

Using Free and Easily Accessible Data: Snapshot of Pulaski County

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An Agricultural and Applied Economics class at Virginia Tech was assigned a project to locate major, readily available data sources, to compile that data, and to present meaningful information about a county in Virginia. A sample of this information and its potential applications is used here to describe Pulaski County.

Pulaski County, in the New River Valley of the Blue Ridge Mountains, boasts natural beauty and outdoor recreational opportunities (Figure 1). It covers 327.4 square miles, including 13.3 square miles of man-made Claytor Lake. Pulaski County is a non-metropolitan county.¹ Almost 29 percent of the population is urban² and lives in the incorporated town of Pulaski, the county seat. The remaining population lives in the incorporated towns of Draper and Dublin and in the surrounding rural area (Tavernise). As of 1992, the population density was only 108 people per square mile.

Like all Virginia counties, Pulaski is subject to economic pressures, opportunities, and limitations. Many county administrators in Virginia feel they do not have the financial resources to identify and deal with important economic issues. Knowing what data are free and readily available is a starting place for assessing these issues.

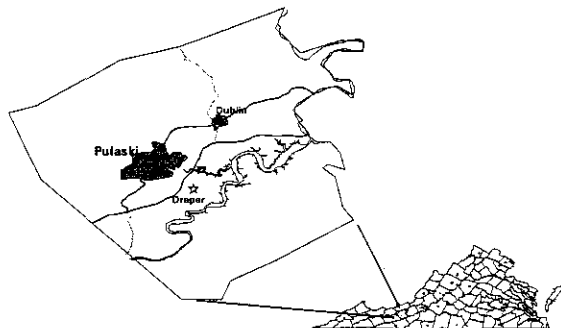
Data for trends provide a picture of how the county has evolved over time and where it appears to be heading. The data for the trends presented came from two sources: *County*

¹ Metropolitan area is a municipality of 50,000 or more people. Non-metropolitan is an area not defined as metropolitan.

² Urban is defined as an incorporated area of 2,500 people or more or an area with a population density of 1,000 people per square mile and contiguous to a municipality of 50,000 or more.

and *City Data Book* (not available on the internet) and *County Business Patterns* (www.census.gov/ecpd/cbp/map/95data/51/155.txt). Both of these publications are from the United States Bureau of the Census and are generally available at local libraries.

Figure 1. Pulaski County



Population and Income Trends

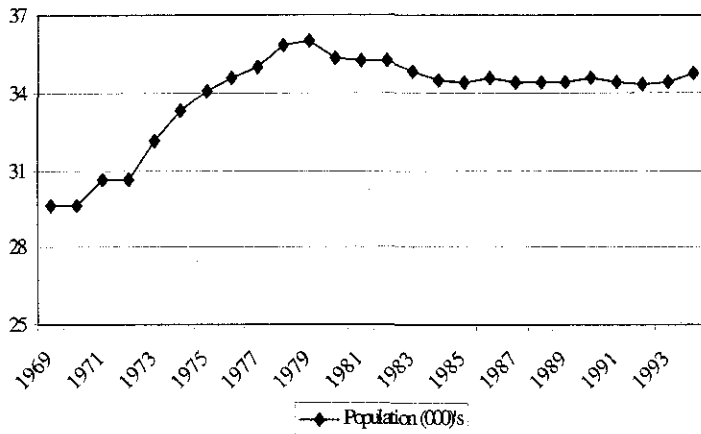
Population trends can provide information about services needed and potential tax base changes. Population in Pulaski County grew steadily from the late 1960's to the late 1970's when it reached a peak of about 36,000. Then it declined to between 34,000 and 35,000 in the early 1980's (Figure 2). Little change in total population has occurred during the last decade.

Pulaski County is no exception to the "graying of America," as the aging of the baby boomers is called. In 1988, 23 percent of Pulaski County's population was 55 or older. By 1994, that number had increased to 24.9 percent (Census 1988 and 1994). The modest 2 percent gain in this

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age bracket may not immediately seem significant, but a reversal in this trend is not likely. In Pulaski County, the proportional increase in the elderly could be the result of older people moving into the county to find a quiet place to retire, younger people leaving, the natural aging of the population, or a combination of these factors.

Figure 2. Population 1969 to 1994.



As the population ages, it would be myopic to assume that the tastes, preferences, and needs of the population will remain the same. The age of the population can affect all facets of society. It can change the marketing undertaken by firms, the types of services offered, and even the types of firms which will stay in business. The aging population coupled with stagnant population growth in the county may leave an insufficient number of younger workers to fill jobs vacated through retirement.

Per capita income can be used to measure the economic progress of a community. If per capita income is increasing over time, presumably the general standard of living is also increasing. From 1969 to 1994, per capita income in Pulaski County, in nominal terms,³ rose steadily from \$2,960 to \$15,592: over a 5-fold increase during the 26-year period. However, real⁴ per capita income shows a much more moderate increase: from \$2,960 to \$3,926 in 1969 dollars, a rate of little more than 1 percent annually (Census 1996).

Businesses in Pulaski County

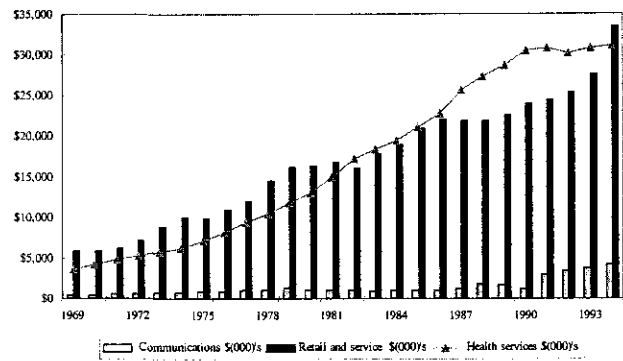
Industries which show either long-term and predictable trends or show great promise for the near future are the retail, services, health services, and communications sectors (Figure 3). Each of these sectors shows approximately a 6-fold increase in the 26-year period measured. As the population of the United States ages, and as people become more health conscious and seek more convenience, the retail, service, and health sectors can expect continued growth.

³ Nominal does not consider the effects of overall price inflation.

⁴ Real puts all dollars on a constant basis to remove the effects of inflation.

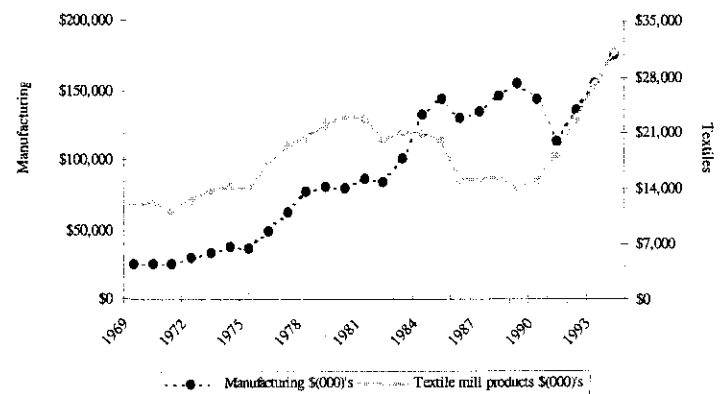
The trend in the communications sector is important. Until 1989, the communications sector of the Pulaski County economy had grown modestly. From 1990 to 1994, the communications sector grew as much as it had in the previous 19 years covered (Census 1996). In an information age, communications play a vital role in determining the status of the future economy. Public schools are connected to the Internet, companies are using teleconferencing, and everyone becomes excited every time a new computer-related device hits the shelves of the local stores. Given the increasing dependence of the economy on communications, encouraging continued development of the communications sector is extremely important to county efforts to maintain a competitive economic base.

Figure 3. Communications, health services, and retail and services sectors, 1969-1994.



Traditionally, Pulaski County has had manufacturing-oriented businesses as its economic base. Unlike the steady growth in the other sectors in the county, these sectors have fluctuated over time (Figure 4). Manufacturing grew erratically from about \$20 million to \$170 million, in nominal dollars, between 1969 and 1994. The textile mill industry has historically been even more volatile, although it has recently enjoyed several years of growth. From 1969 to 1980, the textile mill industry grew from \$10 million to \$22 million. But from 1981 to 1990, it dropped to \$13 million. As of 1994, the textile mill industry rebounded to \$30 million per year (Census 1996).

Figure 4. Manufacturing and textile mill products, 1969-1994.



Pulaski County is limited by relatively underdiversified employment opportunities. Ideally, an area has a mix of industries to help alleviate external shocks in any one sector. If a locality has limited diversification in its industries, a severe shock to one company could be disastrous to the entire economic base of that area.

In 1995, Pulaski County had 6,536 people working in the manufacturing sector. Of the 3 major employers in the county at this time, 2 employed over 1,100 workers and the third over 2,000 workers ("Community Profile"). These employment figures understate the diversification problem because a number of the smaller firms in Pulaski County depend on the large manufacturers as clients for their products. The problem with this situation becomes clear if one company were to close its doors. Manufacturing is a source of primary income, and one primary job generally supports two secondary or service-related jobs. The county would not only lose at least 1,100 jobs from the initial closing, but the multiplier effect of the closing would result in the additional loss of many secondary or service-related jobs.

In addition to these concerns, given the nature of the industries involved, these firms are all subject to cyclical variations. With the three biggest employers being cyclical, a severe recession could make recovery difficult.

The data suggest that these types of industries may have too much variation on which to build an economic base. This situation leads to some challenging questions:

- * Are these fluctuations in the economic base at least partially responsible for the lack of population growth?
- * Are these industries too cyclical to sustain a constant upward trend?
- * How does an area, with these types of industries providing its economic base, cope with economic development?

Localities must recognize the constraints which they face to be able to use their resources most effectively. Sometimes remedying a less-than-desirable situation is difficult, especially if the limiting factors are unknown.

Opportunities

The aging population can provide an opportunity. Older people have fixed incomes that, while rarely extravagant, are almost always reliable. Since long-term stability may be something that the present economic base lacks, having older individuals in the county could help provide that stability. Attracting wealthier, older people to Pulaski County would not be difficult. It is a quiet, spacious,

beautiful, and peaceful area with access to resources which may act as a magnet for those wishing to retire to such an area.

Pulaski County will also have to foster the care of its infant industries such as the retail, services, health services, and communications sectors of the economy. The trends of these industries show a great deal of promise for both the present and the future. That these sectors have grown constantly over the last decade at the same time that the population has been growing older may be more than coincidence. Columbia Pulaski Community Hospital, located in the town of Pulaski, is making strides to accommodate an aging population. It has expanded in recent years and now boasts an advanced cancer center and 288 hospital beds per 100,000 people (Census 1994).

Pulaski County and all Virginia counties need to focus on the changing times. Society is becoming information-oriented and, as such, is placing less importance on domestic manufacturing jobs. While the fluctuations in the manufacturing and textile industries are by no means beneficial to Pulaski County, their impact can probably be mitigated. The future of Pulaski County, as with many other Virginia counties, hinges on its ability to recognize its limitations and capitalize on its strengths.

Other sources of data counties have available to them, albeit not as easily accessed, include housing sales, building permits, federal funding entering the county, changes in expenses by category over time, number of students attending school, and the number of days in attendance. The amount of data collected is vast, but often not presented in a form that is easily used. The basic data used in this analysis are often a good first step for framing local community development discussions.

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NOTICES

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