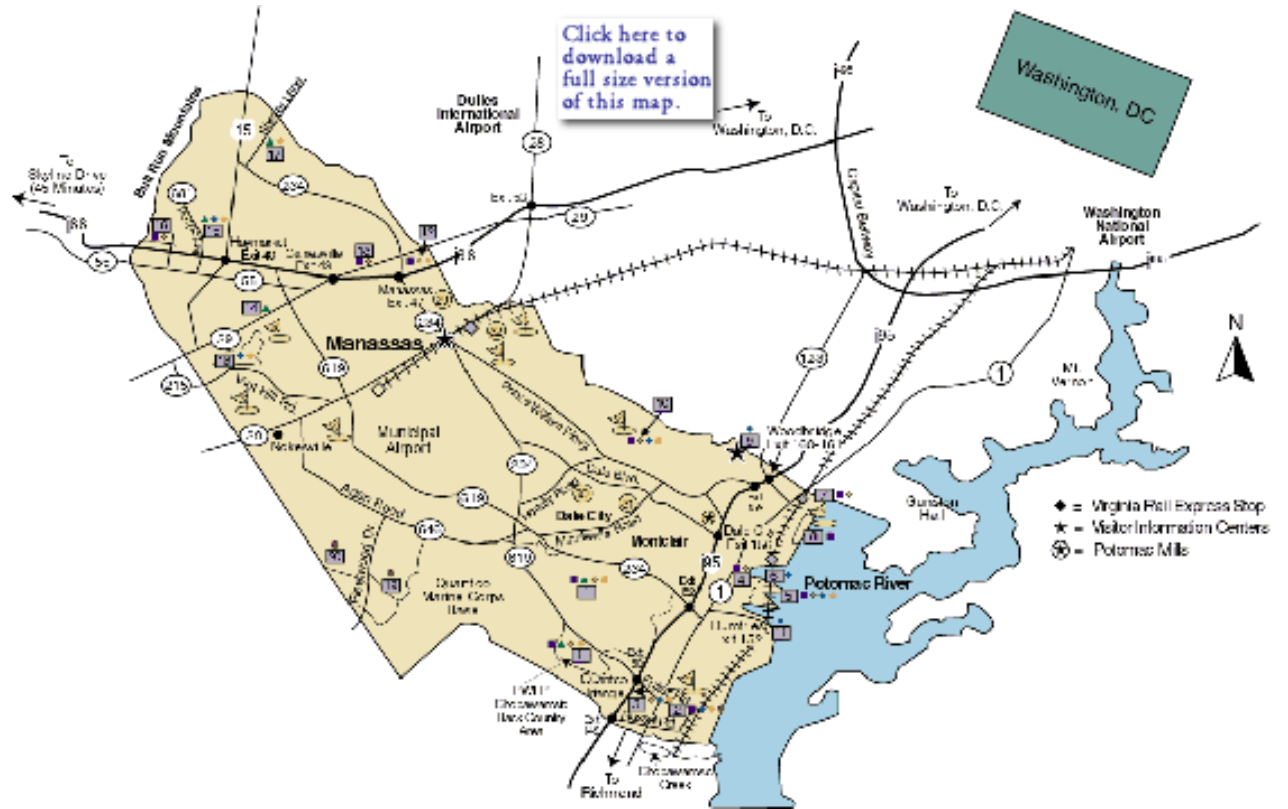


Agriculture Production Survey



Prince William County, Virginia

Sonja Houff
October 16, 2000

Table of Contents

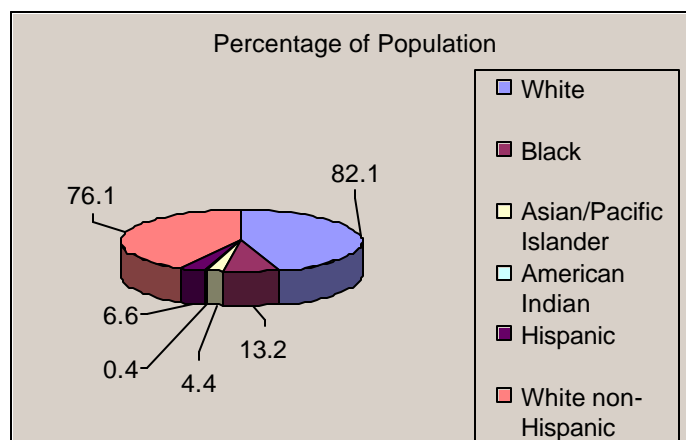
Title Page	1
Table of Contents	2
History	3
Population Information	3
Current Day Schooling	4
General Farming Information	5
Livestock Data	6
Crop Data	7
Trends	8
Conclusions	9
Analysis of Educational Applications	9
Bibliography	9

I. HISTORY

Prince William County has a deep history dating back to the time before the English explorer Captain John Smith. Smith found the native community during the time of the Native Americans when the primary crops were corn and tobacco. England then claimed the land that would later become Prince William County and property was granted to English Subjects. This later chartered the formation of large plantations. In 1731, Prince William County was chartered by the English Parliament. During this period the production of tobacco to Europe and the small town of Dumfries on the Potomac River became crucial in the shipment of crops. For many years the primary crop was tobacco in the county until the market declined and the river ports became silted from erosion. After tobacco fell, agriculture in the community revolved around substance farmers needed to supply themselves and the surrounding communities with. Agriculture continued this way until after the Civil War. During the Civil War many battles destroyed farms and businesses. After the war, many residents had moved away from the county to start life elsewhere. The county quickly rebounded after the war with the completion of two railroads, which caused many mills to be used to process agricultural products. Agricultural products used for export-included wool and grain to be taken to other locations across the nation. The Federal Government in Washington, D.C. expanded Prince William County to become a major center for dairy farming to supply the metropolitan area with fresh milk. The late 1900's brought Prince William County to quickly showing the effects of the rapid growing urban area of Washington, D.C. The area has become evident with more malls and residential development throughout the county. However, currently several small communities still produce crops and raise dairy and beef cattle today providing the agricultural backbone for the agricultural economy in Prince William County.

II. POPULATION INFORMATION

The current population of Prince William County using the 1999 U. S. Census Bureau information was 270,841 with 800.4 people per square mile. The county makes up an area of 338 square miles. The overall percent change in population from 1990-1999 has been a change of 26.0%. The 1998 estimates show that the female and male populations are relatively equal. The population contains 30.2% people under the age of



18 and 4.2% over the age of 65. Therefore, the majority of the population (65.6%) is between 18 and 65 years of age. The ethnic background of the community is broken down according to the 1998 estimates above.

A. Education and Income Data

In the following paragraph I will compare the county to state data in the areas of education and income. This will be compared to state and national census data. A chart below will indicate the county, state, and national data from the U.S. Census Bureau.

i. Education:

Graduates	Prince William County	Virginia	United States
High School (1990)	87.8%	75.2%	75.2%
College (1990)	27.6%	24.5%	20.3%

The trends in this chart show that the county has a higher percentage of students that graduate from high school and college than the state and nation. The state and nation data are relatively similar in the number of students who focus on graduating from high school and college. The majority of the students graduate from high school in the county, state, and nation. However, only around 25%, one-quarter of the population receive a college degree.

ii. Income:

	Prince William County	Virginia	United States
Median Money Income (1995)	\$55,276	\$36,367	\$34,076
Persons per household (1990)	3.02	2.61	2.63

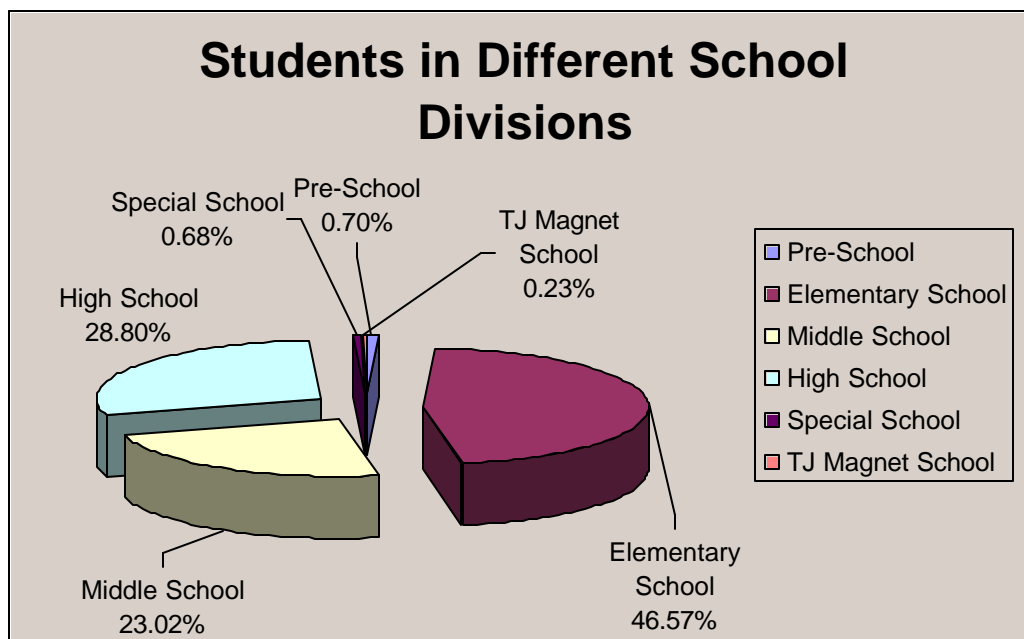
The average income in Prince William County is much higher than the state and national figures. The income may be associated with the large metropolitan areas within the county. The number of people in the household is relatively similar in the county, state, and nation.

III. CURRENT DAY SCHOOLING

Prince William County is a large county containing numerous schools spread throughout the county. The total enrollment of students in the county was 53,049 during the year of 1999-2000. Below I will show the number and percentage of students located in the divisions of the schools.

School	Students	Percentage of Total Students
Pre-School	371	.69%
Elementary School	24,707	46.57%
Middle School	12,212	23.02%

High School	15,280	28.80%
Special School	359	.68%
TJ Magnet School	120	.22%



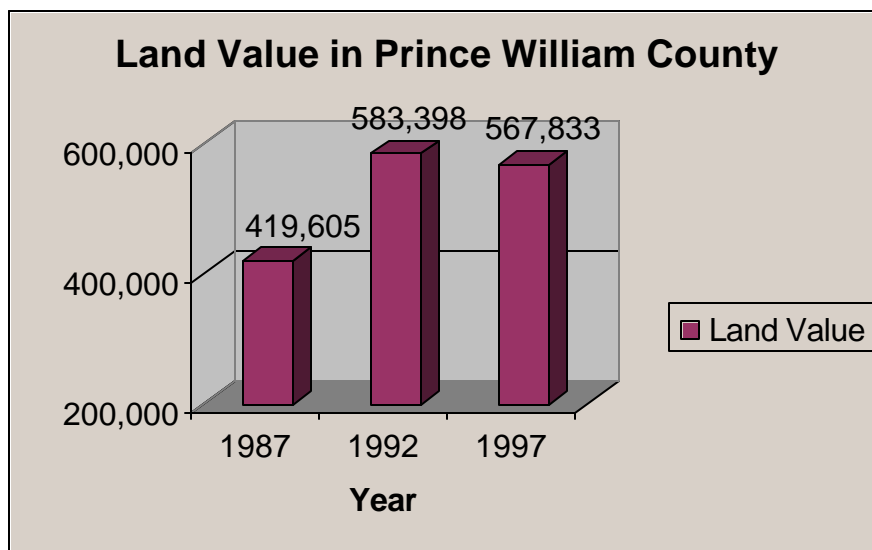
The chart above indicates the breakdown of students in the different schools in the county. Currently, there are more Elementary School students than High and Middle School students. Therefore, the number of students per teacher should be larger.

The school systems student to teacher ratio is 16.4:1 overall. At the Elementary school level with the county having more students the ratio is 22.1:1. Middle and High school ratios are similar being at Middle school at 19.6:1 and High school at 17.6:1. The school system contains 43 Elementary schools, 11 Middle Schools, 7 High Schools, 5 Special Education Schools, and 2 Alternative Schools. The students have excelled in numerous awards from the county. SAT scores for the county averaged 1024. In the 1999-2000 7 students were honored as National Merit Scholarship Semifinalists, National Achievement Scholarship Semifinalist, and National Hispanic Scholar. The curriculum in the county has been changing to develop programs that raise the expectations and performance of the students. A Proficiency Diploma was established to honor students who academically excel in math, language arts, and writing. Each student and teacher is networked to access the Internet in the classroom and offices.

IV. GENERAL FARMING INFORMATION

Farmland in Prince William County is used for livestock and crop production. The primary crops in the county are corn, wheat, soybeans, and hay. The livestock raised in the county includes poultry, beef, dairy, sheep, and hogs. The number of farms in the county has gone from 272 in 1987 to 261 in 1997. The number of acres in farms has changed from 36,926 in 1987 to 35,936 in 1997. Farmland in the county has many emphases from livestock grazing to crop production through the rolling hills of the

county. Marketvalue of the land has increased due to the development of the farmland for subdivisions in the county. The graph below shows the changes in land and building value in the past ten years of data from the Agriculture Census.



The increase in marketvalue of land is due to the population of people moving into the county to be away from the metropolitan areas.

The total number of farms has changed from 272 in 1987 to 261 in 1997. Land in these farms has remained relatively similar from 36,926 acres in 1987 to 35,936 acres in 1997. The average farm contains about 137 acres with little change since 1987. The most farms contain acreage between 50-179 acres according to the Agriculture Census. The average farm expenses per acre have increased about \$4,000 from \$25,502 in 1987 to \$29,785 in 1997. Farmland in this county is depleting to the increase in subdivisions and metropolitan development. Land used for crops and livestock is decreasing as progress and development builds closer to this once strong agriculture community.

V. LIVESTOCK DATA

Livestock production in the county is diverse. However, large numbers of beef and dairy cattle are raised. Small numbers of hogs and sheep are raised in the county. Below I will indicate the changes in the livestock since 1987.

Beef:

	1987	1992	1997
Beef Cows (number)	2480	2615	3256
Beef Cows (farms)	120	111	110

This chart indicates the numbers of beef cows in the county has increased, but the number of beef farms in the county has decreased. From 1987 to 1992, the number of beef cattle has remained the same.

Milk Cows:

	1987	1992	1997
Milk Cows (number)	1655	1125	1116
Milk Cows (farms)	20	14	11

The chart shows that dairy cow numbers and farms in the county are decreasing.

Hogs:

	1987	1992	1997
Hogs and Pigs (number)	530	92	Not available
Hogs and Pigs (farms)	19	8	10

The data indicates that the county contains few hog farms with a decreasing number of hogs produced in the county.

Sheep:

	1987	1992	1997
Sheep (number)	61	360	355
Sheep (farms)	4	15	15

The number of sheep in the community is increasing with the number of sheep farms on a rise.

VI. CROP DATA

The primary focus in grain production in Prince William County is corn, wheat, soybeans, and hay. Below I will break down each commodity in the number of farms, acres, and quantity produced.

Corn:

	1987	1992	1997
(farms)	37	24	21
(acres)	2489	2030	2853
(bushels)	140118	222213	212759

The number of farms raising corn has decreased in the past ten years, however, the total number of acres and bushels have increased.

Wheat:

	1987	1992	1997
(farms)	27	18	16
(acres)	1359	1242	833

(bushels)	66160	62929	35477
------------------	-------	-------	-------

Wheat has decreased in number of farms, acres, and bushels since 1987.

Soybeans:

	1987	1992	1997
(farms)	7	8	15
(acres)	989	817	2426
(bushels)	31441	24872	73924

The number of farms, acres, and bushels has increased in the county since 1987.

Hay:

	1987	1992	1997
(farms)	179	166	152
(acres)	9807	8031	10295
(tons)	13523	14822	15692

Hay produced in the county has come from less farms. However, the number of tons produced and acreage have increased since 1987.

VII. TRENDS IN AGRICULTURE

A. General Trends

Livestock and Crop Production in Prince William County has decreased over the past ten years. The county has lost 20 farms over the past ten years. There has only been a slight decrease of 6.16% in total cropland from 1987 to 1997. The total number of acres had an 18.8% increase in harvested cropland while there was a decrease of 32 farms with harvested cropland. The average farm size in acres has increased slightly over the same ten-year period from 136 acres to 138 acres. The market value of agricultural products has increased from 1987 to 1997.

B. Livestock and Crop Trends

The production number and number of farms in the county has changed slightly in livestock production in the past ten years. Beef cow numbers have gone from 2480 in 1987 to 3256 in 1997. This is an increase 776 head of beef cattle. Milk cow numbers have changed of a decrease of 539 head of dairy cattle. Hogs have shown a drastic decrease in numbers from 428 in 1987 to 99 in 1997. Sheep have increased in numbers and farms since 1987. Livestock is increasing in small amounts through Prince William County. People are focusing on change through development in the county by using farmland for development.

Crop production in the county is on a rise. The production of corn, soybean, and hay has shown an increase in acreage or bushels in the past ten years. However, a decrease of farms, bushels, and acreage can be seen in the production of wheat since 1987. Crop production receiving higher yields on lower acres is due to today's

technology in plant production. Genetics in the plants enable the farmer to receive higher yields per acre.

VIII. CONCLUSIONS

Prince William County has changed in the past from an agriculturally focused county to one that has urbanization in growing cities. Being on the outskirts of Washington, D.C. farms are becoming sparse as people move away from the city. Agricultural Education programs in the county are depleting because the population is focused on urbanization. Each farm is vital in the county and state in providing essential agriculture products to the economy. Without agriculture, the community will lack the education of their food source. The community was built on Agriculture, and schools in the community are lacking programs to educate the metropolitan people on their food source.

VIV. ANALYSIS OF EDUCATIONAL APPLICATIONS

Agricultural Education programs should focus on Horticulture and Crop oriented courses. Landscaping is increasing through the development of the new subdivisions; this would provide an opportunity for students to apply the knowledge they gain in the classroom. Crop production has increased in the past ten years; therefore, students will gain knowledge on a product that is used in their community. I would emphasize horticulture to draw the city students into the classroom. Agriscience courses with focuses on traditional livestock and crop production would be offered to improve the knowledge of those not having the opportunity to grow up on a farm.

VV. BIBLIOGRAPHY

Internet Access:

Homepages:

- 1) Agriculture Census Homepage
www.nass.usda.gov/census
- 2) United State Census Bureau Homepage
www.census.gov
- 3) Prince William County Schools Homepage
www.pwcs.edu

Wieder, Laurie C. Ed. Prince William: A Past to Preserve. Prince William County Historical Commission. 1998.