

Delaware: 1945-1998

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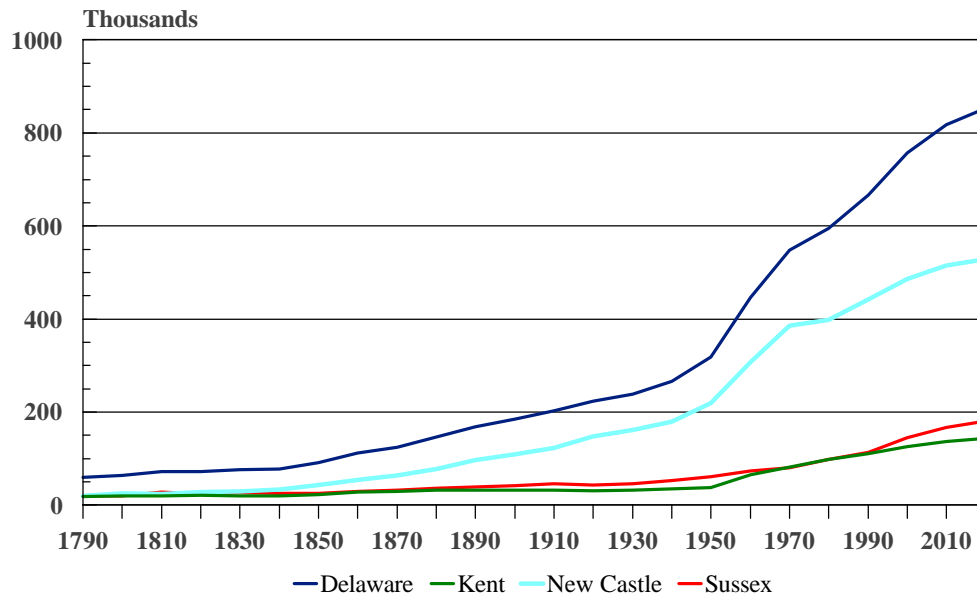
Executive Summary

Economic growth and population demographics are inexorably linked. Growing populations generate the need for additional economic activity by generating the demand for more goods and services. On the other hand, additional economic activity can be generated by increases in the demand for goods and services elsewhere while the production takes place in Delaware. In that case, new jobs need to be filled, and if the local labor market is inadequate, those jobs will either migrate out or population will migrate in to fill them. If firms are to be successful in attracting new employees, especially when labor markets are tight, both wages and quality of life factors will come into play. None of these factors change instantaneously; in fact, many of today's trends may have been in place for decades. In this summary, a brief overview of those trends will be explored.

Population and Growth Rates

In Figure 1 below, the profile of population growth in Delaware and its three counties is displayed. The pattern for the state and for New Castle County is quite similar (although not as smooth) to that

Figure 1
Population of Delaware and Counties
1790-2020



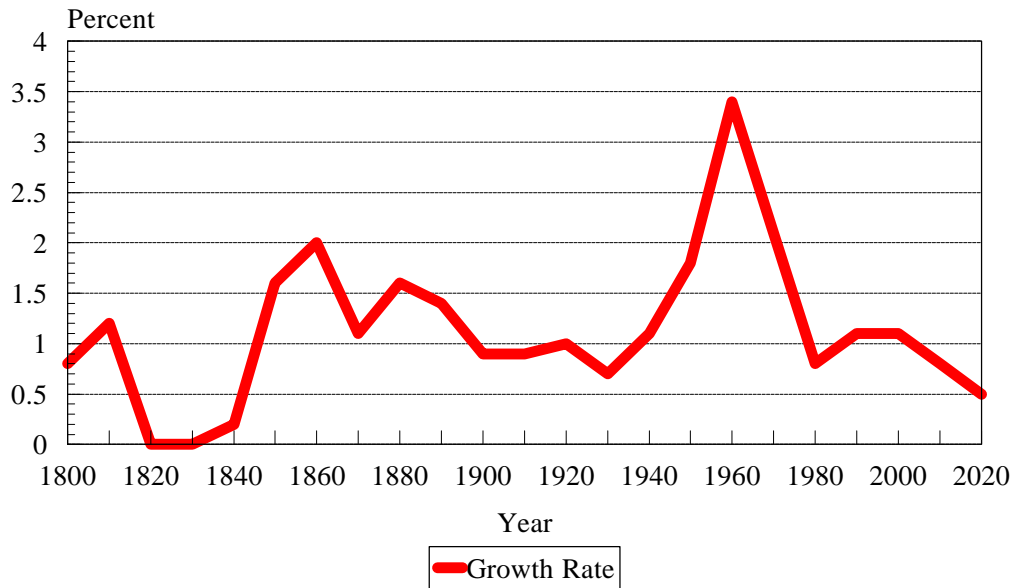
Source: Center for Applied Demography & Survey Research, University of Delaware
Delaware Population Consortium

experienced by the United States as a whole. In the early years, through 1840, the rate of growth is fairly stable. There is an acceleration of growth in 1840-1850 followed by another period of stable growth until

1950 when growth rates accelerated dramatically. Those higher rates were experienced (primarily in New Castle County) until 1980 when rates returned to more traditional levels.

While New Castle County experienced rapid growth until the 1970s, when it was interrupted abruptly with the oil crisis and a major recession, the population of Kent and Sussex counties grew at a slower and more stable rate throughout the period. In the late 1980s, however, the population of Sussex County began to expand much more rapidly. For the period 1990 to 2000, its growth rate has exceeded 2.4% annually. Those rates approach, but do not exceed, those experienced in the state during 1940 to 1960 (Figure 2).

Figure 2
Annual Average Population Growth Rates
Delaware 1790-2020



Source: Center for Applied Demography & Survey Research, University of Delaware Delaware Population Consortium

The long-term annual population growth rate for Delaware is 1.21%, although for this decade it will be slightly higher than that, 1.25%. That masks significant differences in the counties, however. The rate in Kent County is 1.1%; for New Castle County 0.9%; and for Sussex 2.4%. Smaller, less developed areas (such as New Castle County below the canal, 4.2% from 1990 to 2000) can experience even higher rates in the short run, but such rates are not sustainable.

Sources of Growth

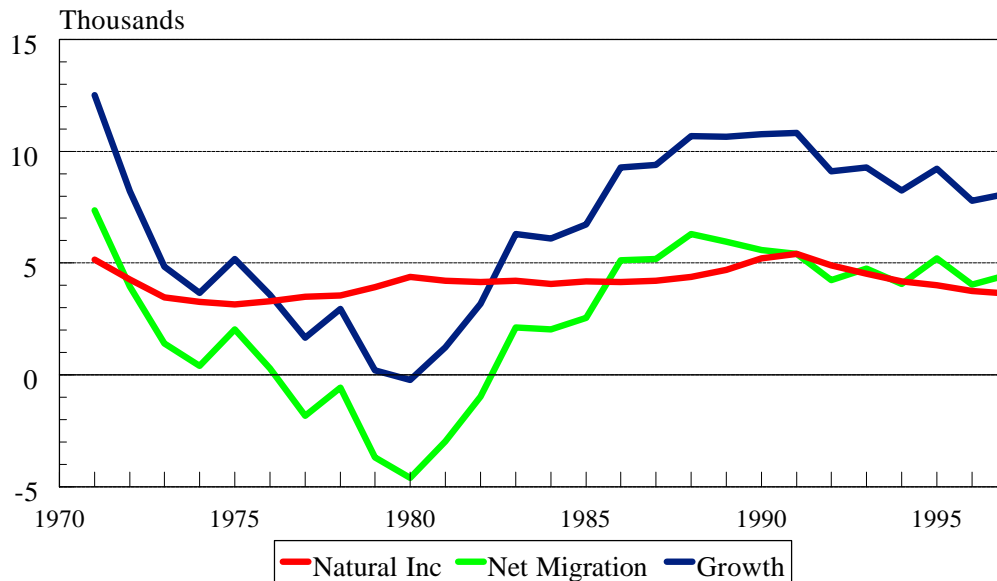
Population has only two sources of growth: natural increase and net migration. Natural increase itself is a function of births in a given period less the deaths in the same period. The size of this factor depends largely on the age of the population and the number of children people choose to have. As the average age of the resident population increases, other things equal, the number of births fall, the number of deaths increase, and natural increase falls.

Net migration is much less predictable and is the source of most of the volatility in population growth rates. It is also influenced by many more complex factors. Delaware experiences net in-migration when more people enter the state than leave. This occurs when, for a variety of reasons (quality of life, job opportunities...), Delaware is more attractive than alternative locations. However, net out-migration can

occur when conditions reverse. The relationship between these two sources of growth and total annual population growth is shown in Figure 3 below.

From July 1970 to June 1971, population growth in Delaware was even more than that being currently experienced. The population grew by almost 13,000 people, and more than 8,000 of that came from net in-migration. As economic conditions worsened, annual population growth fell and was slightly negative in the 1979-1980 period when out-migration approached 5,000. The important point is that the general shape of annual population growth is largely dictated by net migration. It also, for the most part, follows the business cycle.

Figure 3
Sources of Population Growth
1970-1997



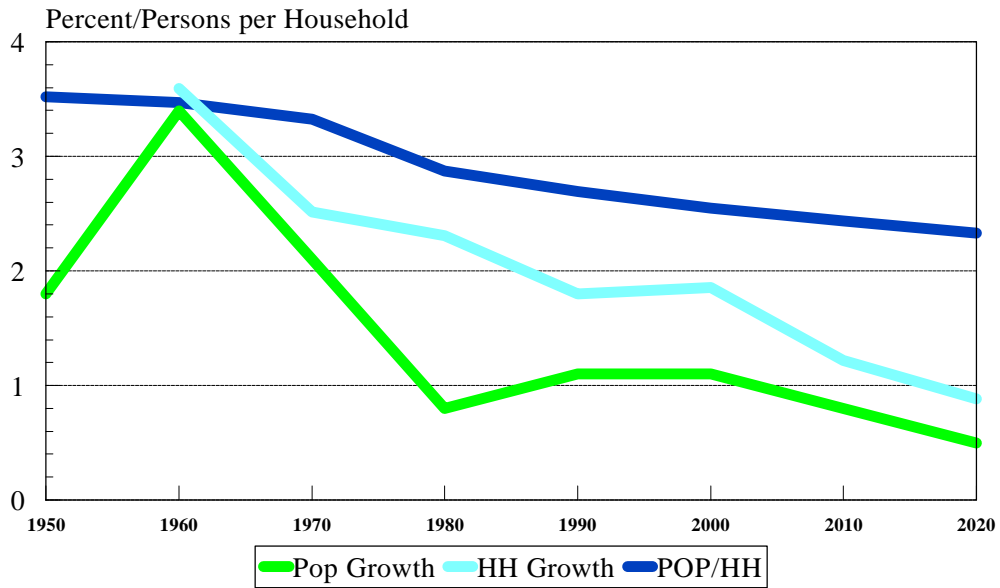
Source: Center for Applied Demography & Survey Research, University of Delaware
US Bureau of Census

The contribution of natural increase is much more stable and predictable. While net migration moved from +8000 to -5000, natural increase moved from 5100 to 4500. There have been variations in natural increase as Delaware moved from the “baby bust” through the “baby boomlet,” but those variations are minuscule compared with the swings in net migration. Since the last recession in 1990-1991, the patterns for both population growth and net migration have been much more stable, probably reflecting the overall stability in the national economy.

Household Formation and Structure

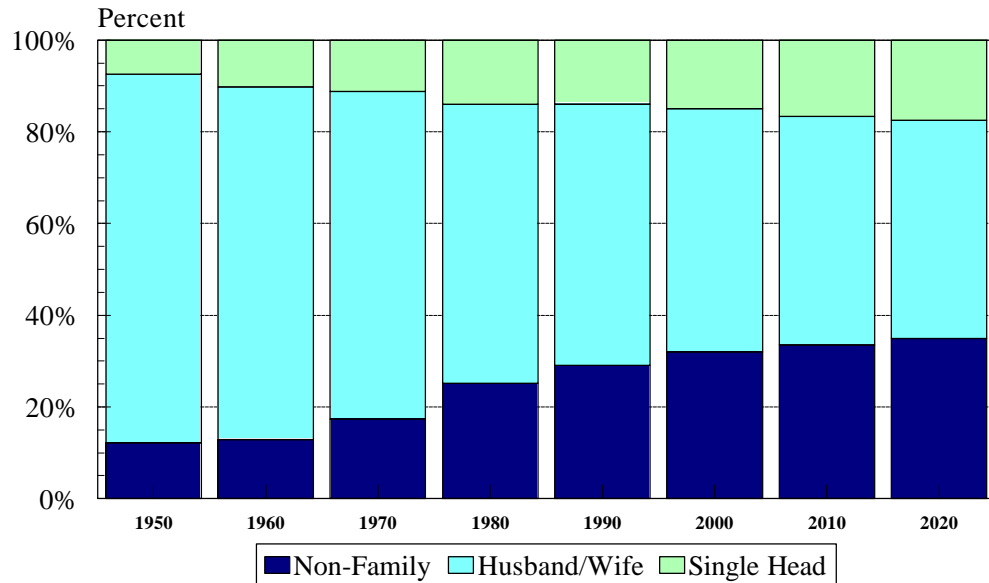
Household formation and structure influences how the population is distributed across the state. It also affects the demand for goods and services on a number of levels. Households are created as children leave their parent’s homes and form new households or when a divorce occurs. Households are lost to both death and by the combination of two households into one by marriage. The level of this activity is influenced by the distribution of population along the age spectrum. In addition, since migration activity can either increase or decrease the number of households, it too can have a significant influence on household formation.

Figure 4
Household Growth and Size
1950-2020



Source: Center for Applied Demography & Survey Research, University of Delaware
US Bureau of Census

Figure 5
Household Structure
1950-2020



Source: Center for Applied Demography & Survey Research, University of Delaware

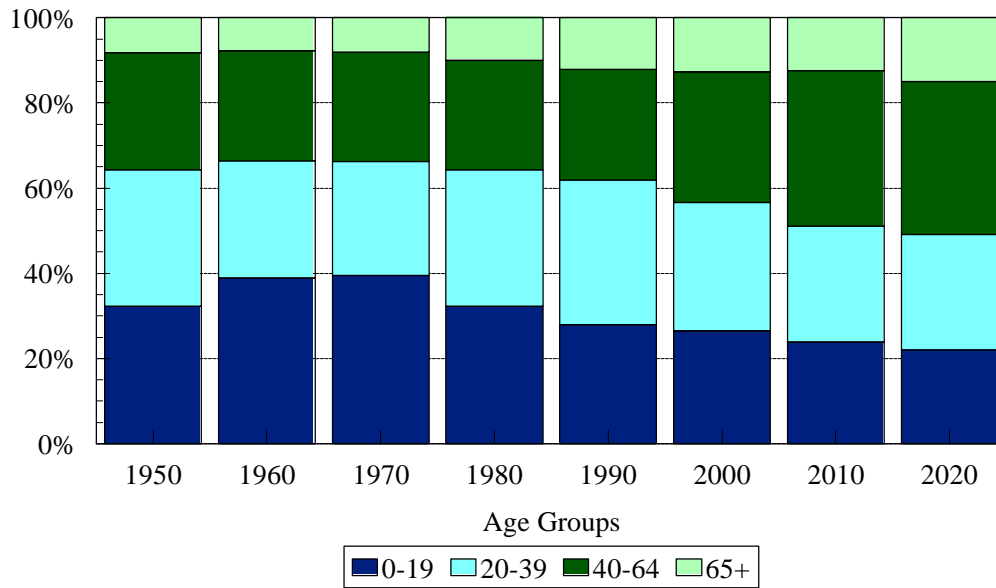
In Figure 4 above, the growth rates for both population and households are shown. Over the range shown, the household growth rate has been higher than that for population. From 1970 through 1990, the differences were dramatic. These data reflect major structural changes in the size and composition of households during that period. In the later years, this phenomenon moderates but still continues. These rates reflect significant changes in completed family size, marriage and divorce rates, the age distribution of the population, and longevity. Population per household, also shown in Figure 4, clearly shows the change that began in 1970. While this trend is expected to moderate, it will likely continue into the foreseeable future.

In Figure 5 above, the change in household composition over the past 60 years is evident and the trend continues. Non-family households, which include people who live alone and unrelated people who live together, have increased and are increasing faster than the other types. This pattern is indicative of later marriages, the divorce rate, and longevity. The single-headed household category is also increasing. This category is comprised primarily of households with a single adult and related children.

Age Structure

Age structure matters and it matters for a number of reasons. Population growth is affected by the age of the population. Household formation changes as the age structure changes. The size of the labor force and additions to it are affected by age. The distribution across four major age groups is shown in Figure 6 below.

**Figure 6
Delaware’s Age Distribution**

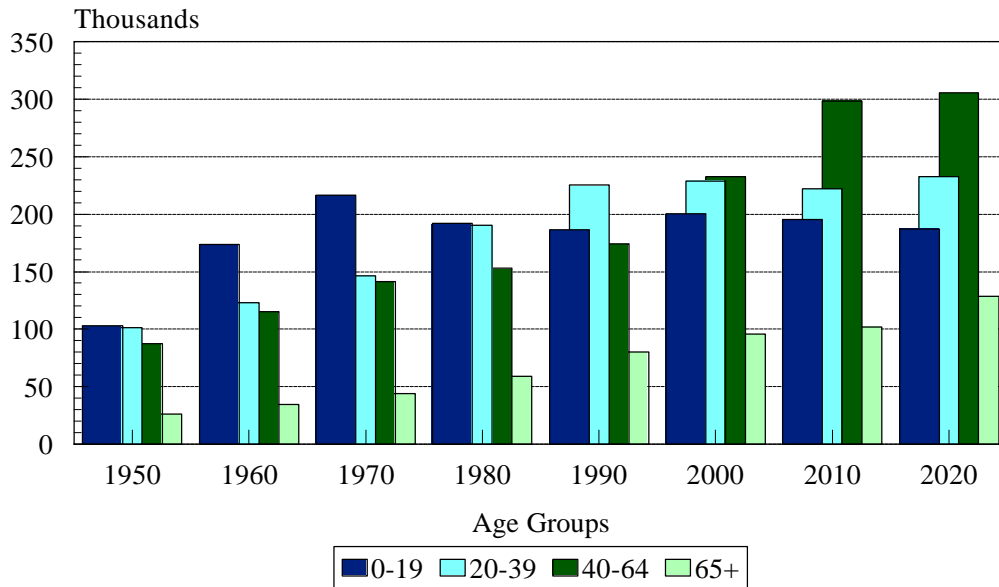


Source: Center for Applied Demography & Survey Research, University of Delaware

From 1950 through 1970, the 0 to 19 age group was growing faster than the 20-64 groups. As changes in household structure and other social changes began to take hold, this changed. Since 1970, the youngest group has been growing slower than the overall population, and the 40-64 age group along with the 65+ group have both been growing faster. This is the impact of the aging baby boomers on Delaware. The actual numbers can be found in Figure 7 below.

The actual number in the 0-19 age group remains slightly under 200,000 for the foreseeable future. If the population in that group were evenly spaced across the range, approximately 10,000 new workers, at most, could be added annually to the labor force, and that includes those that delay employment for higher education.

**Figure 7
Delaware’s Age Distribution
1950-2020**



Source: Center for Applied Demography & Survey Research, University of Delaware

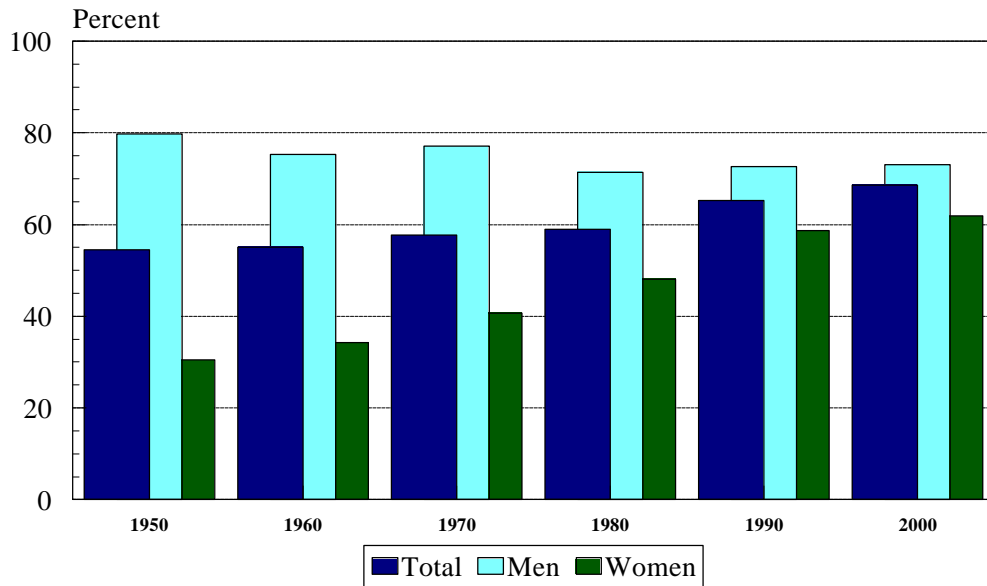
The second point of interest is the developing difference between the numbers in the 20-39 age group and the 40-64 age group. These two groups are at different points in their life-cycle. Younger workers may need to migrate if they are to advance their careers, since the number of more experienced workers is so great. On the other hand, it may also be a positive sign for the state. People in the 40-64 age group have, or at least have had, higher income levels. While they don’t generate the need for goods and services related to household formation, they have more discretionary income to spend in other areas.

Employment

Jobs in Delaware are filled in one of four ways. First, there are new entrants to the labor market from the existing population who become old enough to work. These numbers are dependent on the size of the youngest cohort shown (0-19) in Figure 7 above. Second, there may be new entrants from the older groups who either have never worked before, were previously discouraged, or are now required to seek employment because of economic necessity. Third, there are net in-migrants coming to Delaware to fill jobs that cannot be filled locally for a number of reasons. Finally, there are net in-commuters; i.e., people who live in other states but who enter Delaware every day to work. (Of interest is the net number of commuters since many Delawareans also leave Delaware to work in surrounding states.)

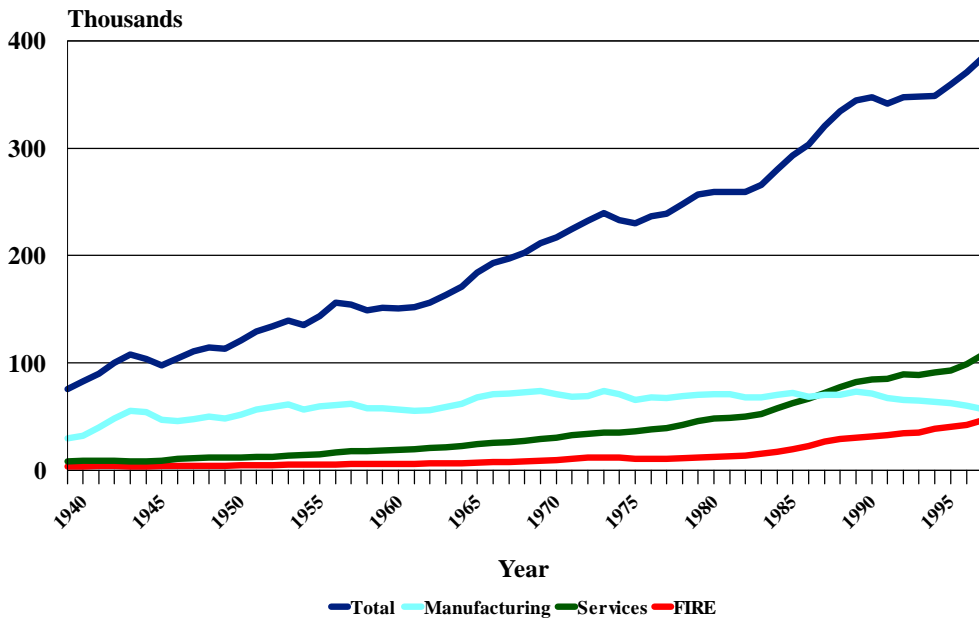
In Figure 8 below, the employment rates by gender are shown for the past 40 years. Overall, the proportion of the population that is employed (either part-time or full-time) has been rising. It has been rising largely because of the increase in the rate among females. That major sources of new labor market entrants is gradually diminishing. The total rate by the year 2000 will have increased marginally, and the rate of increase in the female employment rate is declining. Employment rates for males have remained

Figure 8
Employment Rates by Gender for 16 years and Older
1950-2000



Source: Center for Applied Demography & Survey Research, University of Delaware
 US Bureau of Census

Figure 9
Delaware Employment by Select Sector
1939-1997



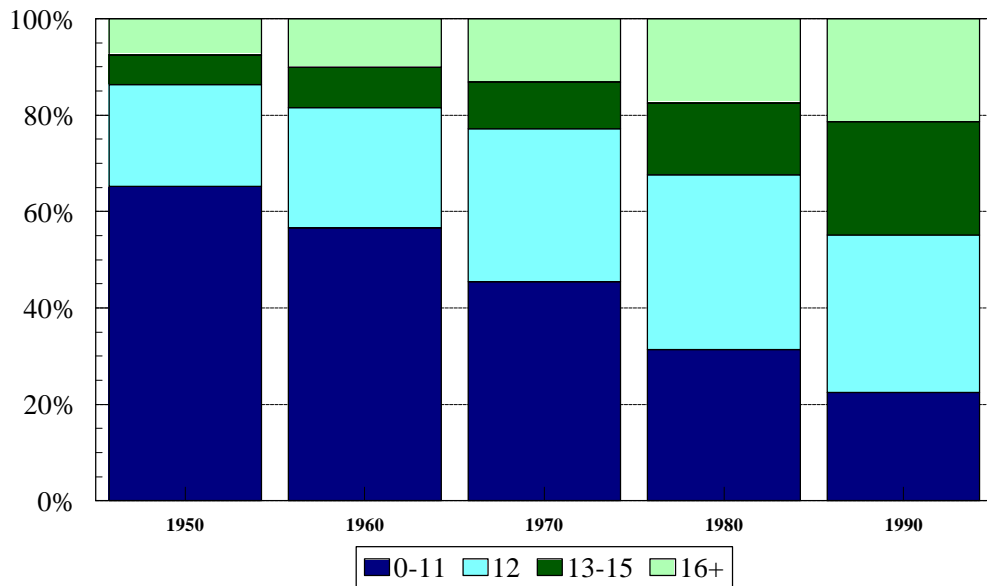
Source: Center for Applied Demography & Survey Research, University of Delaware
 Delaware Department of Labor

fairly constant. The increases that occurred between 1990 and 2000 were almost solely due to greater participation by minorities.

In the out years 2000 to 2020, as the baby boomers retire (assuming they are able to retire), the employment rate will probably fall further. The caveat is that preferences for work may also change with longevity and the boomers may work longer at least on a part-time basis. This trend places further pressure on firms to attract in-migrants or net in-commuters to fill jobs if they are to be located in Delaware. Net commuters are a booming business in Delaware. In 1960, 2000 more people left the state on their way to work than entered. Over the past 30 years, that situation has reversed to the point that more than 12,000 net commuters were filling jobs in Delaware. Today, net commuters are estimated to number almost 31,000 with 51,000 expected by the year 2010.

While labor force participation rates are changing along with the age structure of the population in Delaware, there are other long-term shifts occurring in the structure of the labor market. Delaware has experienced the same shifts occurring in the rest of the country (Figure 9 above). Manufacturing employment has been declining slowly since its peak in the late 1980s. In contrast, service sector employment has been growing rapidly and surpassed manufacturing in 1987. This trend has been driven by corporate restructuring and, in particular by outsourcing. The outsourcing of a data processing or accounting operation to a service sector firm from a manufacturing firm results in the reclassification of those employees, even if they are sited at the same desk in the same, building but are now contract employees. In addition, with the increase in the number of two-worker households, many services that were once done at home are now the focus of service sector companies.

Figure 10
Years of Education
Age 25 years or older
Delaware 1950-1990



Source: Center for Applied Demography & Survey Research, University of Delaware
 US Bureau of Census

A major shift occurred in the FIRE (finance, insurance, and real estate) sector when the state enacted the Financial Center Development Act in the early 1980s. The impact on that sector is obvious in Figure 9 above. That sector's employment has increased threefold over that period and undoubtedly many other jobs

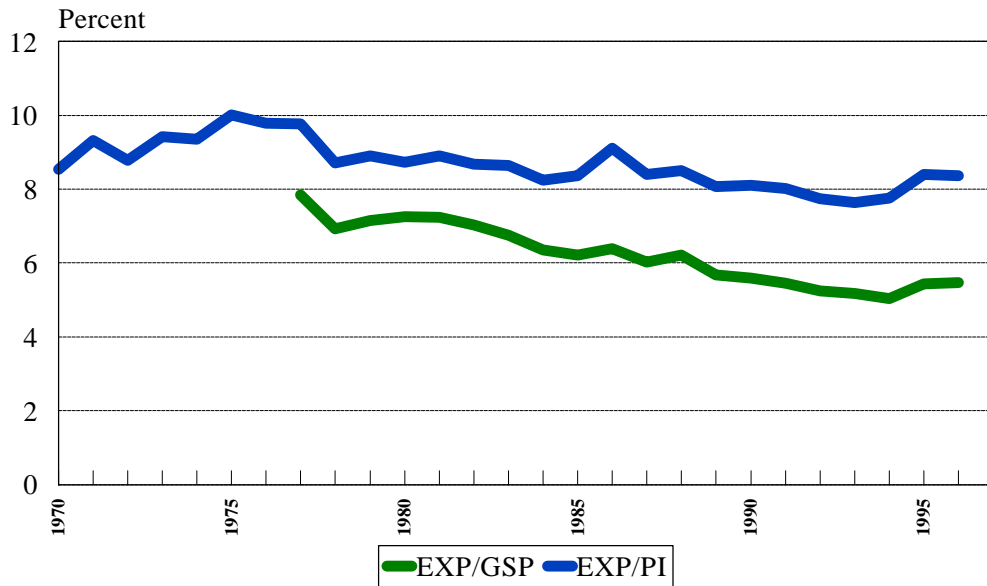
have been generated in other sectors. This initiative fundamentally changed the level of diversification within the labor market and the economy.

As the size of each sector changes, job opportunities also change for those sectors. The time when one could simply graduate from high school and get a well-paying job at the local factory is largely gone. Many of the less skilled jobs have been replaced by robots. As a result, many of the good jobs being created require significantly more education, either formal or employer-provided. Many of these jobs are performed by “information workers” now found in the service sector. They require the ability to use and process information in a variety of ways. For those without such skills, the future is not bright. Many are destined to remain at the low end of the income structure in lower level sales, clerical, and “old service sector” jobs. Fortunately, people are improving their educational level (Figure 10).

State Government

The policies of state and local government can have an impact on the way the state grows. Both companies and individuals look for a balance between public goods and services (schools, roads, police...) provided and the cost of providing them. Excessive taxes or low quality goods and services may inhibit the ability of companies to attract new employees to live in Delaware. At the same time, people may interpret a lack of services as potentially reducing their quality of life. This can have a negative impact on the ability of the state to attract new employees. In Figure 10 below, the ratios of state government expenditures (EXP) to both personal income (PI) and gross state product (GSP) are shown.

Figure 10
Delaware State Government Expenditures
as a Percent of Gross State Product and Personal Income
1970-1997



Source: Center for Applied Demography & Survey Research, University of Delaware

State government expenditures have been declining slowly as a percentage of both measures over the years. There are some anomalies, most notably in 1986 and after 1994 when the rate moved higher. Both reflect times of strengthening economic activity and good/superb revenue growth. Under those conditions, expenditures have been known to rise.

In the final analysis, government has a major role in future economic growth and it extends beyond expenditures. The provision of a quality education through the public school system is crucial. Second, partnerships with businesses, of which the FCDA is an excellent example, can improve the quality and diversity of employment for Delaware's citizens. Third, in order for employers to be able to attract the workers needed to fill the jobs they are creating in the coming decades, a good quality of life must be maintained.