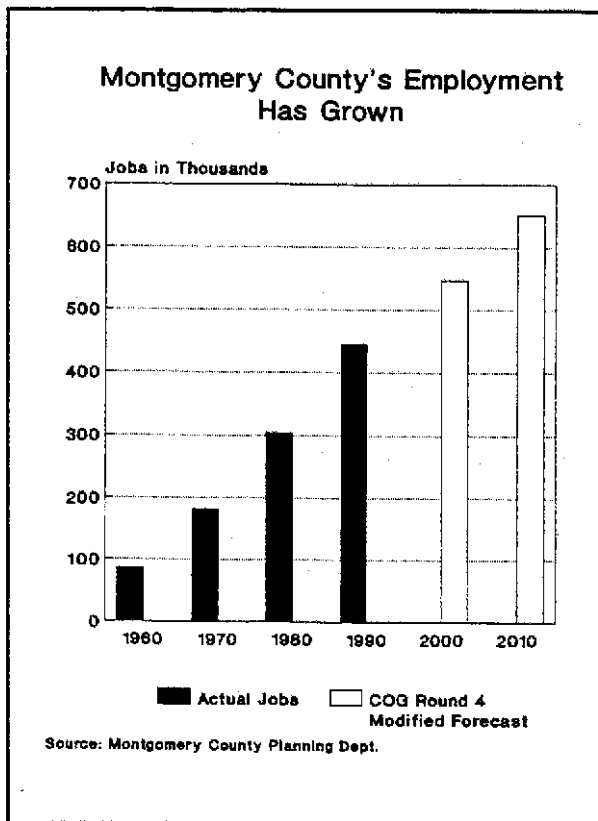


I. HOW ECONOMIC ACTIVITY HAS CHANGED

A. Quantity

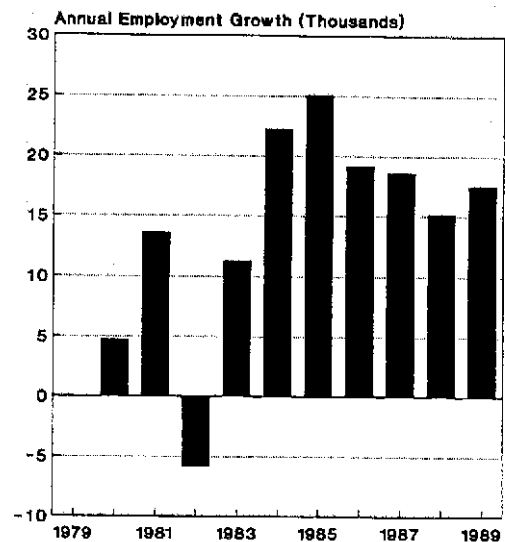
1. Change in Jobs

* The number of jobs located in Montgomery County has more than doubled since 1970. Over 140,000 jobs were created between 1979 and 1989 alone. Montgomery County Planning Department data show that total at-place employment in Montgomery County grew from 182,000 in 1970 to 455,000 in 1990, an increase of 150 percent. In contrast, population increased by 45 percent.



* Montgomery County's share of Washington Metropolitan Area employment increased as Washington, D.C.'s share continued to shrink. Between 1970 and 1989, the County's share of regional employment grew from 15 to 18 percent. During this period, Washington, D.C.'s share of regional employment fell from 43 percent to 28 percent. According to the U.S. Bureau of Economic Analysis, Montgomery County's job

Annual Variation in Job Growth Has Been Substantial



Source: U.S. Bureau of the Census, County Business Patterns and Montgomery County Planning Dept.

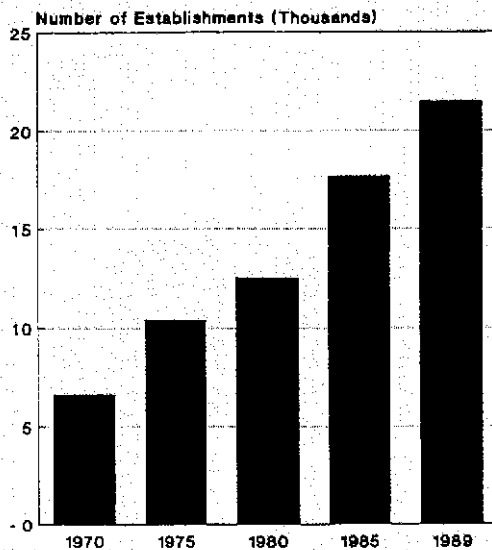
growth of 113 percent exceeded the region's 78 percent, but was smaller than Fairfax County's growth of 270 percent. (Note: The Montgomery County Planning Department uses *U.S. County Business Patterns* at-place employment data in most cases, but the Bureau of Employment Analysis data is used in this case to allow comparison between jurisdictions.)

2. Change in Businesses

* Only 19 private companies located in Montgomery County employ more than 1,000 people. In 1973, there were 6 fewer, or 13, private firms of this size. The top three employers in Montgomery County are IBM, Marriott Corporation and the Chesapeake and Potomac Telephone Company. These firms were present in the County in 1973 as well. Each has a number of sites but their area headquarters are located primarily in the urban/suburban ring.

* Most people are employed in small businesses. The number of business establishments in Montgomery County has more than tripled since 1970.

The Number of Business Establishments Tripled Since 1970



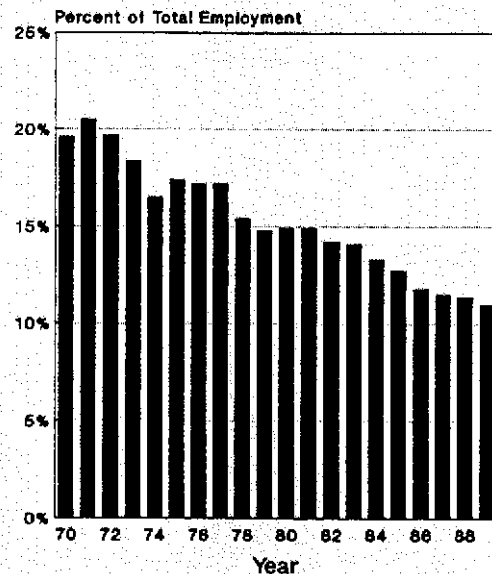
Source: U.S. Bureau of the Census
County Business Patterns

By 1989, the number of business establishments in the County had risen from 6,650 to approximately 21,500, according to data from *County Business Patterns*. County establishments are predominantly small, as they have been consistently during the past two decades. The large majority employ fewer than 50 people. About 73 percent of all businesses employ fewer than 9 people, 22 percent employ between 10 and 49 people, 5 percent employ 50 to 249 people, and only 1 percent of the businesses employ 250 people or more.

* As the County's employment base diversifies, the federal share of employment continues to shrink, even though the number of agencies has increased slightly. In 1970, almost one of every five employees in Montgomery County worked for the federal government. By 1990, even though federal employment in the County had grown by over 30 percent to 42,000 employees, only one of every ten employees in Montgomery County worked for the federal government. The County is home to several of the federal government's largest campuses, including the National Insti-

tutes of Health, the National Naval Medical Center, the Department of Energy, and the National Institute of Standards and Technology. In 1970, 18 federal agencies existed in the County. By 1990, this number had increased by only 1 to 19 agencies. Montgomery County's decrease in share reflects growth in the non-federal work force and the dispersion of federal employment centers over a larger region.

Federal Share of Total Employment Has Declined Gradually for Two Decades

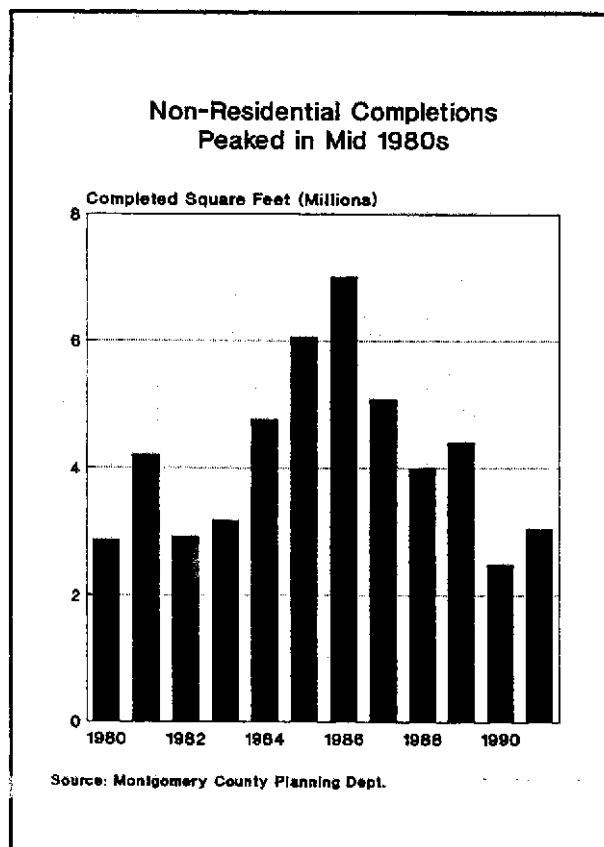


Source: Montgomery County Planning Dept.

3. Change in Employment Space

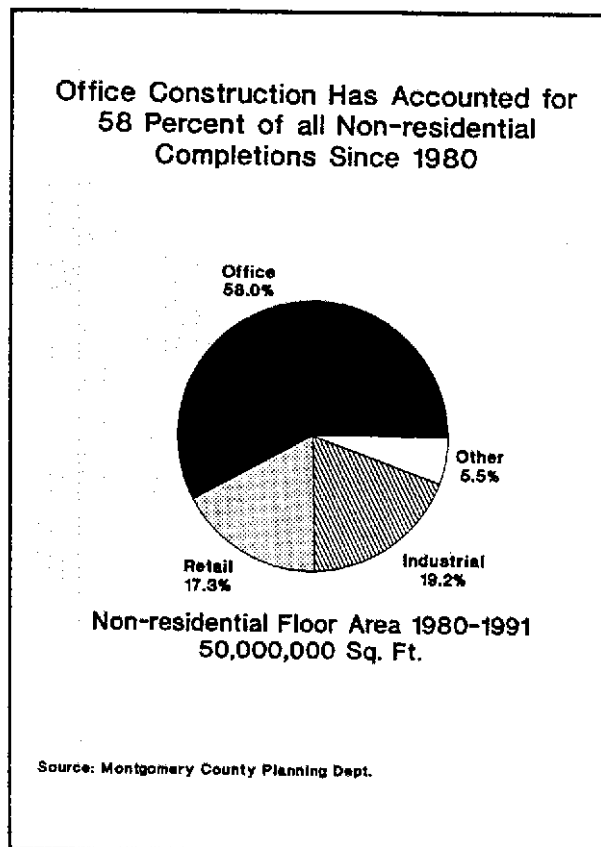
* Montgomery County has approximately 141 million square feet of employment floor area. Thirty-eight percent, about 53 million square feet, of this space is classified as office; 22 percent, or 31 million square feet as retail; a little over 12 percent, 18 million square feet, as industrial; and 28 percent, or 40 million square feet, as "other." "Other" includes hotels, hospitals, schools, and similar, generally institutional uses. These calculations exclude miscellaneous, generally low employment intensity space such as apartment buildings and farm buildings.

* Over 50 million square feet of non-residential space were completed in Montgomery County between 1979 and the end of 1991. Completions peaked in the mid-1980s. The Gaithersburg East policy area captured over 23 percent of the County's non-residential completions during the 1980s with an annual average of almost one million square feet completed. The combined I-270 Corridor policy areas accounted for a large proportion of total non-residential completions. Non-residential completions in the wedge areas have been minimal.



* In contrast to the General Plan's expectations, there has been greater growth in office space than in industrial space. New office space accounted for 58 percent of total square footage of non-residential completions between 1979 and 1991, adding almost 29 million square feet during the 12-year period, while industrial space accounted for less than 20 percent of completions. In addition, industrial space has been used predominantly for research and development or

warehousing, rather than manufacturing as the General Plan envisioned.



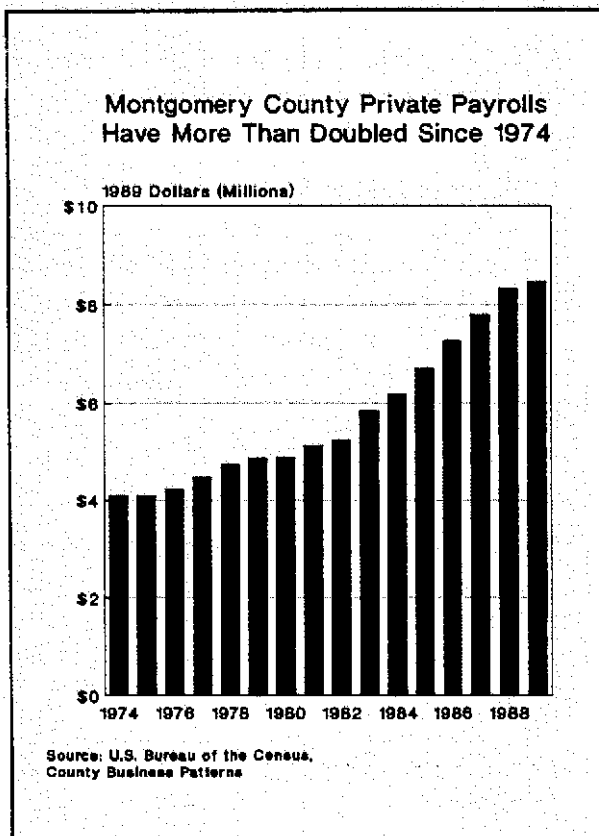
* An estimated 17.5 million square feet of retail space are located in 217 shopping centers across Montgomery County, an increase of almost 6 million square feet since 1970. That increase of 52 percent was only slightly more than the corresponding population increase of 45 percent during the period. Based on data gathered from the 1990 Kalis's Shopping Center Leasing Directory, five urban/suburban ring and I-270 Corridor locations - Silver Spring, Bethesda, Rockville, Germantown and Gaithersburg - account for more than 80 percent of the growth in retail space. The Gaithersburg area alone accounts for almost half of all new shopping center space since 1970.

B. Other Measures of Economic Activity

* Total Montgomery County retail sales increased by 41 percent between 1972 and 1987, from \$4.1 billion to \$5.8 billion in constant 1987

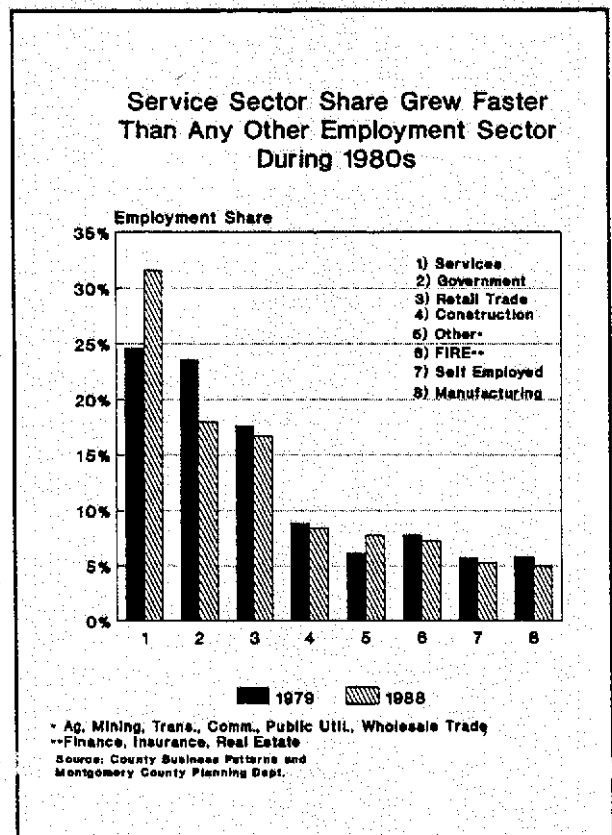
dollars. Population growth accounted for a substantial portion of the increase, although per capita sales still grew almost 13 percent, based on data from the Census of Retail Trade. In fact, sales rose approximately \$1,000 per person from \$7,500 in 1972 to \$8,500 in 1987 in constant 1987 dollars.

* Montgomery County's private payrolls also increased substantially between 1974 and 1989 from \$4.1 billion to \$8.5 billion in constant 1989 dollars, but the increase per payroll worker was only 0.5 percent. The increase in total payroll represents growth of almost 107 percent. That increase, however, is almost entirely due to the increase in the number of payroll employees. Dollars per payroll employee increased by just over \$100, from \$24,790 to \$24,917, in constant dollars, based on data from *County Business Patterns*. (Note that private payroll employees accounted for about 77 percent of at-place employment in 1989. Government employees, self-employed persons, employees of some non-profit organizations are among those who are not included.)



C. Employment Character

* Many of Montgomery County's major private employers have been located in the County since before 1970. Companies that have employed over 2,000 people in the County since 1970 include Vitro Corporation and GEICO in the urban/suburban ring and the IBM Corporation in both the ring and the I-270 Corridor. Other major employers that have located major facilities in the I-270 Corridor since before 1970 include Fairchild Industries, Bechtel, NUS Corporation, National Geographic Society, and Watkins-Johnson Company. The Chesapeake and Potomac Telephone Company, located within the urban/suburban ring, has provided continuous employment in Montgomery County since before the General Plan's adoption. Some Montgomery County employers are considering consolidating operations outside Montgomery County, however.



* Montgomery County's fastest growing employment sector since 1970 has been the service sector, even though the General Plan

envisioned significant growth in manufacturing. Between 1970 and 1990, manufacturing declined from 5 percent to 4.4 percent as a share of total at-place employment. The service sector unexpectedly represented more than one-third of total at-place employment in the County, up from 21 percent in 1970. The retail sector followed with over 16 percent of at-place employment.

The service sector includes most of the traditional professions as well as day-to-day personal services such as dry cleaning, beauty shops, and car repair. The practice of law and medicine, accounting, engineering, and computer programming are examples of the many professions which are classified as service occupations.

D. Intensity of Employment

* The intensity of use and design of employment centers have changed. Prior to 1970, headquarters of large County employers such as Vitro Corporation, National Geographic, and GEICO were typically located in low-rise buildings in large park-like settings. After 1970, additional gross floor area was added to many existing employment centers and new ones were developed. This additional density more closely follows the wedges and corridors concept as envisioned in the General Plan. Office buildings have become more site intensive, thereby requiring less land per employee. Two federal agencies, the National Oceanographic and Atmospheric Administration (NOAA) and the Nuclear Regulatory Commission (NRC), have built tall office buildings within walking distance of major transit stations. The multi-story buildings at Rock Spring Park are another example of more intense office development in the urban/suburban ring. Consistent with the General Plan, no major private employment centers are located in wedge areas.

* Changes in the Zoning Ordinance since 1960 have encouraged greater intensity of commercial/industrial land use. The Central Business District (CBD) and Transit Station (TSM) zones particularly encourage more mixed use and intensity than was offered by the office park approach

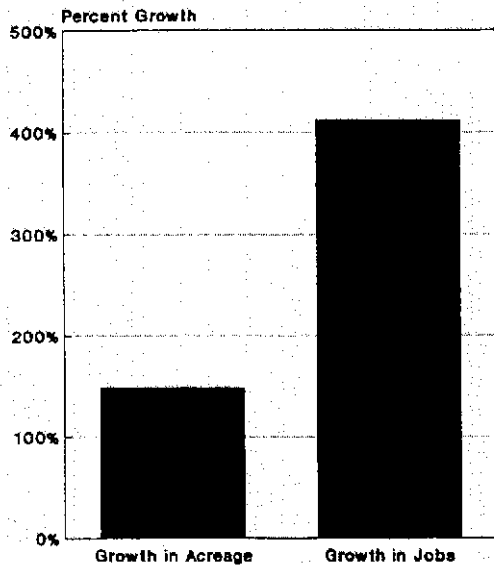
which was very popular in the 1950s and 1960s. The NOAA and NRC buildings noted in the preceding bullet are examples of the CBD and TSM zones respectively, both have a residential phase and ancillary retail. The greater intensity is viewed as a more efficient use of land and infrastructure, especially transportation facilities. There are businesses, however, which will probably continue to prefer an office park setting. These include high technology firms, where security for research efforts is important, and businesses, which need low, spread out buildings for laboratories, assembly areas, and truck deliveries.

While the general trend has been toward greater intensity of land use, the County has reduced the permitted floor area ratio (FAR) in several zones. The C-2 zone was the most intense commercial zone in the 1960s, allowing up to 14 FAR. The allowable density in the C-2 zone has now been reduced to 1.5 FAR. The change is not as drastic as it appears on the surface because C-2 zoning has been replaced by CBD zones in areas designated for intense development in Central Business Districts. The maximum density in the CBD-3 zone is 8. In addition, an FAR cap of up to 0.6 has been imposed on development in the I-3 zone, which previously did not have a limit.

* Between 1960 and 1991, the number of acres of land used for employment (commercial, industrial, governmental and institutional) grew almost 150 percent, from 12,600 to 31,200 acres, while total employment jumped over 415 percent, indicating the increase in intensity. The growing use of structured parking at employment locations and the increase in average building height are elements of this change.

* Even with this substantial growth, commercial and industrial uses now occupy only 2.6 percent of the County's land area. Nonetheless, 2.6 percent is a sizable increase from 0.6 percent in 1960. Institutions and government installations not occupying leased space represent another 7.0 percent of the County's land compared to 3.3 percent in 1960.

Commercial Land Use Is More Intensive Since 1960



Source: Montgomery County Planning Dept.

Summary of Land Use (in Acres), 1960-1992

Land Use	1960		1991	
	Number	Percent	Number	Percent
Single-Family	23,700	7.5%	86,800	26.7%
Multi-Family	700	0.2%	6,700	2.1%
Commercial	1,000	0.3%	5,600	1.7%
Industrial	1,000	0.3%	2,800	0.9%
Local Gov., Insts., Fed. Install., other open	10,600	3.3%	22,800	7.0%
Park & Recreation*	6,800	2.1%	24,100	7.4%
Vacant, Forest, Agriculture**	263,400	82.8%	167,300	51.6%
Other, including rights-of-way	10,800	3.4%	8,400	2.6%
TOTAL***	318,000	100.0%	324,500	100.0%

* Some parkland is included in other categories.

** 90,000 acres included in the Agricultural Reserve in 1991.

*** Totals vary due to differences in tabulations of rights-of-way and islands.

Source: Montgomery County Planning Department.

* The amount of land zoned for commercial and industrial use has also increased since 1960. In 1991, 3.9 percent of the County's land area was zoned for commercial and industrial use compared to 1.1 percent in 1960. Another 1.4 percent was zoned for mixed use, including commercial and industrial uses. Mixed use zones were not available in 1960.

Percentage Distribution of Zoned Land by Zoning Category 1960 - 1991

Zone	1960	1991
Commercial	0.4%	1.1%
Industrial	0.9%	2.8%
Mixed Use	N.A.	1.4%
Multi-Family	0.4%	1.7%
Single-Family	98.3%	51.2%
Rural/Agriculture	N.A.	40.8%
Other	N.A.	0.9%
	100.0%	100.0%

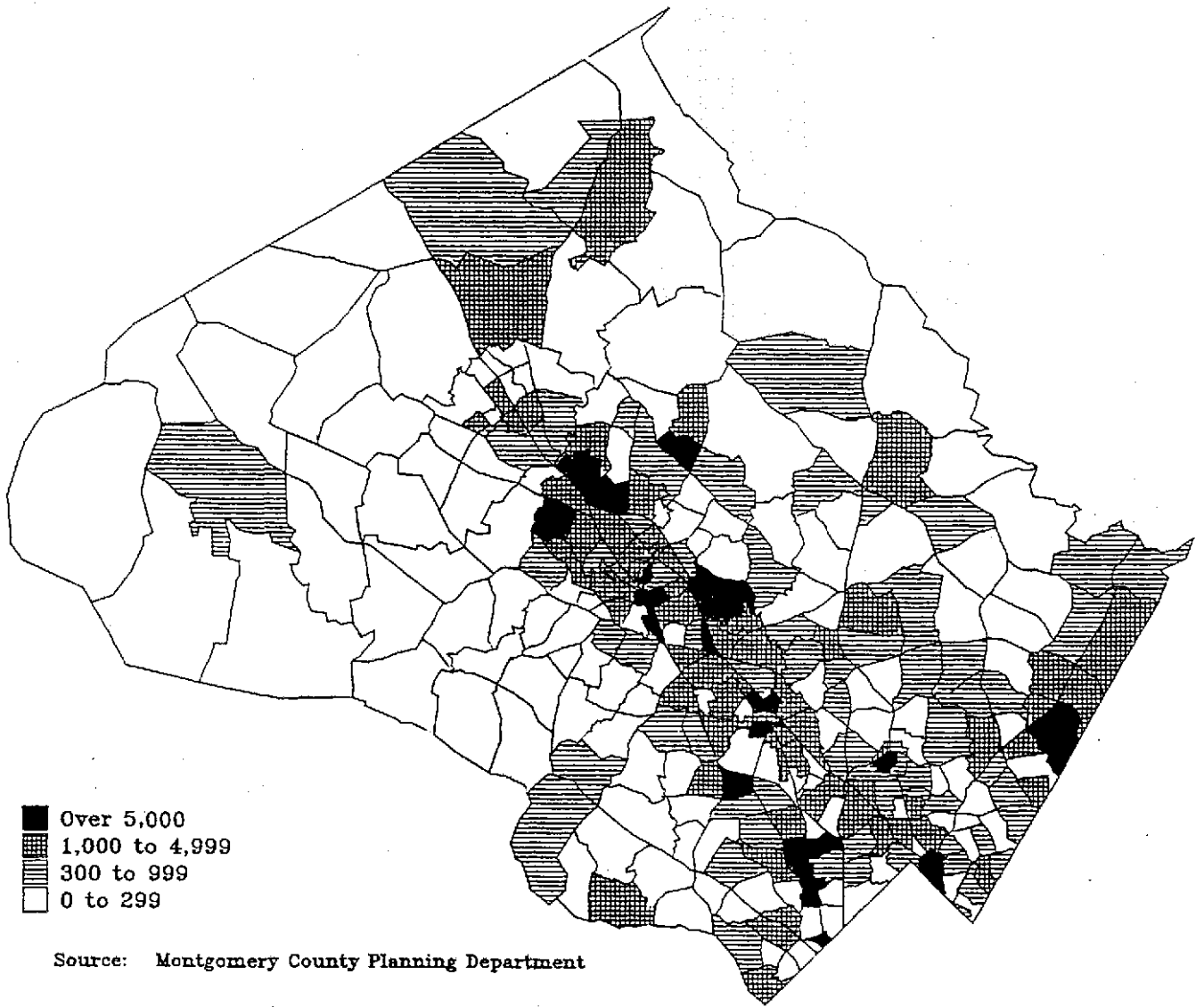
Note: Total is less than the County's total acreage because most water areas and some rights-of-way are not zoned.

Source: Montgomery County Planning Department, Maryland State Tax Assessor's Parcel File, and the ...On Wedges and Corridors, 1964.

Land use and zoning distributions of County land are not strictly comparable. Special exceptions, the variety of zones used for government land, residentially zoned parking lots, and other special situations sometimes mean that the actual use is different from the primary type of use designated by the zone.

* Regional mall space has grown since 1970. Two new regional malls have been completed since 1970 in the urban/suburban ring and the I-270 Corridor, White Flint Mall in North Bethesda and Lakeforest Mall in Gaithersburg. Major additions to the County's other two regional malls, Montgomery Mall and Wheaton Plaza, also have been built since 1970, and Wheaton Plaza has been enclosed. Every regional mall except Lake-

**Job Distribution as of January 1991
By New Traffic Zones**



forest Mall now has structured parking facilities, allowing the land to be used more intensely.

- * **The size and intensity of neighborhood shopping centers and their anchor stores has changed during the last 20 to 25 years.** Between 1970 and 1990, the size of a prototypical grocery store almost tripled from under 20,000 square feet to nearly 60,000 square feet. As a result, grocery chains now prefer to locate in relatively large neighborhood shopping centers and prefer those containing 100,000 square feet of space or more.

E. Geographic Distribution of Employment

- * **The distribution of employment locations in Montgomery County has basically followed the wedges and corridor pattern of the General Plan, as illustrated by the map.** The map divides the County's traffic zones into five major categories of employment intensity. The darkest patterns indicate the highest concentration of jobs. Traffic zones with more than 5,000 jobs are generally located in the urban/suburban ring and in the I-270 Corridor. In the ring, the highest concentrations are in the four central business districts, the City of Rockville and the Rock Spring and West Farm office/industrial park areas. Employment is generally intense throughout the I-270 Corridor and centered along I-270 for the most part, with the airpark to the northeast the most distant intensive location.

In addition, the larger towns and the satellite communities of Olney and Damascus have significant numbers of jobs, generally providing goods and services to local residents. Farming, parks, and limited local retail and public services such as schools are the major forms of employment in the wedge, although the PEPCO and NIH facilities also offer limited employment there.

- * **The percentage of Montgomery County residents who work in the County has increased.** Approximately 59 percent of Montgomery County's employed residents worked in the County in 1987, compared to about 54 percent in

1970. Although the General Plan expected employment growth along the corridors and in the urban ring, the radial pattern of the Plan implied that the central city, Washington, D.C., would remain the primary job location. The change in the geographic distribution of County residents' jobs makes this less and less true.

- * **Redevelopment efforts in Silver Spring and Bethesda have helped maintain economic activity in the urban/suburban ring.** Between 1980 and 1990, a significant amount of redevelopment occurred in the urban/suburban ring. Land uses around the urban/suburban ring Metro stations have intensified. The Bethesda and Silver Spring Central Business Districts (CBDs) alone accounted for more than 13 percent of total non-residential completions, and the entire ring accounted for over one-third of total non-residential completions between 1980 and 1990.

F. Agricultural Employment

- * **The General Plan's commitment to farmland preservation and agricultural jobs has been reinforced by subsequent land use policies and zoning actions.** Changes in zoning, especially the adoption of the Rural Density Transfer (RDT) Zone and the introduction of the Transferable Development Rights (TDR) Program, have done much to protect Montgomery County farmland. In 1981, approximately 90,000 acres were rezoned to the Rural Density Transfer Zone and designated as the Agricultural Reserve. These zoning efforts complement state and local programs to purchase easements for the purpose of farmland and farming activity protection as well.

- * **The loss of farmland has slowed appreciably since 1969.** From January 1981 to November 1991, there have been only 76 subdivisions approved (213 lots) in the RDT zone. This compares to 750 lots approved in rural areas in 1978 alone. The decrease illustrates the dramatic decrease in development activity in the Agricultural Reserve.

- * **The number of farms increased from 654 to 669 between 1969 and 1991.** At the same time, the av-

erage size of a farm declined from 177 acres to 155 acres.

* **More than 100,000 acres of Montgomery County land are currently used for farming, according to the Maryland State Tax Assessor.** This land represents almost one-third of the total area of the County.

* **Almost 32,000 acres of farmland are protected by private, State and County easements.** The protected land includes over 26,000 acres in easements through the County's TDR program, over 2,000 acres in the County's Agricultural Easement Purchase Program, almost 2,000 acres in the Maryland Environmental Trust, and another 1,700 acres in the Maryland Agricultural Land Preservation Foundation program.

G. Employment Related Education

* **During the past decade, Montgomery County has significantly strengthened educational opportunities for its work force by developing and expanding centers for higher education.** These centers are designed to complement and enhance the County's position as a leader in high technology industries, management, and research. To this end, the County has committed over \$40 million in land, infrastructure, and building construction in the development of satellite campuses for two major research universities: the University of Maryland and Johns Hopkins University. The presence of these campuses in the Shady Grove Life Sciences Center is considered instrumental in the continued development of high technology industries in the County. The County has also greatly expanded Montgomery College facilities, highlighted by the addition of the Germantown campus.

* **The Johns Hopkins University opened in Montgomery County in 1988 and offers master's degrees in nine professional fields.** Degree programs include: computer science, electrical engineering, technical management, public health, administrative science, applied behavioral science, special education, guidance and counseling,

and interdisciplinary science studies. The University also has plans to develop a research and development park to complement its academic programs.

* **The Shady Grove campus of the University of Maryland, opened in 1983, attracts many full-time workers to its part-time degree programs offered in the evenings.** Currently, undergraduate degrees are offered in 17 fields, including computer science, management, and liberal arts. The University also offers 8 master's degree programs in a variety of technology-oriented fields, such as telecommunications management, engineering management, computer systems management, and technology management. An MBA program is also offered at the Shady Grove campus.

The University of Maryland is also part of a joint-venture with the National Institute of Standards and Technology and Montgomery County. Their Center for Advanced Research in Biotechnology conducts biotechnology research and complements the County's employment strengths in this field.

* **In addition, Montgomery College has expanded its facilities to offer additional educational and professional training opportunities in Montgomery County.** Its enrollment has soared 350 percent, and it has added the Germantown campus since 1970. Montgomery College now offers classes to 20,000 degree candidates and 13,000 continuing education students on its three campuses in Montgomery County. The college offers degree programs in a range of technologies from automotive technology to biotechnology. It also offers over 1,000 courses, programs and services that address local industry needs, some of which are offered directly at company sites. In addition, the College operates a Center for Small Business in Bethesda for small-business professionals.

* **Howard University recently opened a branch of its School of Continuing Education in the Silver Spring CBD to meet the educational needs of working adults.** The university offers non-de-

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

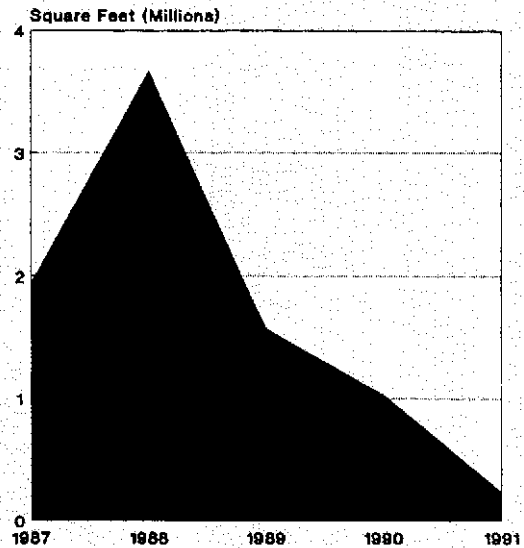
1. Absorption

* 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**

Annual Net Absorption of Office Space Declined Significantly Since 1988



Source: Spaulding and Slye Colliers and Montgomery County Planning Dept.

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-