	26.6%	295	368	24.7%
St. Martin MCD (All Unincorporated Area)	723	1,038	43.6%	588	897	52.6%
Atkinsons MCD (All Unincorporated Area)	262	335	27.9%	251	320	27.5%
Stockton MCD (All Unincorporated Area)	566	465	-17.8%	498	410	-17.7%
Ocean City MCD	19,728	29,852	51.3%	3,208	5,705	77.8%
Ocean City Town	18,221	26,317	44.4%	2,281	3,750	64.4%
Unincorporated Area	1,507	3,535	134.6%	927	1,955	110.9%
Total Worcester County	29,863	47,360	58.6%	11,656	19,694	69.0%
Total All Towns	21,477	30,472	41.9%	5,233	7,555	44.4%
Total Unincorporated Areas	8,386	16,888	101.4%	6,423	12,139	89.0%

Although data from this table were discussed previously in the report there are a few additional comparisons that should be noted. The MCD of Berlin had the largest growth of both total housing units and occupied housing units with an increase of 161.9% and 160.9% respectively, which also coincides with the MCD's total population growth. Overall, the occupied housing units in the unincorporated areas of the county developed at a faster rate than in the towns, with the occupied units in the unincorporated areas increasing by 89.0% while the occupied units in the towns increased by 44.4%. The unincorporated areas of Berlin MCD and Ocean City MCD had the highest growth of occupied housing units with an increase of 194.4% and 110.9% respectively. Stockton was the only MCD with a decrease in occupied housing units, falling from 498 units in 1980 to 410 in 2000, a decline of -17.7%.

Table 5 illustrates the number and percent of owner-occupied and renter-occupied housing units in Worcester County and unincorporated areas in 1980 and 2000. Vacant units are also presented in this table.

**TABLE 5
COMPARISON OF HOUSING TENURE OF UNINCORPORATED AREA AND
WORCESTER COUNTY 1980 - 2000**

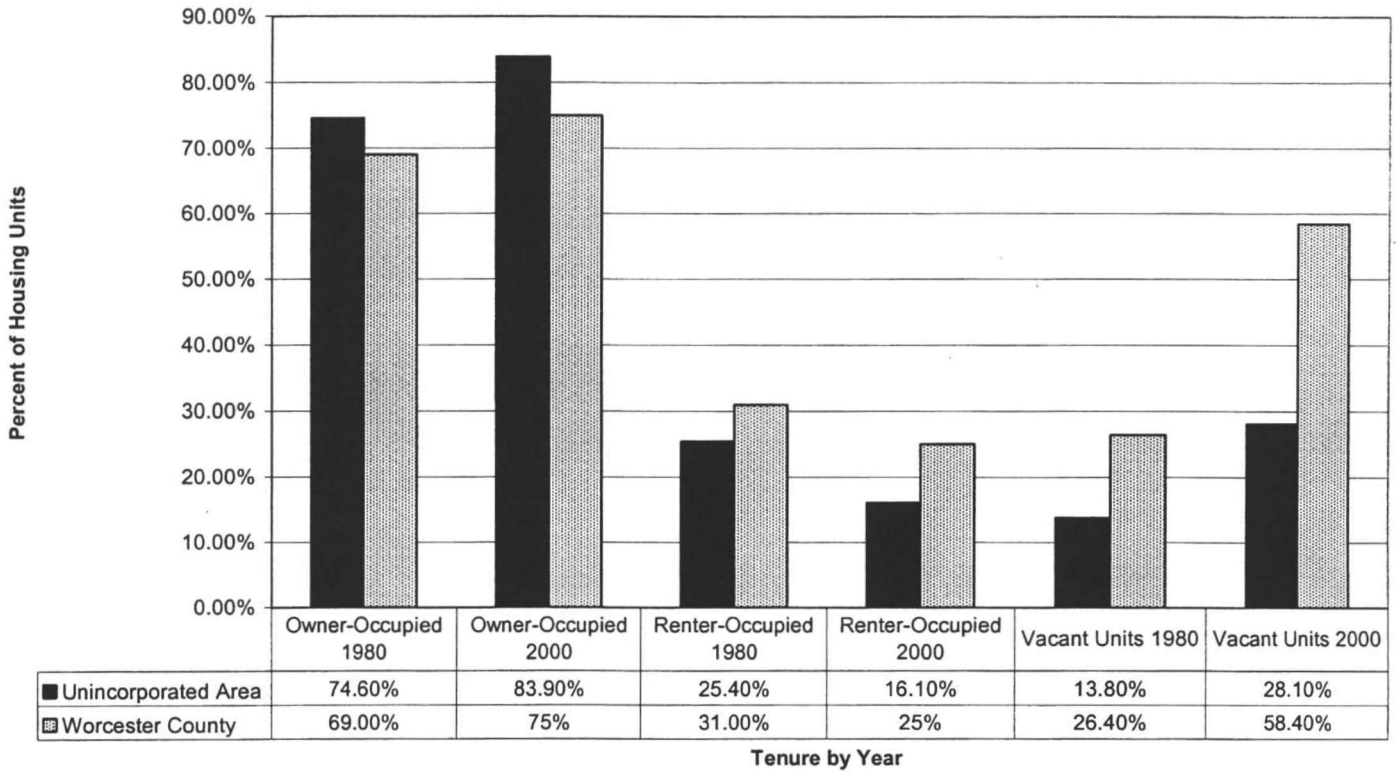
Characteristic	Unincorporated Area				Worcester County			
	1980		2000		1980		2000	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Tenure								
Owner-Occupied	4,791	74.6%	10,185	83.9%	8,043	69.0%	14,769	75.0%
Renter-Occupied	1,632	25.4%	1,954	16.1%	3,613	31.0%	4,925	25.0%
Total Occupied	6,423	100.0%	12,139	100.0%	11,656	100.0%	19,694	100.0%
Vacant Units	1,160	13.8%	4,749	28.1%	7,879	26.4%	27,666	58.4%

In 1980 there were 8,043 owner-occupied housing units, 69.0% out of the 11,656 total occupied units in Worcester County. By 2000 this number grew by 6.0% to 14,769 or 75.0% of all occupied units. The percentage of owner-occupied units in the unincorporated areas of the county grew even more, increasing by 9.3% from 74.6% in 1980 to 83.9% in 2000.

The total number of vacant units in Worcester County also increased from 1980 to 2000, rising from 7,879 or 26.4% to 27,666 or 58.4% of total housing units. This percentage is unusually high when it is compared to the percent of vacant housing units found in the entire state of Maryland (7.7%). It should be noted that the majority (63.9%) of vacant units in Worcester County are seasonal, recreational, or occupational units and are primarily located near Ocean City, a popular summer resort area. Therefore, it is not unexpected that the percentage of vacant units is higher in Worcester County than in Maryland overall.

A comparison of housing tenure between 1980 and 2000 is presented in Chart 4.

**CHART 4
COMPARISON OF HOUSING TENURE UNINCORPORATED AREA AND WORCESTER COUNTY
FROM 1980 - 2000**



House Age

When examining substandard housing, the age of the housing stock is important since housing condition and age is highly correlated. As a house ages, the repair and maintenance costs rise. Sometimes the owner, who may have purchased an older house because it was less expensive, finds the necessary maintenance to prevent further deterioration unaffordable. Thus the ratio of older houses to newer ones will give an indication of the likely condition of the overall housing stock. (Historic homes are, of course, an exception to this generalization since they are likely to be owned by individuals with the means to restore and maintain them.) Table 6 illustrates the year structures were built according to the 1980 and 2000 census data.

**TABLE 6
COMPARISON OF YEAR STRUCTURE BUILT IN
WORCESTER COUNTY 1980 – 2000**

Year Structure Built	1980		2000	
	Number	Percent	Number	Percent
1980 – 2000	n/a	n/a	10,230	51.9%
1960 – 1979	12,164	62.3%	4,983	25.3%
1940 – 1959	3,220	16.5%	2,221	11.3%
1939 or earlier	4,151	21.2%	2,264	11.5%
TOTAL	19,535	100.0%	19,698	100.0%

*1980 data based on year-round housing

**2000 data based on owner-occupied and renter-occupied housing units

Data from the 1980 U.S. Census show that 4,151 or 21.2% of the housing units in Worcester County were built prior to 1940. By 2000 the surviving number of homes built before 1940 had dropped to 2,264 or 11.5% of the county's total housing units. Approximately 45% of the pre-1940 homes in the county disappeared between 1980 and 2000. In 1980 the percentage of housing units built within the previous twenty years (from 1960 to 1979) was roughly 62.3%. In 2000 the percentage of housing units built in the past twenty years (from 1980 to 2000) dropped to 51.9% of all housing units.

Crowded Housing Units and Units Lacking Plumbing

In addition to the age of the housing stock, two other variables that are highly correlated to substandard housing are the number of crowded units (defined as a housing unit with 1.01 or more persons per room) and the number of housing units that lack plumbing. Both variables are collected by the U.S. Census and are good predictors of the general housing conditions in an area.

Table 7 illustrates that the percent of crowded units in Worcester County decreased by 2.0%, dropping from 3.9% of all occupied units in 1980 to 1.9% in 2000, a 51% reduction.

TABLE 7
A COMPARISON OF THE NUMBER AND PERCENTAGE OF CROWDED UNITS**
BY MINOR CIVIL DIVISION, UNINCORPORATED AREA AND WORCESTER
COUNTY 1980 - 2000

Minor Civil Division	Total Unincorporated Area				Total Worcester County			
	1980		2000		1980		2000	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Pocomoke	48	5.8%	18	2.2%	97	4.5%	72	3.0%
Snow Hill	43	5.0%	15	1.6%	68	4.1%	36	2.0%
Berlin	85	3.9%	78	1.2%	120	4.0%	124	1.6%
Newark*	20	6.8%	12	3.2%	20	6.8%	12	3.2%
St. Martin*	36	6.1%	11	1.2%	36	6.1%	11	1.2%
Atkinsons*	3	1.2%	0	0.0%	3	1.2%	0	0.0%
Stockton*	26	5.2%	0	0.0%	26	5.2%	0	0.0%
Ocean City	23	2.5%	26	1.3%	88	2.7%	120	2.1%
TOTAL	284	4.4%	160	1.3%	458	3.9%	375	1.9%

Percent is of total occupied units

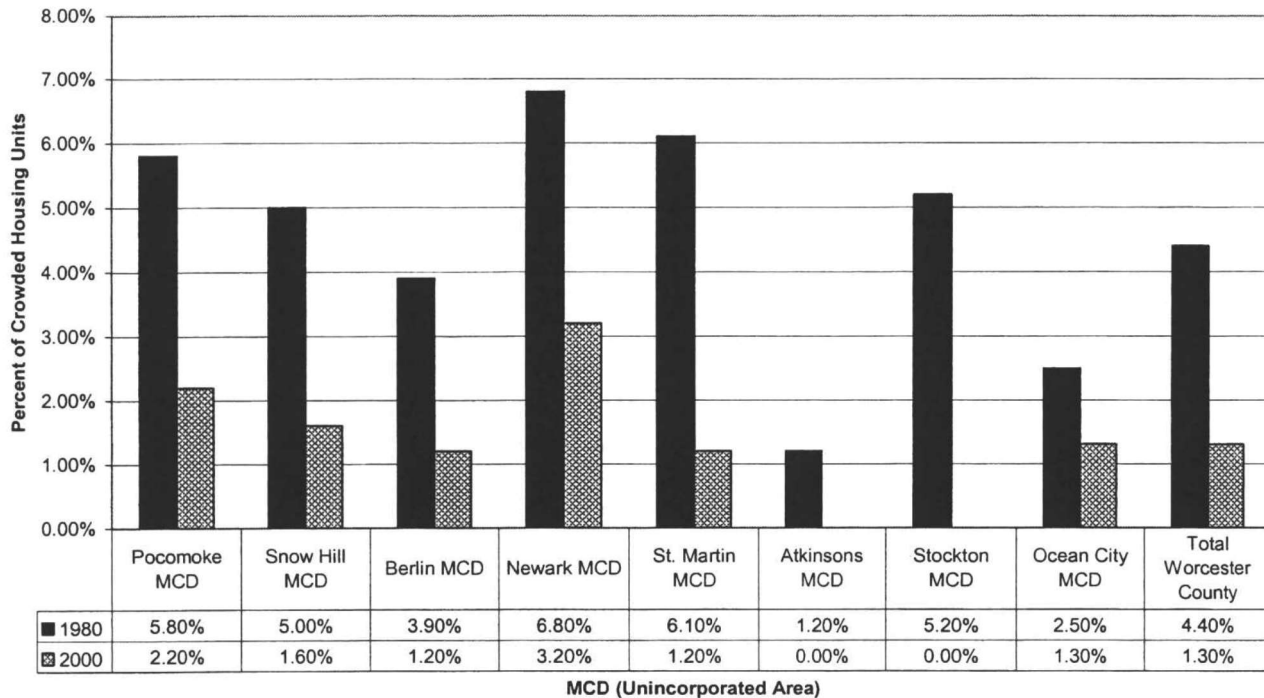
*All Unincorporated Area

**1.01 or more occupants per room

In 1980, the percent of crowded housing units in the unincorporated areas of the county was 4.4%, with Newark MCD having the highest rate at 6.8% and Atkinsons MCD having the lowest at 1.2%. By 2000, the county unincorporated rate of crowded housing decreased to 1.3% of all occupied housing units, with Newark MCD still the highest with a rate of 3.2% and both Atkinsons MCD and Stockton MCD with 0.0%.

Chart 5 illustrates a comparison of crowded housing units in Worcester County and unincorporated areas in 1980 and 2000.

**CHART 5
COMPARISON OF CROWDED HOUSING UNITS IN UNINCORPORATED AREAS OF
WORCESTER COUNTY FROM 1980 - 2000**



The number and percent of housing units lacking plumbing facilities in Worcester County and unincorporated areas in 1980 and 2000 are presented in Table 8.

**TABLE 8
A COMPARISON OF THE NUMBER AND PERCENTAGE OF UNITS LACKING
PLUMBING FACILITIES BY MINOR CIVIL DIVISION, UNINCORPORATED AREA
AND WORCESTER COUNTY 1980 – 2000**

Minor Civil Division	Total Unincorporated Area				Total Worcester County			
	1980		2000		1980		2000	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Pocomoke	104	9.8%	19	2.1%	163	6.7%	19	0.7%
Snow Hill	123	12.3%	29	2.7%	200	11.1%	34	1.7%
Berlin	167	5.7%	53	0.6%	221	5.9%	53	0.5%
Newark*	39	12.3%	6	1.4%	39	12.3%	6	1.4%
St. Martin*	97	15.3%	6	0.6%	97	15.3%	6	0.6%
Atkinsons*	19	7.4%	2	0.6%	19	7.4%	2	0.6%
Stockton*	106	18.8%	26	5.4%	106	18.8%	26	5.4%
Ocean City	28	0.4%	7	0.2%	63	0.6%	60	0.2%
TOTAL	683	10.6%	148	0.9%	908	7.8%	206	0.4%

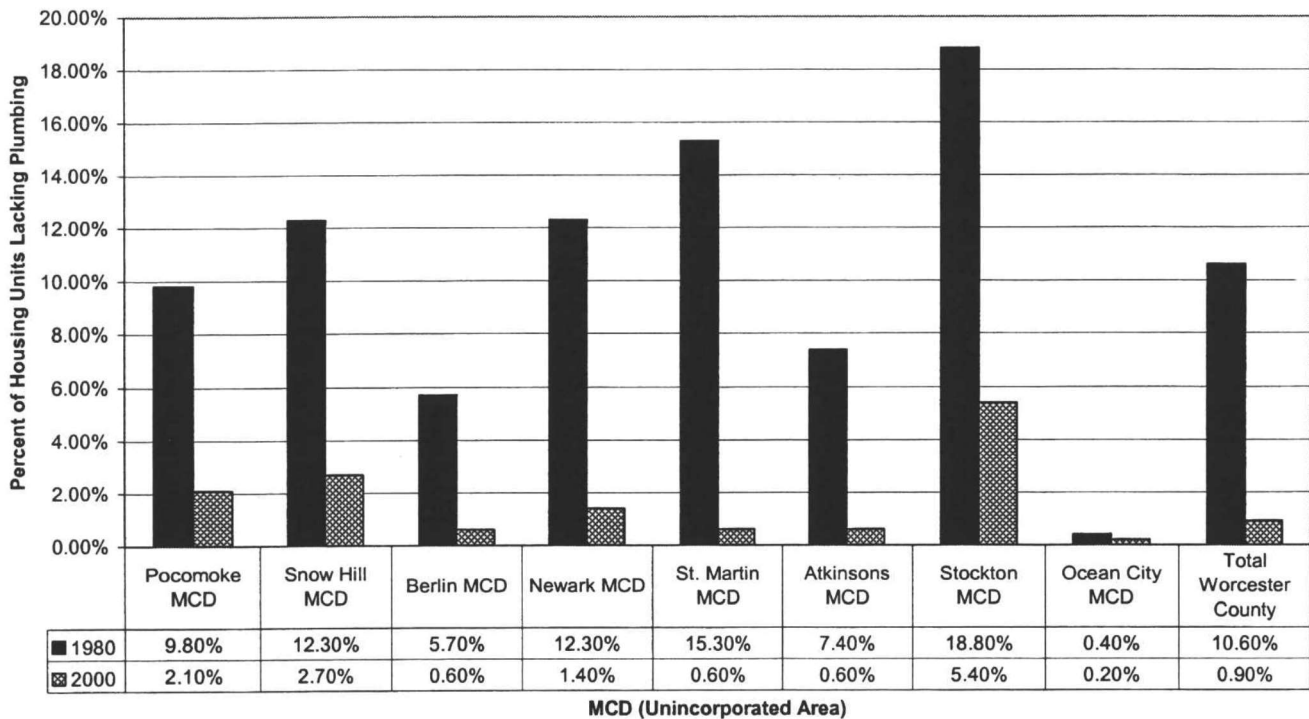
Percent is of total housing units

*All Unincorporated Area

In 1980 a total of 7.8% of all housing units in Worcester County and 10.6% in the unincorporated area lacked plumbing facilities. Stockton MCD had the highest rate in 1980 at 18.8% while Ocean City MCD had the lowest at 0.6%. In 2000 Stockton MCD still had the highest rate at 5.4% and Ocean City remained the lowest with 0.2%. The unincorporated areas of the county experienced a 92% reduction in units lacking plumbing in 2000 to a rate of 0.9%. The total number of housing units lacking plumbing in the county dropped in 2000 from 908 to 206, a rate of 0.4% representing a 95% percent reduction overall indicating a significant improvement over the 20 year period. Therefore, it can be concluded that housing units without plumbing facilities in Worcester County have become virtually non-existent, as the rate is less than one half of one percent.

Chart 6 illustrates a comparison of plumbing facilities in Worcester County and unincorporated areas in 1980 and 2000.

**CHART 6
COMPARISON OF HOUSING UNITS LACKING PLUMBING IN UNINCORPORATED AREAS OF
WORCESTER COUNTY FROM 1980 - 2000**



SECTION II

2004 SURVEY OF SUBSTANDARD HOUSING UNITS

A. METHODOLOGY

The methodology for the 2004 study called for a two-step process. The first step was the windshield inspection described earlier, the second, an individual interview with an occupant for relevant economic and demographic characteristics of the inhabitants. This was followed by an inspection of the identified housing unit. The survey was conducted over a four-week period during May and June. First, it involved a windshield inspection of all the single family housing units in the county (multi-family buildings were not included). In most cases, a second, and in others, a third inspection was done to insure the reliability of the ratings. Three exterior features, the roof, the siding, and the yard of each house were inspected using a 3-point scale where (1) was good, (2) was fair, and (3) was poor. Houses with a score of 7 or more were plotted using a GPS receiver for inclusion in the second step.

During the second step of the two-phase process, following the identification of an occupied substandard unit, a minimum of three attempts to contact the occupants was made to complete the survey instrument. After the first attempt to interview an occupant, the date and time were noted. Subsequent attempts were made at different times of the day, different days of the week, including weekend afternoon and evenings so as to maximize the opportunity of finding someone home. In some cases, it was evident that the occupants were at home but would not open their door. Sometimes interviews were concluded after the third attempt when it was observed by chance that people were at home. Frequently neighbors were helpful in providing information about where occupants could be found, i.e. at job sites or working the fruit stand down the road. There were several homes where repeated attempts to secure an interview were futile. The interviewer had a letter of identification from Mr. Jerry Redden, the director of the Worcester County Department of Economic Development identifying the purpose of the study and encouraging respondents to cooperate with the interview process. Jo Ellen Bynum, the Housing Administrator was listed as the person to contact with any questions.. We found most people were cordial and cooperative with the interview. Nearly all occupants were able to answer the survey questions.

B. FINDINGS – OVERVIEW

The windshield survey of all single family housing units identified 278 houses* that qualified under the criteria as substandard housing. Table 9 depicts these 278 housing units by occupancy status and by census tract.

TABLE 9
SUBSTANDARD HOUSING UNITS BY CENSUS TRACT

Census Tract	Occupied	Vacant	Abandoned	Used for Other Purposes	TOTAL
9901	0	0	0	0	0
9902	22	17	20	0	59
9903	5	4	5	0	14
9904	2	6	4	1	13
9905	0	0	1	0	1
9906	0	0	0	0	0
9907	0	1	4	1	6
9908	7	15	24	0	46
9909	1	0	1	0	2
9910	20	32	50	4	106
9911	6	5	17	3	31
TOTAL	63	80	126	9	278

* Maps of the location of each housing unit by census tract and Minor Civil Division (MCD) are located in the appendix of this report.

Of the 278 units identified, 63 or 22.7% were occupied, 80 or 28.8% were vacant, 126 or 45.3% were considered abandoned, and nine or 3.2% were being used for other purposes. It should be noted that the process of assigning a specific classification to an unoccupied unit was somewhat subjective since one of the most important variables in this determination was the intent of the owner, and that was frequently hard to ascertain. Essentially, a unit was classified as abandoned if it appeared that the clear intent of the owner was not to have the unit occupied again. The owner's intent could either be explicitly known if he/she told someone of his/her plans, or implicitly expressed through the action of letting the unit fall into such disrepair that it was uninhabitable due to health and safety factors and/or the apparent cost of restoration was beyond the value of the building. In units where windows and doors were broken or missing and the structure was clearly unsound, intent seemed clear; however, there were cases where intent was not easy to discern. For this reason the 206 units identified as vacant or abandoned could vary as much as 10 to 15% between the two categories.

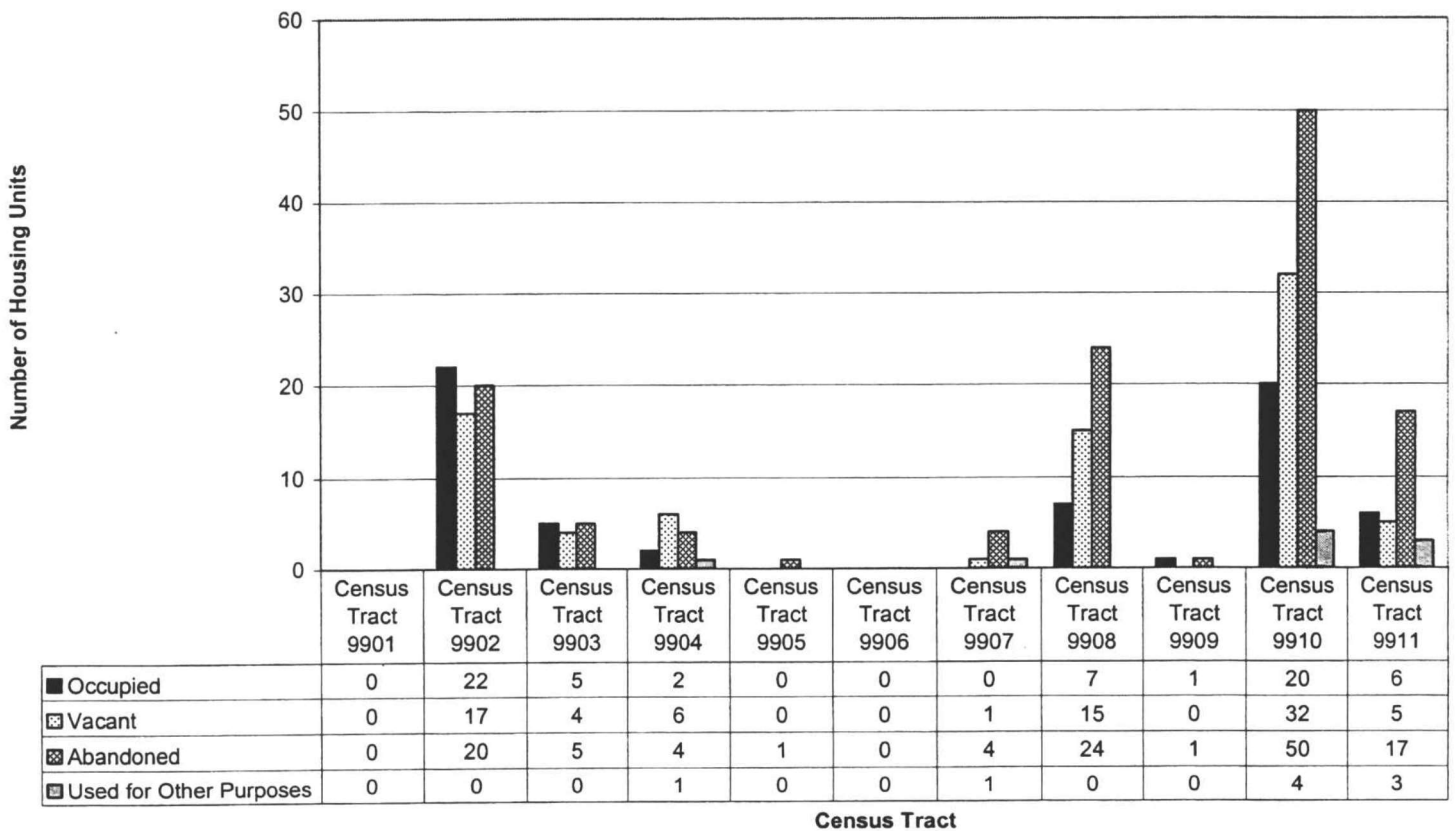
A unit was only classified as "used for other purposes" when that unit was being so utilized and the intention of the owner was known because of an interview with the owner or a neighbor. The majority of structures in this category were being used as storage units; however, one structure had been turned into a housing unit for turkeys. In most cases, it appeared possible to return the unit to a residence with rehabilitation.

The majority of substandard housing units identified were located in four out of the 11 census tracts in Worcester County. These census tracts were 9902, 9908, 9910, and 9911. Census tract 9902 borders Wicomico County to the west and Delaware to the north. Whaleyville, Bishopville, Showell, Timmonstown, and Libertytown are included in this census tract. Census tract 9908 includes the rural area between Berlin and Snow Hill both east and west of Route 113. Newark is included in tract 9908. Census tract 9910 borders Somerset County to the west and Wicomico County to the north. The greater Pocomoke City area, east of Route 13 and including Stockton

and Girdletree, is located in this tract. Census tract 9911 includes the greater Pocomoke City area west of Route 13. Borders include Virginia on the south and Somerset County on both the west and north borders. Unionville is included in this census tract. Only one substandard unit was identified in census tracts 9901, 9905, and 9906, which encompass Ocean City and Ocean Pines. These data are presented visually in Chart 7.

A minimum of three occupant-contacts was attempted at each of the 63 occupied units. Out of these, 38 surveys or 60.3% were fully completed; 10 households declined to participate in the survey, and 15 units had no one available to complete a survey.

**CHART 7
NUMBER OF SUBSTANDARD HOUSING UNITS BY OCCUPANCY AND BY CENSUS TRACT**



Marginal or Grey Areas

In addition to the 278 identified substandard units, numerous marginal housing units came close to meeting the criteria for inclusion in the study by scoring six of the seven required points. Areas with clusters of two or more of these houses were referred to as *grey areas* because the condition of the units fell just below the cutoff score for inclusion. In general, the *gray areas* are vulnerable housing that could slide into the substandard category with continued neglect; however, with some rehabilitation and ongoing maintenance they can remain outside of the inclusion criteria. Though it was beyond the scope of this study to record the number and

locations of individual marginal units, the number is estimated at between 65 and 70 such houses in the general areas indicated below:

- Steam Mill Hill in Whaleyville
- Morris Road (south of Selbyville) between Route 113 and Hidden Acres Lane
- Hotel Road (south of Selbyville) from Route 113 to the intersection of the railroad tracks with the road
- Peerless Road beginning at Route 113 and ending at Campbelltown Road
- Campbelltown Road from the intersection of Peerless Road to Curtis Methodist Church
- Flower Street in Briddletown beginning at Honeysuckle Road and continuing to Seahawk Road
- Seahawk Road from Flower Street to Sinepuxent Road
- Germantown Road starting at New Bethel United Methodist Church and ending at Harrison Road
- Bethel Road beginning at Germantown Road and ending at Harrison Road
- Newark Road from Route 113 to Daffodil Lane.
- Scotland Road beginning at Route 365 (Public Landing Road) and ending at Mount Wesley United Methodist Church

In addition to the specific areas listed above, marginal units were also found in Girdletree and Stockton, both of which had many houses that appeared to be 75-125 years old. Generally speaking, the older houses in Girdletree appeared to be somewhat better maintained than those in Stockton. Only a few houses in Girdletree qualified as *grey areas*, mostly scattered along Dukes Road, Railroad Avenue, Olney Road, and Route 12. On the other hand, many homes in Stockton appeared to be in serious need of rehabilitation. Some houses had building materials in the yards which implied that rehab efforts were under way. Overall, Stockton had by far the largest cluster of houses in the county categorized as *grey area* units. The majority of those homes were located along Route 366 between Hursley Road and Ticktown Road and on Route 12 both north and south of town.

Housing Tenure

Table 10 presents housing tenure of the occupied substandard housing units surveyed.

**TABLE 10
NUMBER AND PERCENT OF SUBSTANDARD HOUSING UNITS OWNER-
OCCUPIED AND RENTER-OCCUPIED BY CENSUS TRACT**

Census Tract	Owner-Occupied		Renter-Occupied	
	Number	Percent	Number	Percent
9901	0	*	0	*
9902	6	*	5	*
9903	2	*	2	*
9904	0	*	2	*
9905	0	*	0	*
9906	0	*	0	*
9907	0	*	0	*
9908	2	*	3	*
9909	0	*	1	*
9910	9	*	1	*
9911	5	*	0	*
TOTAL	24	63.2%	14	36.8%

* Individual census tract percentages are based on numbers too small to be meaningful.

In terms of tenure of the 38 units for which there was full information, 24 or 63.2% of the housing units were owner-occupied, and 14 or 36.8% were renter-occupied. This means of those housing units for which there was information available, almost twice as many occupied housing units were owner-occupied as compared to renter-occupied.

House Age

Since house age is considered a variable in the quality of substandard housing, the identified housing units were evaluated on their age. Table 11 presents these data by census tract.

**TABLE 11
AGE OF HOUSE* BY CENSUS TRACT**

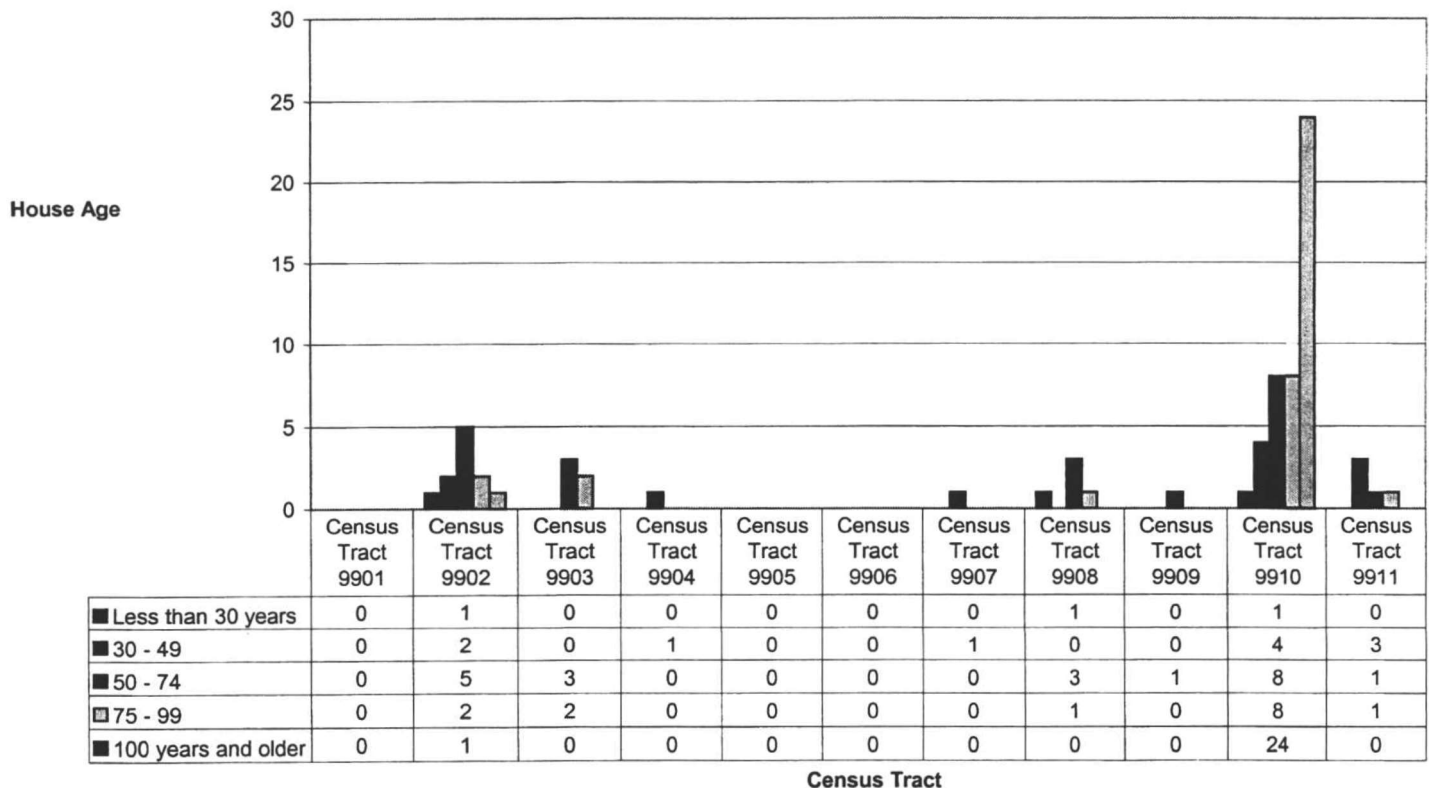
Census Tract	Less than 30 years old	30 - 49 years old	50 - 74 years old	75 - 99 years old	100 years or older
9901	0	0	0	0	0
9902	1	2	5	2	1
9903	0	0	3	2	0
9904	0	1	0	0	0
9905	0	0	0	0	0
9906	0	0	0	0	0
9907	0	1	0	0	0
9908	1	0	3	1	0
9909	0	0	1	0	0
9910	1	4	8	8	24
9911	0	3	1	1	0
TOTAL	3	11	21	14	25

* Does not include majority of abandoned housing units or structures being used for other purposes.

The age, actual or estimated, of individual structures was obtained from either the occupants or was estimated by the surveyor for 74 or 49.0% of the 151 substandard units evaluated. Data was not obtained for the remaining 77 housing units as the age of the structure could not be determined by the surveyor. The majority of the 151 housing units evaluated externally were occupied or vacant units; however, a few apparently abandoned housing units and structures, following further evaluation by the surveyor, were found to be used for other purposes. Because of this change in status, these structures were added to this total. Housing units initially identified as abandoned were not evaluated for age as there was no reliable way to estimate their age given their various states of deterioration.

With the exception of census tract 9910, the largest age group of substandard housing was between 50 and 74 years old with 21 housing units falling into this category. However, census tract 9910—which includes Stockton and Girdletree and is located between Snow Hill Town and Pocomoke City—contained 24 housing units that were 100 years old or older making this the largest age group overall. The median age of houses in the study was approximately 75 years with the youngest house at 15 years old and the oldest house at 150 years old. House age by census tract for the 74 homes surveyed is illustrated in Chart 8.

**CHART 8
HOUSE AGE BY CENSUS TRACT**



Value of Housing Unit

The value of the substandard housing units surveyed was also recorded. This information was obtained either from the occupant or an estimate made by the surveyor. These data are subjective, but give a reasonable indication of the monetary value of substandard housing. Due to the rapid growth in the Berlin area, the housing unit values are much higher in Berlin than in the rest of the county; therefore, a separate scale was used to reflect the value of these substandard housing units. Table 12 shows the breakdown of the surveyed housing units by value.

**TABLE 12
ESTIMATED VALUE OF SUBSTANDARD HOUSING UNITS**

	Number	Percent
Berlin area \$75,000 - \$120,000	5	4.5%
Berlin area under \$75,000	15	13.4%
County \$75,000 - \$90,000	3	2.7%
County \$30,000 - \$75,000	52	46.4%
County under \$30,000	37	33.0%
TOTAL	112	100.0%

The value of the housing unit was estimated for 112 or 40.3% of the 278 substandard units identified by this survey. The housing units for which value was not estimated were either abandoned or the surveyor was unable to determine an approximate value. Of the units whose value was estimated, the majority, 104 or 92.9%, were valued under \$75,000 while 37 or 33.0% of those units were valued at \$30,000 or below. Only eight or 7.2% of the units had an estimated value over \$75,000.

C. OCCUPANT INFORMATION - DEMOGRAPHICS

The following data on occupant information is based on the 38 households that the surveyors were able to contact and who agreed to participate in the survey.

Number of Occupants per Household

A breakdown of the number of household occupants for the 38 households surveyed is presented in Table 13.

**TABLE 13
TOTAL NUMBER OF OCCUPANTS PER HOUSEHOLD**

Number of Occupants	Number of Households	Percent
1 Occupant	9	23.7%
2 Occupants	13	34.2%
3 Occupants	8	21.1%
4 Occupants	6	15.8%
5 Occupants	1	2.6%
6 Occupants	0	0.0%
7 Occupants	1	2.6%
TOTAL	38	100%

A total of 95 individuals lived in the 38 occupied housing units, an average of 2.5 persons per household. The most frequent number of individuals per household was two occupants with 13 or 34.2% of the households falling into this category. The majority of the housing units (30 or 79.0%) had three or fewer occupants. Only two households or 5.3% consisted of five or more individuals. Therefore, it is clear that small households make up the vast majority of identified substandard housing occupants.

Disabled Occupants

Table 14 presents data regarding the number of occupied housing units with one or more disabled occupants.

**TABLE 14
NUMBER OF DISABLED OCCUPANTS PER HOUSEHOLD**

Number of Disabled Occupants	Number of Households	Percent
No Disabled Occupants	21	55.3%
1 Disabled Occupant	14	36.8%
2 Disabled Occupants	3	7.9%
Total Number of Households	38	100.0%

About half of the households that participated in the survey had one or more disabled occupants residing in the home. Out of the 95 total occupants, 20 or 21.1% were disabled and 17 or 44.7% of the 38 households surveyed had at least one occupant with a disability. These households were evenly dispersed throughout the county. The percentage of disabled individuals living in substandard housing in Worcester County is about equivalent to the percent of disabled individuals in all of Worcester County. According to the 2000 U.S. Census, 21.0% of the population age five years and over, or 9,154 individuals out of 43,569 in Worcester County, have a disability. This percent is only slightly higher than the percent of individuals in the State of Maryland age five years and over that have a disability, 17.6% or 854,345 out of 4,843,046 individuals.

Age of Occupants

A breakdown of number of occupants by age group is illustrated in Tables 15 and 16.

**TABLE 15
NUMBER OF OCCUPANTS PER HOUSEHOLD BY AGE GROUP**

Number of Occupants	Under 18 years old		18 – 39 years old		40 – 64 years old		Age 65 and over	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>Households with:</i>								
No Occupants	28	73.7%	26	70.3%	7	18.4%	20	54.1%
1 Occupant	6	15.8%	8	21.6%	17	44.7%	16	43.2%
2 Occupants	3	7.9%	2	5.4%	14	36.8%	1	2.7%
3 Occupants	0	0.0%	1	2.7%	0	0.0%	0	0.0%
4 Occupants	1	2.6%	0	0.0%	0	0.0%	0	0.0%
Total Number of Households	38	100.0%	37*	100.0%	38	100.0%	37*	100.0%

*Data not available for one of the surveyed occupied units.

**TABLE 16
INDIVIDUALS BY AGE GROUP**

Age Group	Number	Percent
Under 18	16	17.0%
18 – 39	15	16.0%
40 – 64	45	47.9%
65 and Over	18	19.1%
TOTAL	94	100.0%

As shown in the table, the largest occupant age group was between 40 and 64 years old with 45 or 47.9% of the 94 occupants falling into this age range. Of the participating households, 31 or 81.5% had one or two occupants in this age range. Eighteen individuals or 19.1% were age 65 and over; however, 17 households or 45.9% of the surveyed housing units had occupants in that age group. The majority of these households (16 out of 17) had only one elderly resident. A total of 10 housing units or 26.3% had occupants under the age of 18. Most of these units had only one or two minor residents; however, one unit housed four occupants under the age of 18. The smallest occupant age group was that between 18–39 years old with 15 individuals or 16.0% of all occupants falling into this category.

Owner/Renter Demographics

Tables 17 and 18 present respectively the sex and age of the unit owner or renter of the surveyed substandard housing units.

**TABLE 17
SEX OF UNIT OWNER OR RENTER**

	Number	Percent
Male	16	45.7%
Female	19	54.3%
TOTAL	35*	100.0%

* Data not available for three of the surveyed occupied units.

Of the 35 households that completed the survey question, 19 or 54.3% of owners or renters were female, and 16 or 45.7% were male. These data were unavailable on three of the surveys completed for occupied units.

**TABLE 18
AGE OF UNIT OWNER OR RENTER**

Age of Owner or Renter	Number	Percent
35 - 44	4	12.9%
45 - 54	6	19.4%
55 - 64	8	25.8%
65 - 74	6	19.4%
75 - 84	4	12.9%
85 - 94	3	9.6%
TOTAL	31*	100.0%

* Data not available for seven of the surveyed occupied units.

The majority of household owners or renters were between the ages of 45 and 74 with 20 or 64.6% of individuals falling into this age range. Four individuals or 12.9% of owners or renters were between the ages of 35 and 44, and three or 9.6% were above the age of 85. It should be noted that seven households declined to provide information for this item.

Household Type

The type of household, illustrated in Table 19, was broken down into eight categories: (1) single individual; (2) husband and wife (no children); (3) husband and wife with children; (4) single parent with children; (5) related adults; (6) unrelated adults; (7) extended family; and (8) other.

**TABLE 19
HOUSEHOLD TYPE**

Type of Household	Number	Percent
Singe Individual	9	23.7%
Husband & Wife (no children)	5	13.1%
Husband & Wife with children	3	7.9%
Single Parent with children	2	5.3%
Related Adults	6	15.8%
Unrelated Adults	3	7.9%
Extended Family	9	23.7%
Other	1	2.6%
TOTAL	38	100.0%

Overall, the two most common types of households were "single individual" and "extended family." Each of these categories consisted of nine households or 23.7%. "Related adults" was the next largest category with six households or 15.8%. "Husband and wife with no children" occupied five units or 13.2% while "husband and wife with children" occupied three or 7.9% of the housing units. "Single parent with children" was the second smallest category with two households or 5.3% falling under this criterion. There was one household placed in the "other" category, and this household consisted of both related and unrelated adults. Seven of the nine individuals who lived alone shared their age with the surveyor, and of those seven, five individuals or 71.4% were over the age of 62.

Race of Household

The racial composition of the surveyed households is presented in Table 20.

**TABLE 20
RACE OF HOUSEHOLD**

Race	Number	Percent
Black	25	65.8%
White	12	31.6%
Other	1	2.6%
TOTAL	38	100.0%

Over twice as many substandard housing units were occupied by blacks than by whites, with 25 or 65.8% of households being black and 12 or 31.6% being white. There was one housing unit or 2.6% occupied by another race, Native Hawaiian, or other Pacific Islander. No respondent households considered themselves Hispanic or Latino.

D. OCCUPANT INFORMATION - ECONOMIC INFORMATION

Monthly Expenses

Data regarding the monthly rent or mortgage payment and monthly utility costs of the households that participated in the study are presented in Tables 21 and 22 respectively. Table 23 illustrates the combined total of these two factors to show the total monthly expense for each household.

**TABLE 21
MONTHLY RENT OR MORTGAGE PAYMENT BY HOUSEHOLD**

	Number	Percent
No Monthly Payment	18	58.0%
\$0.00 - \$149.00	2	6.5%
\$150.00 - \$299.00	2	6.5%
\$300.00 - \$449.00	4	12.9%
\$450.00 - \$599.00	4	12.9%
\$600.00 and above	1	3.2%
TOTAL	31*	100.0%

* Data not available for seven of the surveyed occupied units.

A significant number of households that participated in the survey paid no monthly rent or mortgage payment. Of the units surveyed, 18 units or 58.0% fell into this category. These occupants had no monthly rent or mortgage payments either because there was no mortgage on the house or because they were tenants who worked for the homeowner in lieu of paying monthly rent. The amount of the mortgage or rent payment made each month by the remaining households ranged from \$75.00 to \$625.00 per month with an average payment of about \$350.00. Only one household or 3.2% paid more than \$600.00 a month for rent or mortgage. It should be noted that seven of the respondents failed to answer this item.

**TABLE 22
AVERAGE MONTHLY UTILITIES COST BY HOUSEHOLD**

	Number	Percent
\$0.00 - \$99.00	4	12.5%
\$100.00 - \$199.00	7	21.8%
\$200.00 - \$299.00	8	25.0%
\$300.00 - \$399.00	5	15.6%
\$400.00 - \$499.00	2	6.3%
\$500.00 - \$599.00	4	12.5%
\$600.00 and above	2	6.3%
TOTAL	32*	100.0%

* Data not available for six of the surveyed occupied units.

Of the 38 households surveyed, 32 or 84.2% answered the question pertaining to average monthly utilities expense. In contrast to the findings regarding monthly rent or mortgage payment, all of these households did have a monthly utilities payment. The average monthly cost was about \$278.00 a month with a range from \$25.00 to \$1,000.00. The majority of households paid between \$100.00 and \$399.00 a month with 20 housing units or 62.5% of the households that completed this question falling under this category. Four units or 12.5% paid under \$100.00 per month, and only two housing units or 6.3% paid \$600.00 or more each month for utilities.

**TABLE 23
TOTAL MONTHLY EXPENSES BY HOUSEHOLD**

	Number	Percent
\$0.00 - \$149.00	5	16.1%
\$150.00 - \$299.00	8	25.8%
\$300.00 - \$449.00	8	25.8%
\$450.00 - \$599.00	3	9.7%
\$600.00 - \$749.00	1	3.2%
\$750.00 - \$899.00	2	6.5%
\$900.00 and above	4	12.9%
TOTAL	31*	100.0%

* Data not available for seven of the surveyed occupied units.

Total monthly cost (rent/mortgage plus utilities) for most of the housing units was below \$450.00 per month. Twenty-one units or 55.3% fell into this category. The amount each household paid per month ranged from \$25.00 to \$1,300.00 with an average monthly payment of about \$430.00. Four housing units or 10.5% had monthly expenses exceeding \$900.00.

Sources of Income

The survey identified 35 adult residents of surveyed housing units currently employed in the labor force. The occupation of each individual was classified according to the *U.S. Department of Labor 'Bureau of Labor Statistics' Occupational Classification System Manual* which permits a standardized classification of all occupations. Table 24 illustrates the occupations of the occupants in the identified substandard housing units.

**TABLE 24
OCCUPATIONS OF WORKING ADULTS**

Occupation Category	Number of Individuals
Category C – (Sales)	2
Category D – (Administrative Support)	3
Category E – (Precision Production)	1
Category F – (Machine Operator)	1
Category G – (Transportation)	2
Category H – (Laborer)	5
Category K – (Service Occupation)	21
TOTAL	35

Of the respondents, the majority (21 or 60.0%) were employed in Category K-Service Occupation positions. This category includes such jobs as food and health service, cleaning and building service, and personal service occupations. The second largest category was Category H jobs employing five individuals or 14.3% of the working adults. Jobs found in this category include agriculture and marine workers as well as construction workers. Both Categories H and K represent lower income jobs. Of the remaining working adults, one to three individuals or 2.9% to 8.6% were employed in each of the following categories: C, D, E, F, and G.

In addition to employment income, many occupants of the surveyed substandard housing units receive additional income including public assistance or social security. These data are presented in Table 25.

**TABLE 25
OTHER SOURCES OF HOUSEHOLD INCOME**

	Number of Households
Public Assistance	3
Social Security	22
Unemployment	2
Family	0
Fuel Assistance	3
Other	4
None	12

Of the households that participated in the survey, 12 or 31.6% received no other sources of income than wages from employment. The majority of households that did receive additional income received Social Security with 22 or 57.9% of surveyed households in this category. The same number of households collected public assistance and fuel assistance with three housing units or 7.9% falling into each category. Two households or 5.3% received unemployment, and four households or 10.5% were placed in the "other" category. The households in this category received either veteran benefits or SSI. Most households had one form of income in addition to employment wages; however, eight households or 21.1% had two or more other sources of income.

Household Income

At the request of Worcester County, amount of total household income was classified into four categories according to federal poverty classifications based on income and household size. As defined by the Maryland Department of Housing and Community Development, extremely low income is 30% of the median family income for the specific family size, low income is 50% of the median family income for the specific family size, and moderate income is 80% of the median family income for the specific family size. Table 26 shows the breakdown of income by category.

**TABLE 26:
INCOME CATEGORIES**

Category	Household Size							
	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
Extremely Low Income	11,550	13,200	14,800	16,450	17,800	19,100	20,400	21,750
Low Income	19,200	21,950	24,700	27,450	29,650	31,850	34,050	36,250
Moderate Income	30,750	35,150	39,550	43,900	47,450	50,950	54,450	57,950

A breakdown of the average monthly income of the surveyed households is presented by census tract in Table 27.

**TABLE 27
HOUSEHOLD INCOME BY CENSUS TRACT**

Census Tract	Extremely Low Income	Low Income	Moderate Income	Above Moderate Income
9901	0	0	0	0
9902	6	3	2	0
9903	3	1	0	0
9904	1	0	1	0
9905	0	0	0	0
9906	0	0	0	0
9907	0	0	0	0
9908	0	5	0	0
9909	0	1	0	0
9910	6	1	3	0
9911	4	1	0	0
TOTAL	20	12	6	0

Most of the households that participated in the survey had an extremely low income (which was to be expected) with 20 or 52.6% of households falling into this category. The balance of households had either a low income or moderate income with no households having an above moderate income. Six households or 15.8% had a moderate income while the remaining 12 or 31.6% had a low income.

E. PHYSICAL CONDITION OF HOUSING UNITS

The exteriors of all but dilapidated housing units were evaluated based on four criteria: grounds, roof, siding, and windows/doors. Each of these categories received a rating between one and three: (1) adequately maintained; (2) needs some extensive repair/maintenance; (3) needs extensive rehab. Table 28 displays the data found for 151 evaluated housing units. Dilapidated structures were not evaluated for condition since it was assumed that the cost of rehabilitation would exceed the value of the structure.

TABLE 28
A COMPARISON OF EXTERIOR CONDITION OF ALL HOUSING UNITS AND OCCUPIED ONLY UNITS

	Adequately Maintained		Needs some Extensive Repair/Maintenance		Needs Extensive Rehab.	
	Number	Percent	Number	Percent	Number	Percent
<i>All Evaluated Units</i>						
Grounds	22	14.6%	64	42.4%	65	43.0%
Roof	5	3.3%	36	23.8%	107	70.9%
Siding	0	0.0%	45	29.8%	106	70.2%
Windows/Doors	3	2.0%	35	23.2%	112	74.2%
<i>Occupied Only Units</i>						
Grounds	9	14.3%	27	42.9%	25	39.7%
Roof	4	6.3%	22	34.9%	34	54.0%
Siding	0	0.0%	16	25.4%	45	71.4%
Windows/Doors	1	1.6%	13	20.6%	46	73.0%
Interior Walls*	6	15.8%	14	36.8%	18	47.4%

Note: Percentages may not add up to 100.0% due to missing data.

*Numbers are based on the 38 housing units that were inspected inside.

The survey evaluated the majority of housing units as needing extensive rehabilitation for all categories (excluding condition of the grounds), with 107 or 70.9% showing the roof in need of extensive rehab, 106 or 70.2% needing new siding, and 112 or 74.2% needing extensive rehab to windows/doors. The grounds for all housing units were in better condition overall, with 22 units or 14.6% being rated as adequately maintained and 64 or 42.4% needing some extensive repair/maintenance.

The condition of the interior walls was also evaluated on as many occupied housing units as were accessible (38 total units). Of these units, the interior walls for six or 15.8% were evaluated as adequate, 14 or 36.8% were in need of some extensive repair, and 18 or 47.4% were considered to be in need of extensive rehab.

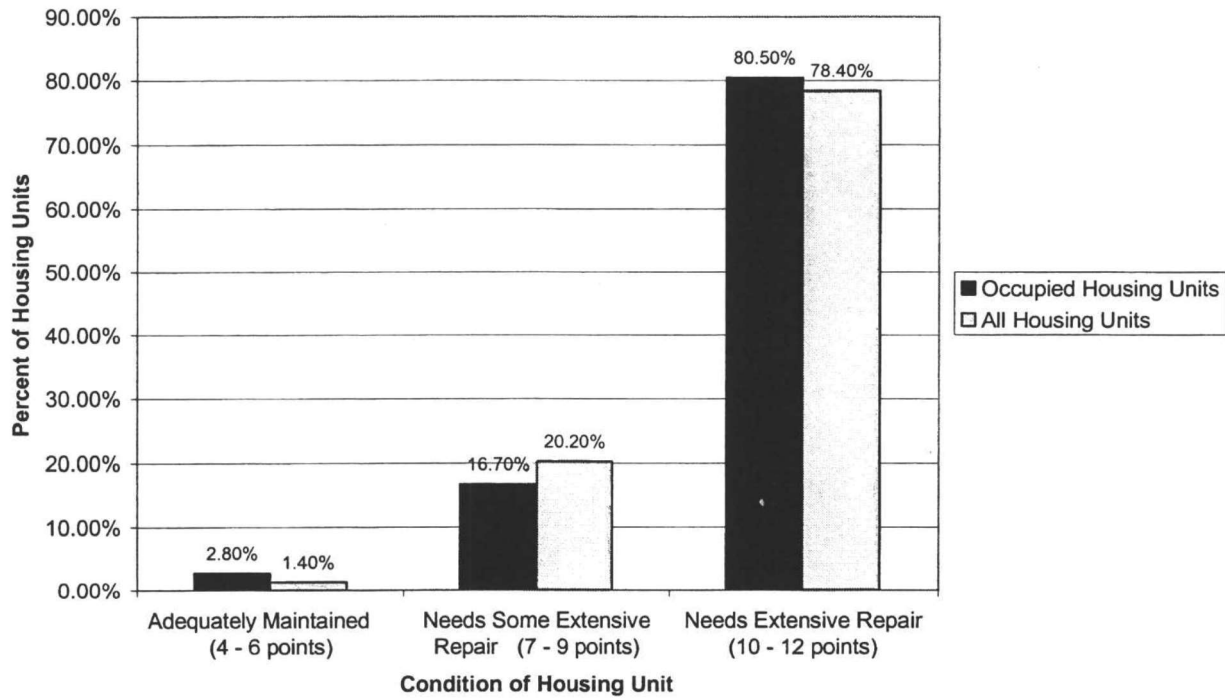
A 12-point scale was developed to summarize the exterior conditions of each housing unit. This scale is based on the ratings given for the condition of the grounds, roof, siding, and windows/doors. The number of points a structure can receive ranges from four to 12, with four meaning that an individual structure received a rating of "adequate" in all four categories and 12 meaning that the structure received a rating of "needs extensive rehab" in all four categories. For example: a housing unit that has grounds in adequate condition (1 point), a roof in need of some extensive repairs (2 points), siding needing extensive repair (3 points), and windows/doors needing extensive rehab (3 points) would receive a total score of nine points.

A comparison of total score between occupied only units and all housing units is shown in Table 29 and Chart 9. No significant difference was found between the overall conditions of occupied units as compared to all housing units.

**TABLE 29
SUMMARY OF STRUCTURAL CONDITIONS**

	No. of Points	Occupied Only		All Housing Units	
		Number	Percent	Number	Percent
Adequately Maintained	4-6	1	2.8%	2	1.4%
Needs some Extensive Repair/Maintenance	7-9	6	16.7%	30	20.2%
Needs Extensive Repair	10-12	29	80.5%	116	78.4%
TOTAL		36	100.0%	148	100.0%

COMPARISON OF OCCUPIED HOUSING UNITS AND ALL HOUSING UNITS BY SUMMARY OF STRUCTURAL CONDITION



Condition of foundation was another exterior characteristic that was evaluated; however this was not included in the total score. These data are presented in Table 30.

**TABLE 30
CONDITION OF FOUNDATION**

	Number	Percent
Foundation Enclosed	113	77.9%
Foundation Not Enclosed	32	22.1%
TOTAL	145	100.0%

Note: Numbers only include the housing units that were evaluated.

Of the homes evaluated, 113 or 77.9% had an enclosed foundation (which is considered a good rating) while 32 or 22.1% had only a partially enclosed or non-enclosed foundation.

Key Indicators of Substandard Housing

Table 31 shows the data collected for eight select key variables that are indicators of housing quality. Although the number of units lacking public sewer appears high (34 units or 89.5%), these units did have a septic tank or a cesspool. There were no housing units lacking connection to a public sewer, a septic tank, or cesspool.

**TABLE 31
SELECT KEY VARIABLE (OCCUPIED HOUSING UNITS ONLY)**

	Number of Units Lacking	Percent of Units Lacking
Water Supply	2	5.3%
Public Sewer	34	89.5%
Septic Tank/Cesspool	4	10.5%
Hot Water	8	21.1%
Lavatory	9	23.7%
Full Bathroom	5	13.2%
Working Plumbing	6	15.8%
Electricity	1	2.6%

not collected on why a house was abandoned, neighbors frequently volunteered what they knew. Many times they said that the house had been empty ever since the owner died or left to move somewhere else. The neighbors provided no single answer as to why houses became deserted. Several times we were told that the family of a deceased occupant did not want the house, nor could they sell it because no one had a clear title. Other times the story was simply that the former tenant moved for some reason and the condition of the house was so poor that no one could move in afterwards. Many of the owners appear to live out of the county.

The number of abandoned houses helps to explain the reduction in the older housing stock that was identified in the census analysis in the first section. It was pointed out that about 39% of the pre-1960 household stock disappeared between the 1980 and 2000 census. Therefore, a certain percent of the improvement in occupied housing can be attributed to the fact that at a given point in time some substandard housing is simply abandoned by the owner.

Another factor responsible for the improvement in housing was the strong economy of the 1990s. Low unemployment rates and higher salaries provided the funds necessary for low-income families to improve their houses without assistance. The improved economy also fueled a housing boom in many parts of the county, creating a market for the land upon which substandard housing may stand, in which case it is torn down so that new housing may be constructed.

The challenge facing the county government and citizens is how to address the pockets of depressed housing. Many of the residents who occupy substandard houses are poor, with few job skills; many are older, live on fixed incomes, and have disabilities which make it unlikely they would be able to contribute money or muscle to rehabilitation efforts. The data suggest that many of those living in the 143 substandard houses need assistance to improve their housing situations.

Appendix A
Maps of the Substandard Housing

Substandard Housing Inventory of Worcester County, Maryland

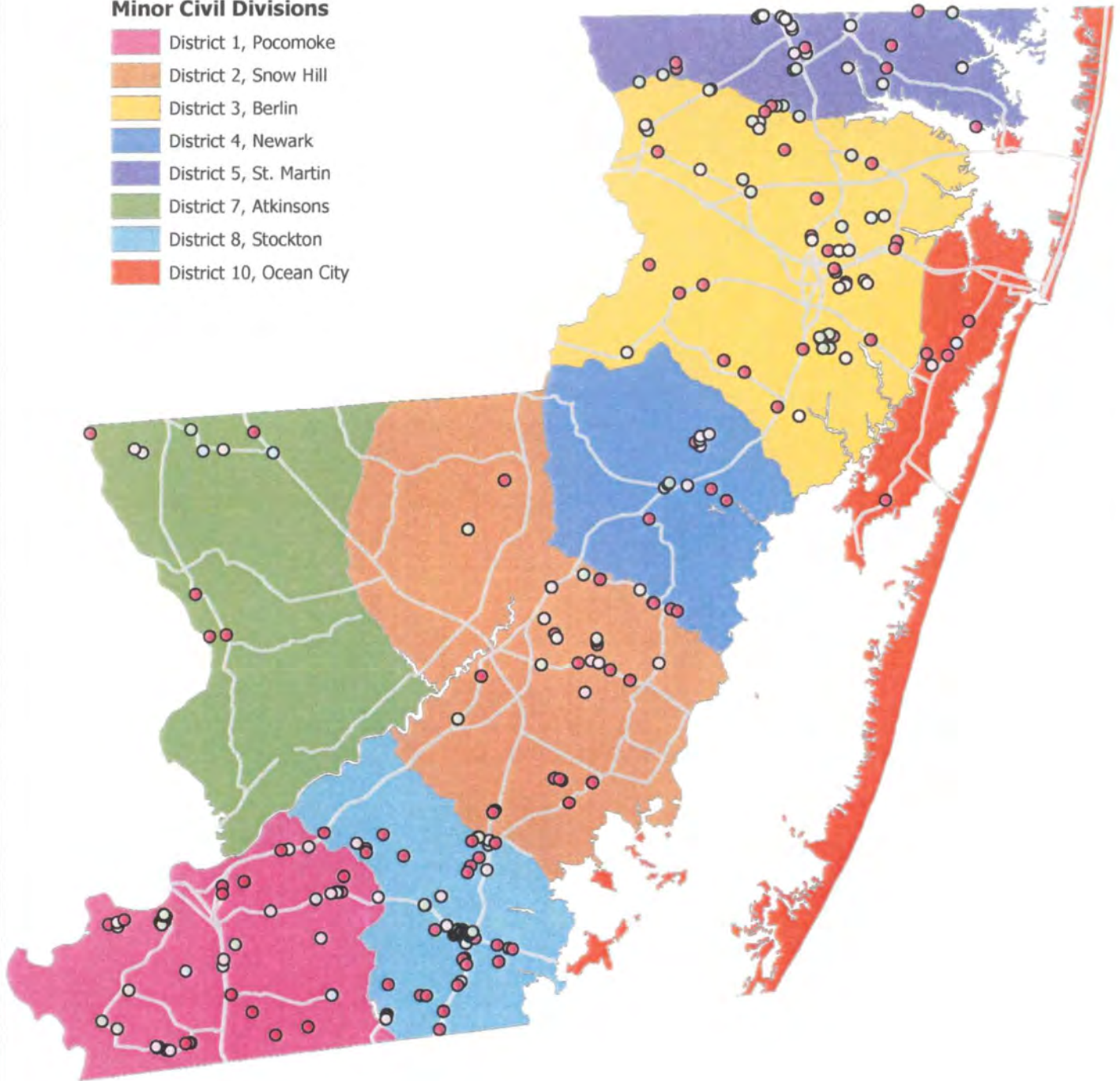
Summer 2004

House Status

- Inhabited/Occupied
- Vacant
- Abandoned
- Other

Minor Civil Divisions

- District 1, Pocomoke
- District 2, Snow Hill
- District 3, Berlin
- District 4, Newark
- District 5, St. Martin
- District 7, Atkinsons
- District 8, Stockton
- District 10, Ocean City



Substandard Housing Inventory of Worcester County, Maryland

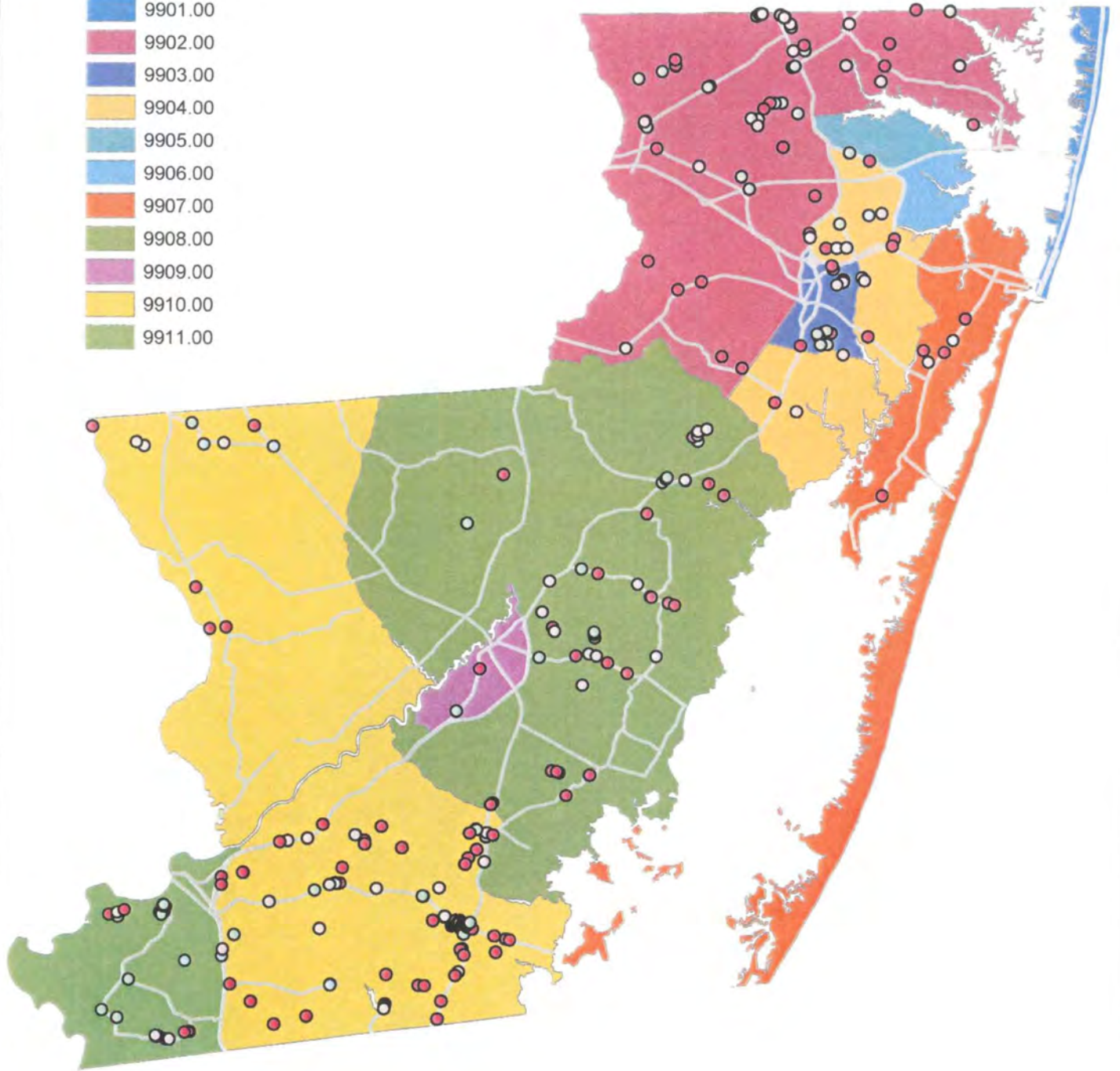
Summer 2004

House Status

- Inhabited/Occupied
- Vacant
- Abandoned
- Other

Census Tract

- 9901.00
- 9902.00
- 9903.00
- 9904.00
- 9905.00
- 9906.00
- 9907.00
- 9908.00
- 9909.00
- 9910.00
- 9911.00



Substandard Housing Inventory of Worcester County, Maryland

Marginal Areas

— Marginal Area
Road



HOUSING SURVEY FORM

(Worcester County)

1. Worker # ____ (0-8)

2. Map and Point # _____

3. Form # ____ (001-400)

OCCUPANT INFORMATION

4. Total # of occupants ____ (01-98)

5. disabled ____ (0-8)

Age of Occupants

6. # under 18 ____ (0-8)

7. # 18-39 ____ (0-8)

8. # 40-64 ____ (0-8)

9. # 65 and over ____ (0-8)

10. Sex of Unit Owner or Renter w/Lease:

Male ____ (1)

Female ____ (2)

11. Age of #10 above: ____ (01-98)

12. Household Type

Single Individual ____ (1)

Husband & Wife - no children ____ (2)

Husband & Wife - with children ____ (3)

Single Parent - with children ____ (4)

Related Adults ____ (5)

Unrelated Adults ____ (6)

Extended Family ____ (7)

Other (specify) ____ (8)

13. Race:

Do you identify yourself as (select one or more):

___ Black or African American

___ White

___ Two or More Races

___ American Indian or Alaska Native

___ Asian

___ Native Hawaiian or Other Pacific Islander

14. Ethnicity:

Do you identify yourself as (select only one):

___ Not Hispanic or Latino ___ Hispanic or Latino

15. How old is this house? ____ years (000-998)

16. Own or rent: Own ____ (1) Rent ____ (2)

17. Monthly Rent/Mtg. Payment Paid: ____ (001-998)

18. Avg. Monthly Utilities Cost: ____ (000-200)

19. Sum of #17 and #18 ____ (001-998)

20. Estimated Value of House:

Berlin Area

\$135,000 and up ____ (1)

\$120,000-\$135,000 ____ (2)

\$75,000-\$120,000 ____ (3)

Under \$75,000 ____ (4)

Remainder of County

\$90,000 and up ____ (5)

\$75,000-\$90,000 ____ (6)

\$30,000-\$75,000 ____ (7)

Under \$30,000 ____ (8)

No Answer ____ (9)

21. Occupations of Working Adults:

#1 _____

#2 _____

#3 _____

#4 _____

22. Other Sources of Income/Assistance:

Public Assistance ____ (1)

Social Security ____ (2)

Unemployment ____ (3)

Family ____ (4)

Fuel Assistance ____ (6)

None ____ (7)

Other ____ (8)

(Specify) _____

23. Ever applied for weatherization or fuel assistance?

Yes ____ (1) No ____ (2)

24. Household Income

___ Extremely Low Income (1)

___ Low Income (2)

___ Moderate Income (3)

___ Above (4)

EXTERIOR

25. Grounds: Well Maintained ____ (1)

Need some Maintenance ____ (2)

Eyesore ____ (3)

26. Roof Condition: Good ____ (1)

Minor Repairs ____ (2)

Poor-Need Rehab. ____ (3)

27. Siding Condition: Good ____ (1)

Needs Paint/Repairs ____ (2)

Poor-Needs Rehab. ____ (3)

28. Windows/Doors: Good ____ (1)

Minor Repair ____ (2)

Poor-Needs Rehab. ____ (3)

29. Foundation Enclosed: Yes ____ (1) No ____ (2)

WATER

30. Water Supply: Yes ____ (1) No ____ (2)

31. Public Sewer: Yes ____ (1) No ____ (2)

32. Septic Tank/ Cesspool: Yes ____ (1) No ____ (2)

33. Hot Water: Yes ____ (1) No ____ (2)

34. Lavatory: Yes ____ (1) No ____ (2)

35. Full Bathroom: Yes ____ (1) No ____ (2)

36. Working Plumb.: Yes ____ (1) No ____ (2)

INTERIOR

37. Number of Rooms ____ (01-20)

38. Walls/Ceiling Condition: Good ____ (1)

Needs Paint/Repairs ____ (2)

Poor- Needs Rehab ____ (3)

Unable to Evaluate ____ (5)

39. Heating:

Central (oil) Functioning ____ (1)

Central (elec.) Functioning ____ (2)

Central (gas) Functioning ____ (3)

Central (oil) Not Functioning ____ (4)

Central (elec.) Not Functioning ____ (5)

Central (gas) Not Functioning ____ (6)

No Central ____ (5)

No Information ____ (6)

40. Auxiliary Heating:

Kerosene ____ (1)

Wood/Coal ____ (2)

Oil ____ (3)

Electric ____ (4)

Combination ____ (5)

None ____ (6)

Other ____ (7)

Specify _____

41. Electricity:

Yes ____ (1) No ____ (2)

42. House not occupied ____

Appendix B
Survey Instrument

HOUSING SURVEY FORM

(Worcester County)

1. Worker # ____ (0-8)

2. Map and Point # ____ -- ____

3. Form # ____ (001-400)

OCCUPANT INFORMATION

4. Total # of occupants ____ (01-98)

5. disabled ____ (0-8)

Age of Occupants

6. # under 18 ____ (0-8)

7. # 18-39 ____ (0-8)

8. # 40-64 ____ (0-8)

9. # 65 and over ____ (0-8)

10. Sex of Unit Owner or Renter w/Lease:

Male ____ (1)

Female ____ (2)

11. Age of #10 above: ____ (01-98)

12. Household Type

Single Individual ____ (1)

Husband & Wife - no children ____ (2)

Husband & Wife - with children ____ (3)

Single Parent - with children ____ (4)

Related Adults ____ (5)

Unrelated Adults ____ (6)

Extended Family ____ (7)

Other (specify) ____ (8) _____

13. Race:

Do you identify yourself as (select one or more):

____ Black or African American

____ White

____ Two or More Races

____ American Indian or Alaska Native

____ Asian

____ Native Hawaiian or Other Pacific Islander

14. Ethnicity:

Do you identify yourself as (select only one):

____ Not Hispanic or Latino ____ Hispanic or Latino

15. How old is this house? ____ years (000-998)

16. Own or rent: Own ____ (1) Rent ____ (2)

17. Monthly Rent/Mtg. Payment Paid: ____ (001-998)

18. Avg. Monthly Utilities Cost: ____ (000-200)

19. Sum of #17 and #18 ____ (001-998)

20. Estimated Value of House:

Berlin Area

\$135,000 and up ____ (1)

\$120,000-\$135,000 ____ (2)

\$75,000-\$120,000 ____ (3)

Under \$75,000 ____ (4)

Remainder of County

\$90,000 and up ____ (5)

\$75,000-\$90,000 ____ (6)

\$30,000-\$75,000 ____ (7)

Under \$30,000 ____ (8)

No Answer ____ (9)

21. Occupations of Working Adults:

#1 _____

#2 _____

#3 _____

#4 _____

22. Other Sources of Income/Assistance:

Public Assistance ____ (1)

Social Security ____ (2)

Unemployment ____ (3)

Family ____ (4)

Fuel Assistance ____ (6)

None ____ (7)

Other ____ (8)

(Specify) _____

23. Ever applied for weatherization or fuel assistance?

Yes ____ (1) No ____ (2)

24. Household Income

____ Extremely Low Income (1)

____ Low Income (2)

____ Moderate Income (3)

____ Above (4)

EXTERIOR

25. Grounds: Well Maintained ____ (1)

Need some Maintenance ____ (2)

Eyesore ____ (3)

26. Roof Condition: Good ____ (1)

Minor Repairs ____ (2)

Poor-Need Rehab. ____ (3)

27. Siding Condition: Good ____ (1)

Needs Paint/Repairs ____ (2)

Poor-Needs Rehab. ____ (3)

28. Windows/Doors: Good ____ (1)

Minor Repair ____ (2)

Poor-Needs Rehab. ____ (3)

29. Foundation Enclosed: Yes ____ (1) No ____ (2)

WATER

30. Water Supply: Yes ____ (1) No ____ (2)

31. Public Sewer: Yes ____ (1) No ____ (2)

32. Septic Tank/ Cesspool: Yes ____ (1) No ____ (2)

33. Hot Water: Yes ____ (1) No ____ (2)

34. Lavatory: Yes ____ (1) No ____ (2)

35. Full Bathroom: Yes ____ (1) No ____ (2)

36. Working Plumb.: Yes ____ (1) No ____ (2)

INTERIOR

37. Number of Rooms ____ (01-20)

38. Walls/Ceiling Condition: Good ____ (1)

Needs Paint/Repairs ____ (2)

Poor- Needs Rehab ____ (3)

Unable to Evaluate ____ (5)

39. Heating:

Central (oil) Functioning ____ (1)

Central (elec.) Functioning ____ (2)

Central (gas) Functioning ____ (3)

Central (oil) Not Functioning ____ (4)

Central (elec.) Not Functioning ____ (5)

Central (gas) Not Functioning ____ (6)

No Central ____ (5)

No Information ____ (6)

40. Auxiliary Heating:

Kerosene ____ (1)

Wood/Coal ____ (2)

Oil ____ (3)

Electric ____ (4)

Combination ____ (5)

None ____ (6)

Other ____ (7)

Specify _____

41. Electricity:

Yes ____ (1) No ____ (2)

42. House not occupied ____

Salisbury
UNIVERSITY