degree courses, seminars, and workshops for working adults who seek specialized technical or managerial training or who require relicensure or recertification in their professions. Programs and courses last anywhere from two days to a full semester. Howard University will also arrange specialized training and development courses to public and private agencies and businesses on their work site.

* Columbia Union College in Takoma Park offers 7 two-year and 20 four-year degrees in health care, education, business, and the arts and sciences, as well as pre-professional programs. The College is affiliated with Washington Adventist Hospital and is highly regarded in health career preparation.

II. CURRENT EMPLOYMENT CONDITIONS

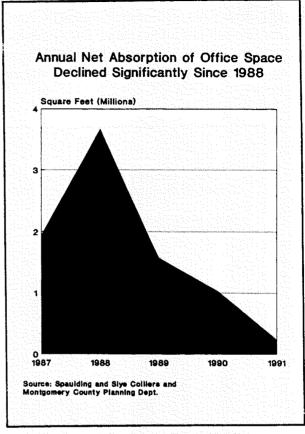
A. Employment Space Trends

1. Absorption

* According to data from the Spaulding and Slye Colliers Office Report, Montgomery County absorbed almost 12 million square feet of leasable space in the five and one-half years from mid-1986 through 1991. The increase occurred even though there was a net loss of occupied space in three of the four quarters of 1991.

The rate of absorption is the rate of net increase or decrease in occupied space. The quarterly Spaulding and Slye Colliers survey covers rentable commercial office and office-like industrial space in buildings of 20,000 square feet or more throughout the Washington, D.C. metropolitan area. It does not include owner-occupied buildings, government-owned buildings, or medical buildings. As a result, buildings occasionally move in or out of the rental supply as their ownership changes. The overwhelming majority of the increase in space represents new construction.

* Montgomery County's average annual absorption of 1.8 million square feet was lower than the annual absorption in Fairfax County, Prince



George's County, or Washington, D.C. between mid-1986 and 1992. These three jurisdictions averaged annual increases of 4.3 million, 2.0 million, and 6.9 million square feet of space respectively.

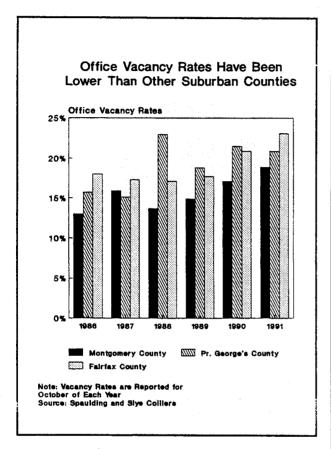
* The total rentable space or base for this growth varied greatly among the four jurisdictions.

Montgomery County increased its total rentable space from almost 17 million to almost 31 million square feet during the period; Fairfax increased from almost 27 million to over 62 million square feet; starting in the second quarter of 1986, Prince George's County grew from over 6 million to 15 million square feet; and the District increased from 48.6 million in the third quarter of 1986 to over 86 million square feet by the end of 1991.

2. Vacancy Rates

* The strong absorption of commercial space was accompanied by relatively high and generally rising vacancy rates. Montgomery County's comparatively moderate level of construction meant that the County also had the second lowest aver-

age vacancy rate, 15.9 percent, during the five and one-half years. The County's rate ranged from a low of 10.7 percent in the second quarter of 1987 to a high of 19 percent in the second quarter of 1991.



- * In spite of the increasing suburbanization of the regional economy, Washington, D.C. had the lowest average office vacancy rate, as well as the highest absorption of rental space of the four jurisdictions compared here. Its average vacancy rate was 9 percent during the period from 1987 through 1991. During the same period, Fairfax County had an average rate of 18.7 percent, while Prince George's County's average was the highest at 20.1 percent.
- * Vacancy rates and space absorption generally reflect the state of the economy. During the last five and one-half years, both Montgomery County and Fairfax County had their highest net absorption in 1988 toward the end of the boom. Absorption then decreased and vacancy rates

rose during the next three years as the recession approached.

There are exceptions, however. Although vacancy rates increased in both Washington, D.C. and Prince George's County between 1989 and 1991, as the economy turned downward, both jurisdictions experienced their second highest vacancy rate during the boom. Neither had unusually high net additions to the supply of space at the time of the higher vacancy rate. In addition, Washington, D.C.'s absorption of office space has been increasing since 1989 in spite of the economic downturn. The District has probably been insulated from the recession to a greater degree than Prince George's County by its especially large federal presence.

* One result of the rising vacancy rate for office space was that developers in Montgomery County chose to build or complete planned industrial space while backing off on office construction. Completions of industrial square footage in 1991 exceeded 30 percent of total non-residential completions, about 50 percent more than the annual average for industrial space between 1980 and 1992. The total industrial space completed in 1991 was almost one million square feet, the fourth highest total in the 12-year period.

B. Resident Labor Force Characteristics

- * Montgomery County's employed residents, aged 25 and over, are generally affluent and well-educated, compared to the County's entire population or to the national population. The typical employed resident is a married man who lives in a relatively large household, works in an office building, is employed full-time, works for the private sector, and drives alone to work. (Unless otherwise noted, all of the information in this section is based on the 1987 Census Update Survey and includes all full and part-time workers aged 25 and older.)
- * The differences between the demographic characteristics of the County's employed resi-

dents, aged 25 and older, and all County residents hold few surprises, but illustrate the composition of the resident work force. A higher proportion of employed residents are male than of all residents, although the difference is relatively small, 53 percent of workers are male compared to 47 percent of the general population. The distribution of workers by race and ethnicity is almost identical to that of the total population.

Although most workers, 73 percent, are married, workers are a little more likely to be men living alone or in a male headed household of unrelated individuals than all County residents, 6 percent compared to 4 percent. The median level of education of both groups is college graduate, but more employed residents hold graduate degrees; 28 percent compared to 24 percent for the total County population. The median level of education nationally is high-school graduate.

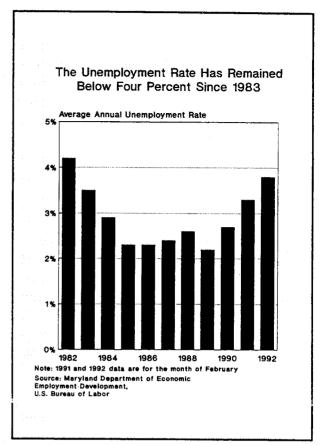
- * As might be expected, the median household income of employed County residents, aged 25 and over, is higher than the overall median. In 1986, it was \$61,935 in 1990 dollars compared to \$56,494 for all households. It is also substantially higher than the national median, which was \$31,078 in 1986 in 1990 dollars. Higher income is part of a pattern of inter-related characteristics, such as family size and housing type, which are also typical of younger and middle-aged adults.
- * Employed residents live in larger households than the overall County average. Their average household size is 2.8 persons compared to 2.6 persons for all households, reflecting the relative likelihood that workers' households include children. Resident employees own their homes more often, 72 percent compared to 70 percent. And more of them live in single-family houses, 74 percent compared to 70 percent for all County residents. Interestingly, the percentage living in garden apartments is about the same for employees as it is for all residents while the percentage of employed residents in high-rise buildings is only 8 percent compared to 11 percent overall.

- The typical Montgomery County worker, aged 25 and older, works in an office building, is employed by the private sector, and drives alone to work. More than half, 51 percent, of workers who live in the County are employed in office settings. The next two most frequent job locations are retail and wholesale facilities, 11 percent, and educational facilities, 9 percent. Sixty-two percent work in the private sector, 10 percent for nonprofit organizations, and 28 percent for government. Most of the workers in the 25-and-over age group drive alone to work, 72 percent, but 11 percent carpool and 9 percent take Metro, according to the 1987 Census Update. The remaining 8 percent walk, bicycle, take buses or MARC trains, or work at home.
- While the labor force participation rate for women aged 25 and over is approaching that of men, there are some significant differences in the employment characteristics of the two groups. A larger percentage of women work parttime than men, 21 percent compared to 5 percent. The percentage is even higher for women with children under 5, 31 percent of whom work parttime. Women are also more likely to hold jobs located in the County than men, 66 percent compared to 48 percent. Women work in office buildings a little less frequently and in educational settings more frequently than men, indicating that women remain more likely to hold teaching and related jobs. Finally, women drive to work alone a little less often and take buses or work at home a little more often. Not surprisingly, women, particularly those in their early thirties, also report the greatest need for daycare services.
- * Montgomery County's resident employees, aged 16 and older, work throughout the Washington, D.C. metropolitan area, but the majority, 59 percent, work in the County. In 1970, 54 percent worked in the County. A complementary change in work location was a decrease in those working in Washington D.C., from 33 percent to 25 percent.

* Young people aged 16 to 18 are an important segment of the County's work force. In 1987, approximately two-thirds of all persons in this age group held full or part-time jobs. Sixty-two percent worked in retail and wholesale locations indicating that they constitute an important labor resource for these businesses. Judging from their high household incomes and large household sizes, most were living with their families and were also attending high school. Males worked more often than females, 54 percent compared to 46 percent.

C. Labor Force Trends

- Montgomery County's labor force, including employed residents and those actively seeking work, grew from 308,000 in 1980 to 423,000 in 1991, an increase of 37 percent. Annual growth averaged 8,500, but two years showed a significant decline. The labor force shrank by more than 12,000 persons in 1980 and by almost 14,000 persons in 1991. Both decreases occurred during recessionary periods. In both cases, the decrease in the labor force was more than 4,000 persons greater than the number of unemployed workers for the year. This indicates that many residents chose to drop out of the labor force or to move rather than actively seek other work locally. The year with the greatest increase was 1985, when the local labor force grew by more than 25,000.
- * Montgomery County's unemployment rate remains low. During the 11-year period from 1982 through February 1992, rates have ranged from a low of 1.8 percent in March 1990 to a high of 4.2 in 1982, another recessionary period. The rate was at 3.8 percent in February 1992. The annual average for the period is 2.9 percent, which approximates the minimum rate of 3 percent that economists believe is necessary to allow choices for employees and employers and reasonable transitions between jobs.
- * Montgomery County's unemployment rate is consistently below the Maryland and national rates. Montgomery County's rate has generally been between 50 and 60 percent of the State rate



and 40 to 50 percent of the national rate. In February 1992, when Montgomery County's rate was 3.8 percent, Maryland's was 7.5 percent and the U.S. was 7.3 percent. (These rates are unusual in that the State's rate has usually been below the federal rate in the past.)

D. County Economic Policy

- * "To ensure the continued quality of life which exists in the County," the County Executive issued a "Plan for Economic Stability" for Montgomery County in January 1992. The strategy statement responds to Montgombery County's current economic downturn as well as more general economic issues. It contains four "strategic thrusts" for the 1990s as follows:
 - " Retain and attract Federal research and regulatory agencies;
 - Focus on knowledge-based industries and institutions;

- Enhance the growth of existing businesses;
 and
- Strengthen the workforce to meet present and future needs."

This statement constituted part of the Executive's comments on the Annual Growth Policy. The statement also called for a reasonably balanced ratio of jobs and housing and for more concentrated development in Metro station areas to use the County's infrastructure more efficiently. The statement is also part of Montgomery County's Strategic Plan for Economic Development for the 1990s.

III. RELATIONSHIP OF HOUSING TO EMPLOYMENT

- * In 1990, the County-wide ratio of existing jobs to existing housing units was approximately 1.5 to 1. One measure of balance between housing and jobs is one job for each resident worker. Using this measure, the County's current situation is consistent with the General Plan's land use objective of a balanced relationship between residential growth and economic activities. Since Montgomery County households have an average of about 1.5 workers, a jobs/housing ratio of between 1.4 and 1.6 is reasonably balanced.
- * The potential future County-wide ratio of jobs to housing, based on the development capacity of all currently zoned and planned acreage for these uses, could range from 2.4 to 2.7 jobs per housing unit. This zoned ratio of jobs to housing does not appear to be consistent with the General Plan's objective to "obtain a balanced relationship between residential growth and economic opportunities," although the Plan did not specify an exact ratio.

However, the buildout ratio of jobs to housing may be overstating the number of jobs that will actually develop. On average, employment sites use a smaller proportion of their zoning holding capacity than housing. Industrial and retail buildings are designed for the functional use

of their occupants more than to maximize FAR. Many commercial uses, such as shopping centers and gasoline filling stations, prefer one- or two-story buildings even when a higher FAR is allowed. Surface parking is often preferred because it is usually more convenient and is much less expensive. The combination of low structures, green area, surface parking, and setback requirements results in lower than maximum use of available FAR. On the other hand, a housing site is considered "fully developed" if it contains a housing unit of greater assessed value than the value of the land on which it is located, regardless of the size of the unit, setbacks, and other development factors.

* The General Plan objective concerning the balance of jobs and housing addressed the issue on a County-wide basis. The Plan clearly did not expect each smaller geographical area, such as an individual master plan or sector plan area, to strive for such a balance. In fact, the Growth Management Advisory Work Group questioned the use of the jobs/housing ratio in area master plans. Balance is only one element that master plans consider when establishing the vision for an area. There are many others.

IV. FUTURE COUNTY EMPLOYMENT

A. Development Capacity

- * The total full development job capacity of employment- related zoned and planned land in Montgomery County ranges from 1,023,000 jobs to 1,269,000 jobs. Existing buildings account for about 41 percent of low capacity and 33 percent of the high. Of the total capacity, space for 605,000 to 850,000 jobs remains to be built. In September 1991, the pipeline of approved development contained enough space to serve about 125,000 jobs, or about 10 percent of the high capacity.
- * If growth were to continue at the average annual rate of the years between 1970 and 1990, Montgomery County would have enough zoned capacity for jobs well beyond 2040, based on the