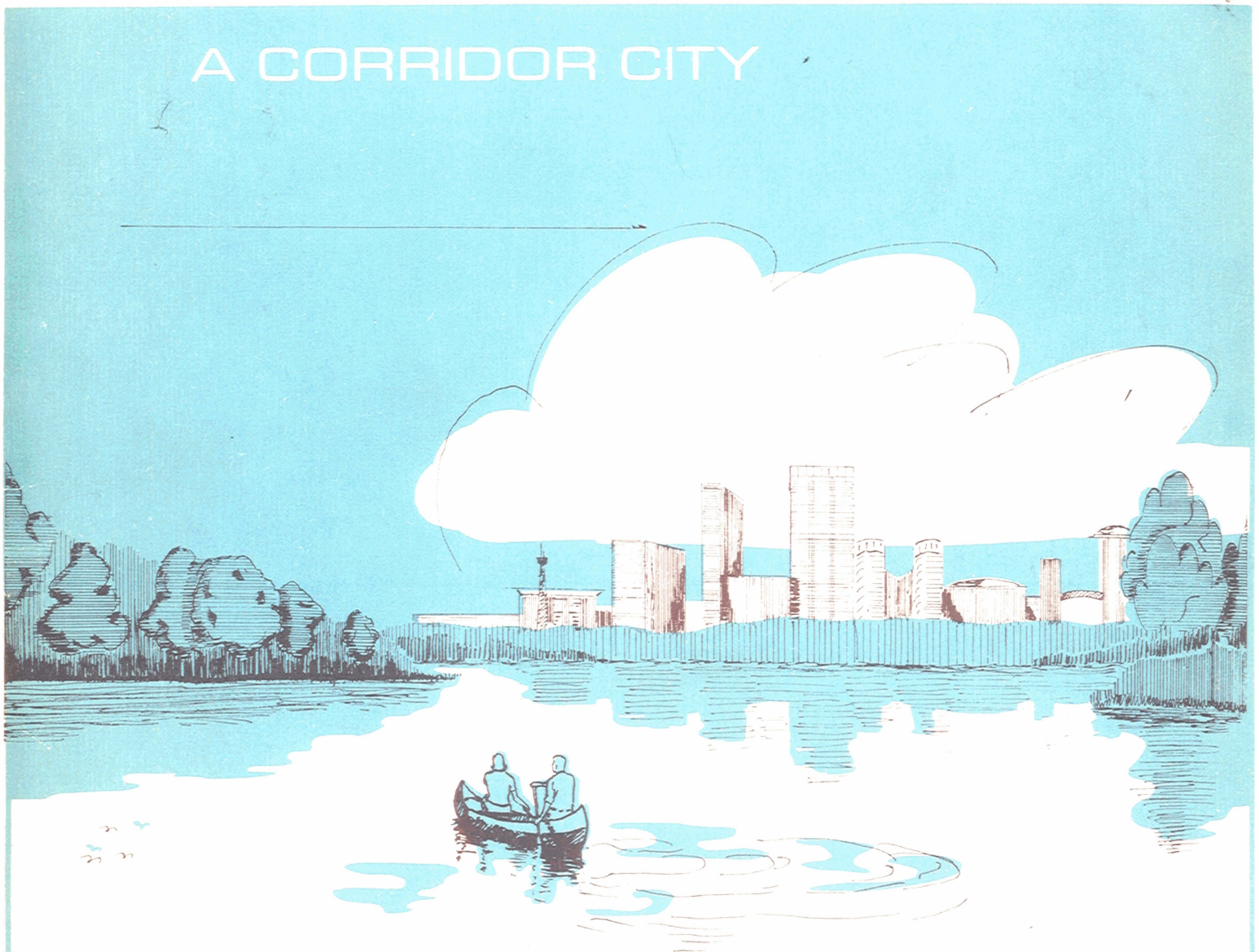


MASTER PLAN FOR GERMANTOWN

A CORRIDOR CITY



THE MARYLAND-NATIONAL CAPITAL
PARK AND PLANNING COMMISSION

MASTER PLAN FOR
GERMANTOWN
MONTGOMERY COUNTY, MARYLAND

CERTIFICATE OF ADOPTION

THIS MASTER PLAN FOR GERMANTOWN IS A PART OF THE GENERAL PLAN FOR THE PHYSICAL DEVELOPMENT OF THE MARYLAND-WASHINGTON REGIONAL DISTRICT IN MONTGOMERY AND PRINCE GEORGE'S COUNTIES, ADOPTED PURSUANT TO THE PROVISIONS OF CHAPTER 780, LAWS OF MARYLAND, 1959, AS AMENDED, BY RESOLUTION OF OCTOBER 19, 1966, AFTER A DULY ADVERTISED PUBLIC HEARING HELD ON JUNE 13, 1966.


JESSE F. NICHOLSON
Secretary-Treasurer


W. C. DUTTON, Jr.
Chairman

JANUARY 1967

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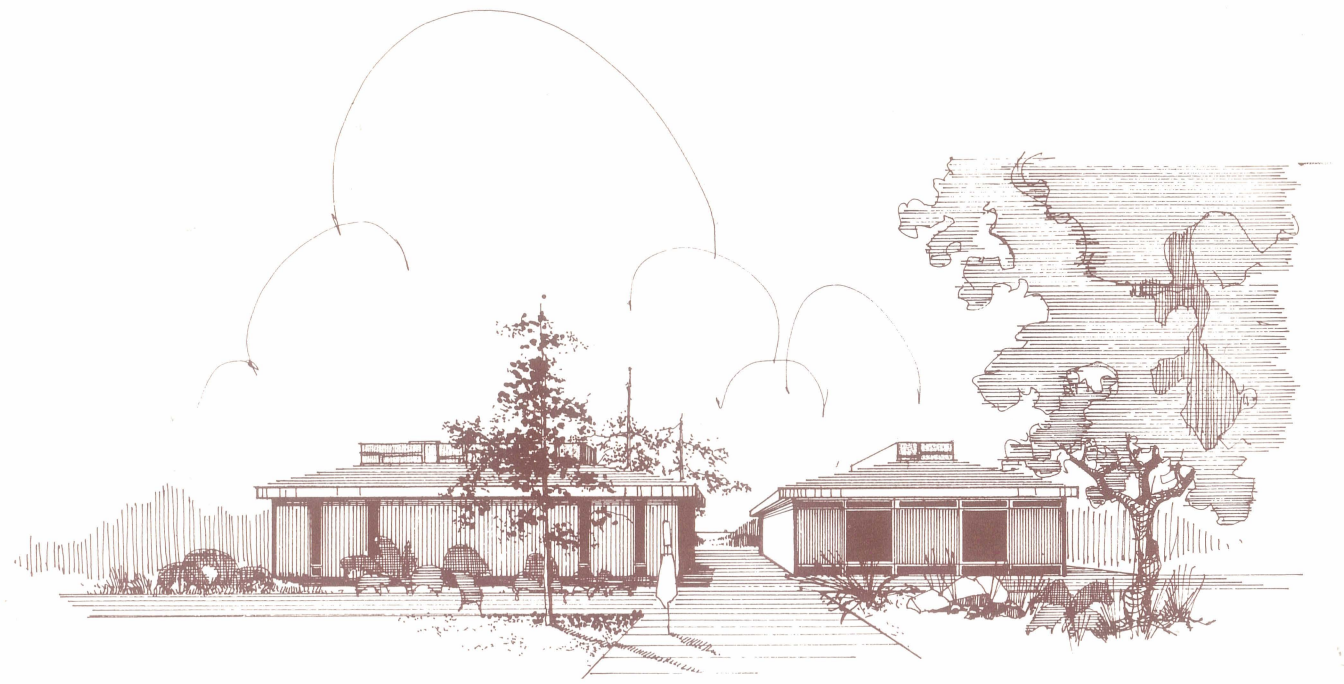
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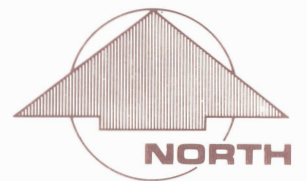
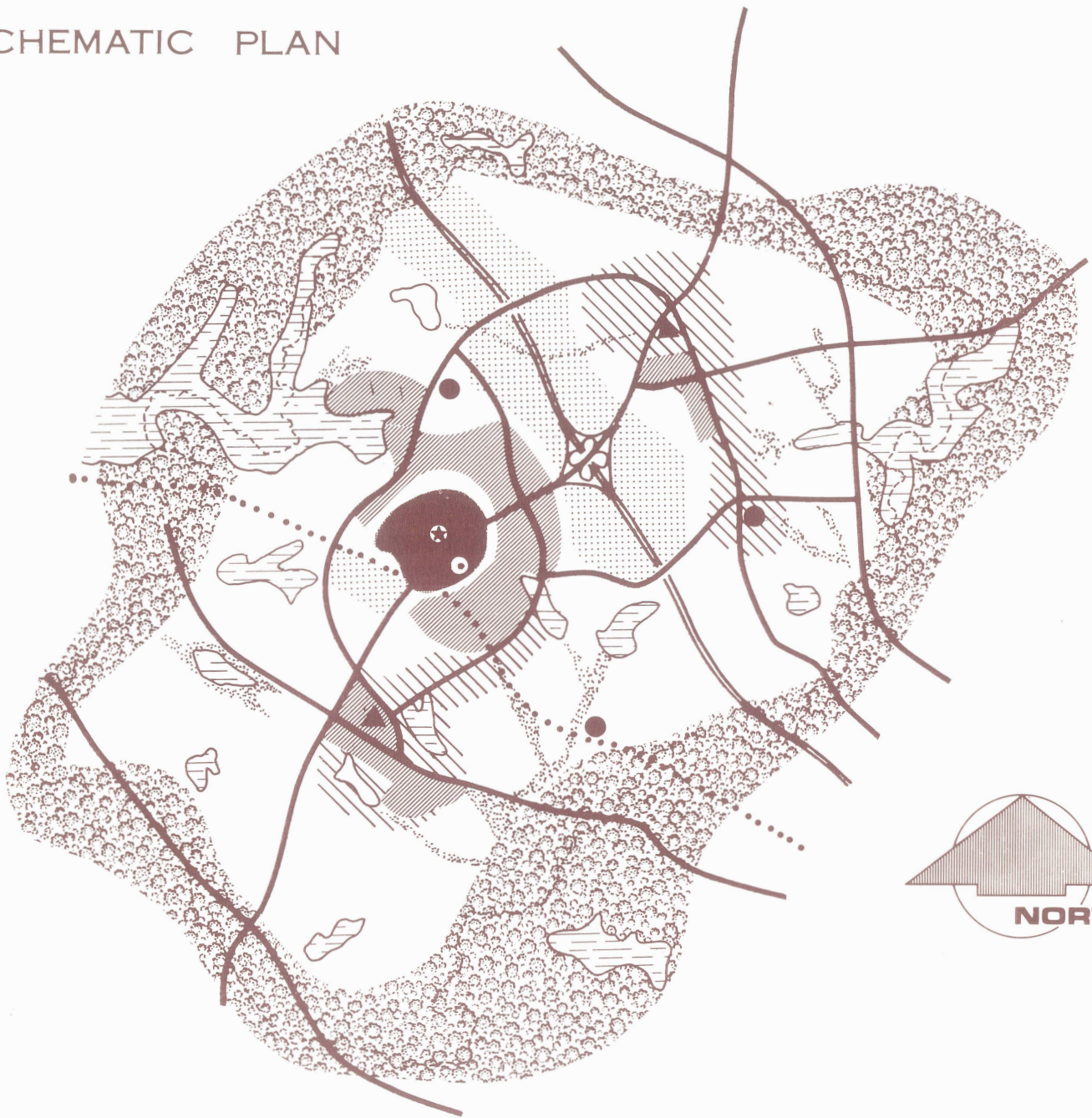


INTRODUCTION – SUMMARY




This Master Plan for the development of Germantown is the first attempt to create a "Corridor City", as proposed in the "Wedges and Corridors" General Plan, adopted by The Maryland-National Capital Park and Planning Commission in 1964. The result is a community for some 95,000 people, covering approximately 15 square miles of land, and located within 25 miles of downtown Washington, D. C. The Plan puts forward a number of new ideas and recommendations for the physical development of a community according to the concept of "New Towns" similar to Reston and Columbia, but carried out within the framework of diverse private ownership and public regulation. As such, the Plan calls for experimentation on the part of both public and private individuals and agencies in the use of new methods to conserve open space, acquire lands for public purposes, and to promote development of an environment for living that will provide social, cultural and employment opportunities to meet tomorrow's standards. **Outstanding features of the Plan include:**

1. A well defined community boundary delineated in large measure by stream valley parks forming a continuous greenbelt.
2. A strategically located central core with commercial, civic and high density residential areas unified by dramatic new approaches in urban design.
3. Prime industrial sites to augment and expand the county's role as the chief research and development center of the nation.
4. A pattern of neighborhoods and communities designed to minimize the penetration of through traffic and the intrusion of non-residential land uses into residential areas.
5. A circulation system which provides both regional traffic movement and facilitates convenient internal circulation.
6. An open space program befitting tomorrow's increasing recreational needs and establishment of a water oriented community with numerous opportunities for lake front residential development.
7. A school system incorporating the school-park concept and designed to accommodate enrollments resulting from residential patterns in well defined neighborhoods.
8. A zoning pattern permitting a wide diversity of housing types and the added opportunity to use new categories for planned unit development and imaginative neighborhood design.
9. A pattern of development compatible with the natural topography making possible logical extensions of sewer and water facilities on a programmed basis during the early stages of community growth.




SCHEMATIC PLAN



Residential Areas

-  Single Family
-  Med-density Multi-Family
-  High density Multi-Family




Commercial Areas

-  Neighborhood
-  Community
-  Regional

Community Facilities

-  Civic Center
-  Parks
-  Lakes
-  Conservation Area
-  Industrial Areas

Transportation

-  Rapid Transit
-  Freeway
-  Major Highways

CHAPTER I — LAND USE INVENTORY

Location — The planning area receives its name from the small community of Germantown, situated at the intersection of Maryland Route 118 and the Metropolitan Branch of the Baltimore and Ohio Railroad. From this location, in the northwest section of Montgomery County, Maryland, it is some 33 miles to Baltimore, 18 miles to Frederick and 9 miles to Rockville, the County Seat.

Boundaries — Germantown is bordered on the east by the Great Seneca Creek and on the west by Little Seneca Creek. Both streams originate in the northern portion of the county and flow in a south to southwesterly direction. Major drainage channels are used to define the northern and southern limits of the planning area. The northern boundary follows a tributary of Little Seneca Creek just south of Old Baltimore Road easterly to the ridge which carries Maryland Route 27 north from Maryland Route 355. From this point, the boundary crosses Route 27 and joins a tributary of Great Seneca Creek south of Brink Road. The southern boundary follows a similar pattern along a drainage channel east from Little Seneca Creek near Schaefer Road, then passing over the ridge occupied by Route 118 north of the Blackrock subdivision, and then down to the Great Seneca Creek just north of the Potomac Electric Power Company substation.

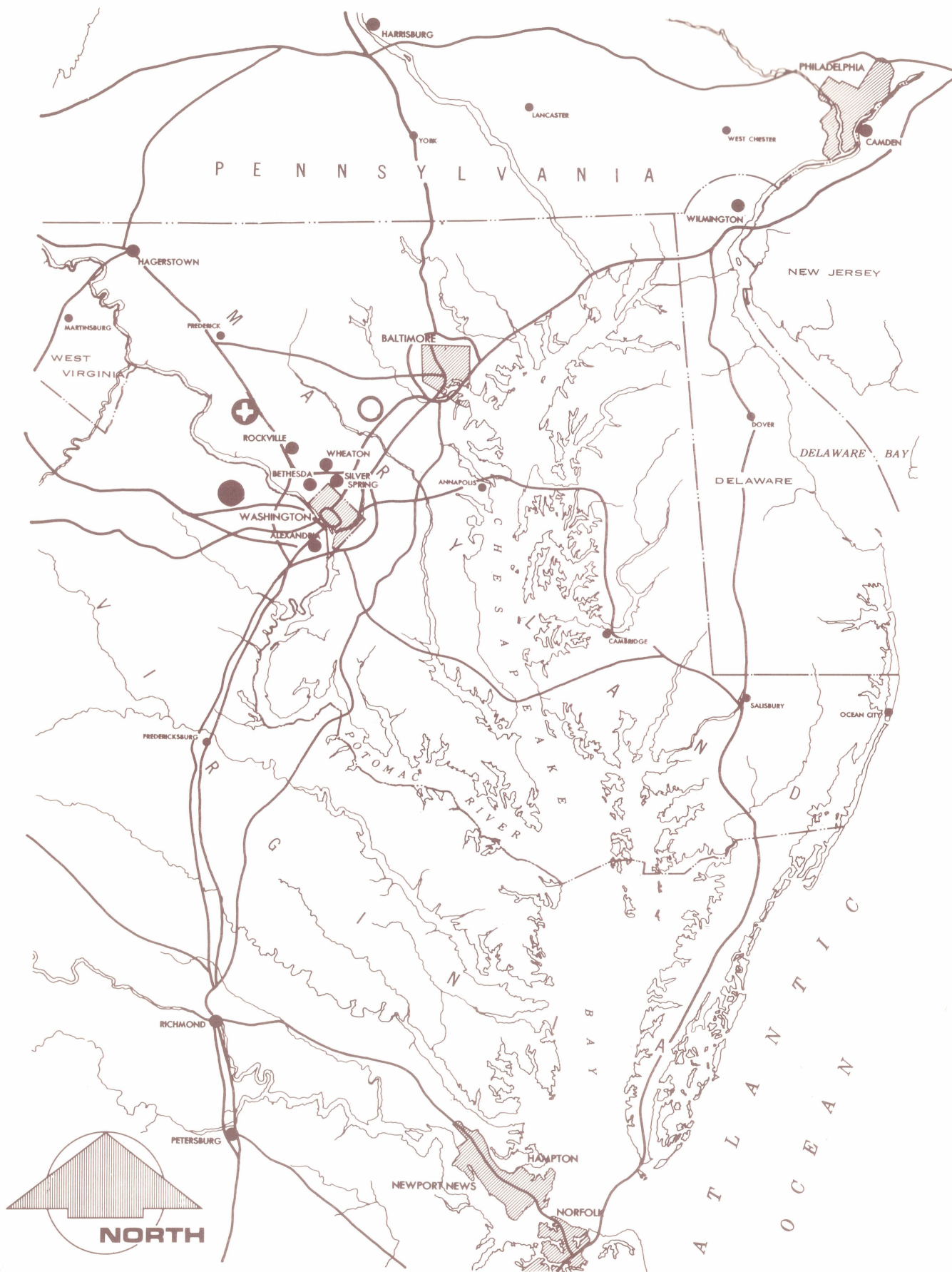
History — The early history of Germantown is somewhat obscure, but it is generally believed that old Germantown, situated at the intersection of Clopper Road and Maryland Route 118, was first settled by German farmers who had migrated to the Frederick area from Pennsylvania in the early 1800's. In 1873, the Metropolitan Branch of the Baltimore and Ohio Railroad was built between Washington, D. C. and Point of Rocks, Maryland. With the coming of the railroad, development began to concentrate near the station, about a mile to the north, and the original community was gradually abandoned. Little evidence remains of Old Germantown, which in 1880, consisted of two churches, a public school and a population of 75 persons. Land values at that time varied from \$10.00 to \$40.00 per acre.

Agriculture was the principal activity in Montgomery County from 1850 to 1920, a period which saw the widespread use of fertilizers to correct soil faults caused by an almost complete exhaustion of the soil by crude farming methods during the first half of the 19th Century.¹ From 1920 until World War II, a specialized type of farming developed leaning toward the production of dairy products and beef cattle. In the intervening years since World War II, there has been a steady decrease in the amount of land used for farming in Montgomery County as **urban growth continues** to spread outward from the District of Columbia.

Present Character of Development — The present village of Germantown consists of a small concentration of both old and new dwellings plus other facilities such as: a general store, bank, nursing home, grain mill, and an elementary school. Other small, well-established communities in the planning area are Middlebrook, some 3 miles to the north at the intersection of Maryland Route 355 and Middlebrook Road; and Neelsville, about one mile north of Middlebrook on Route 355.

Recent subdivision activity of importance in the area centers around the Kingsview Knolls Subdivision on Schaefer Road, south of Clopper Road; Germantown Estates, south of the Germantown Elementary School; and the Fox Chapel Subdivision on Route 355, south of Middlebrook. Meadowbrook Estates, located north of Route 118 and east of Interstate Highway 70-S has been under development for the past ten years.

1. Maryland. Upper Montgomery County Planning Commission. **Land Use Study**, (Rockville), September, 1954, p. 16.



GERMANTOWN IN RELATION TO
MIDDLE ATLANTIC REGION

GERMANTOWN IN RELATION TO MONTGOMERY & PRINCE GEORGE'S COUNTIES



A number of trailer courts are located on Route 355 between Neelsville and a point just south of Middlebrook.

Employment centers of importance are the National Headquarters of the Atomic Energy Commission located at the southwest quadrant of the Route 118 interchange and the Fairchild Hiller industrial research center, now under construction, to the north across Route 118.

Except for occasional commercial uses, the remainder of the land in the planning area is lying idle or used for agricultural, private recreational or State park purposes. A line of high energy transmission towers, carrying electric power from the Potomac Electric Power Co., generating plant at Dickerson to the Washington metropolitan area, crosses the southern portion of the area to a transformer station on Route 118. From this point, one line runs north up the Great Seneca Valley towards Prince George's County and the other extends in a southeasterly direction to Bethesda. One underground transcontinental natural gas pipeline now crosses the northern portion of the planning area and one existing American Telephone and Telegraph underground line passes through the center of the area in an east-west direction. A trans-continental AT&T line is also under consideration to pass through the area in a north-south direction.

NATURAL FEATURES

Physical — All of the Germantown planning area lies within a physiographic region called the Piedmont Plateau. This region extends from the Hudson River to East Central Alabama and is characterized by a rolling to hilly topography which, in the planning area, ranges in elevation from 300 to 500 feet above sea level. Rock out-croppings are evident and a number of minor drainage channels cross the area, many of which contain spring-fed streams. Both the Great Seneca and Little Seneca Creeks have headwaters in the northern portion of the country and maintain a year-around flow through the planning area.

Soils in the area are considered to be only moderately good for farming, as they are susceptible to erosion and can be cultivated only part of the time. These soils are not highly productive, but are used for all common crops and for pasture.¹ Suitability of soils for residential development using septic tank sewage disposal systems is limited to areas with slopes of less than 15 per cent. Reforestation may be possible in areas proposed for permanent open space as most soils will support stands of pine and hardwood.

Wooded areas are prevalent throughout the planning area, especially in the main stream valleys running north and south. Most of the high land has been cleared of forests, which in the early days of the country, completely covered all of Montgomery County.

Climate — Germantown enjoys a favorable climate with extremes in temperature seldom experienced. According to records kept at Rockville, the County Seat,² the average January temperature is 33.0° and the average June temperature 74.2°. Mean annual precipitation is about 40 inches, distributed uniformly throughout the year, largely in the form of rain, although heavy snowfalls have been recorded on occasion.

Normal movement of air currents flowing from the southwest or northwest across the Appalachian Mountains, keeps the Germantown area relatively free of the air pollution which often affects the Washington Metropolitan region. This factor, along with an increase in elevation of approximately 400 feet over downtown Washington, D. C., keeps the planning area somewhat cooler in the summer.

1. USDA. Soil Conservation Service, *Soil Survey, Montgomery County, Maryland*. Washington, GPO, October 1961, pp. 20, 27.

2. Maryland. Upper Montgomery County Planning Commission, *op. cit.*, p. 5.

CHAPTER II — TRENDS AND PROJECTIONS

Perhaps the most difficult task in the preparation of a plan for a new city is to predict the number and types of people, businesses and industries which will be located in the community when it reaches a mature stage. Therefore, for planning and design purposes, it is necessary to examine the trends which have shaped the development of our nation, state, and local metropolitan area. The past growth of population will indicate the rate at which living accommodations will have to be provided in the future and the various kinds of dwellings needed. Employment trends will reveal the prosperity of the area in the average annual income of families, and the nature of the economic base can be determined by the number of employees in local, state and federal service, retail trade and industrial manufacturing.

Population Growth — Montgomery and Prince George's Counties in Maryland are among the fastest growing suburban counties among United States Metropolitan areas of one million population or more. In the past half century (1910-1960), the population of the two Counties increased from 68,000 to 698,000 a growth of over 1,000 per cent. From 1940 on, the population has doubled every ten years.

With the coming of World War II and the expansion of Federal government, the growing population spread out from the District of Columbia in all directions. By 1960, 35 per cent of the metropolitan area had settled in Montgomery and Prince George's Counties.

While statistics show that the rate of growth is slowing down, the growth in total numbers is still very substantial and will continue to be so through 1970. By 1980, the Regional District* will be host to a population of about 1,435,000 — 45% of the Metropolitan population, and approximately double the number of people in 1960. By the year 2000, the bi-county figure will be nearly 2,190,000 — only slightly less than the entire present day Washington Metropolitan Area population of approximately 2,400,000. Project totals for ten year periods are shown as follows:¹

	1960	1970	1980	1990	2000
Natl. Capital Reg.	2,096,662	2,944,800	3,638,000	4,376,000	5,000,000
MWDR { Mont. Co.	340,928	508,100	643,400	832,000	995,000
{ P. G. Co.	357,395	623,700	792,900	1,007,500	1,192,000

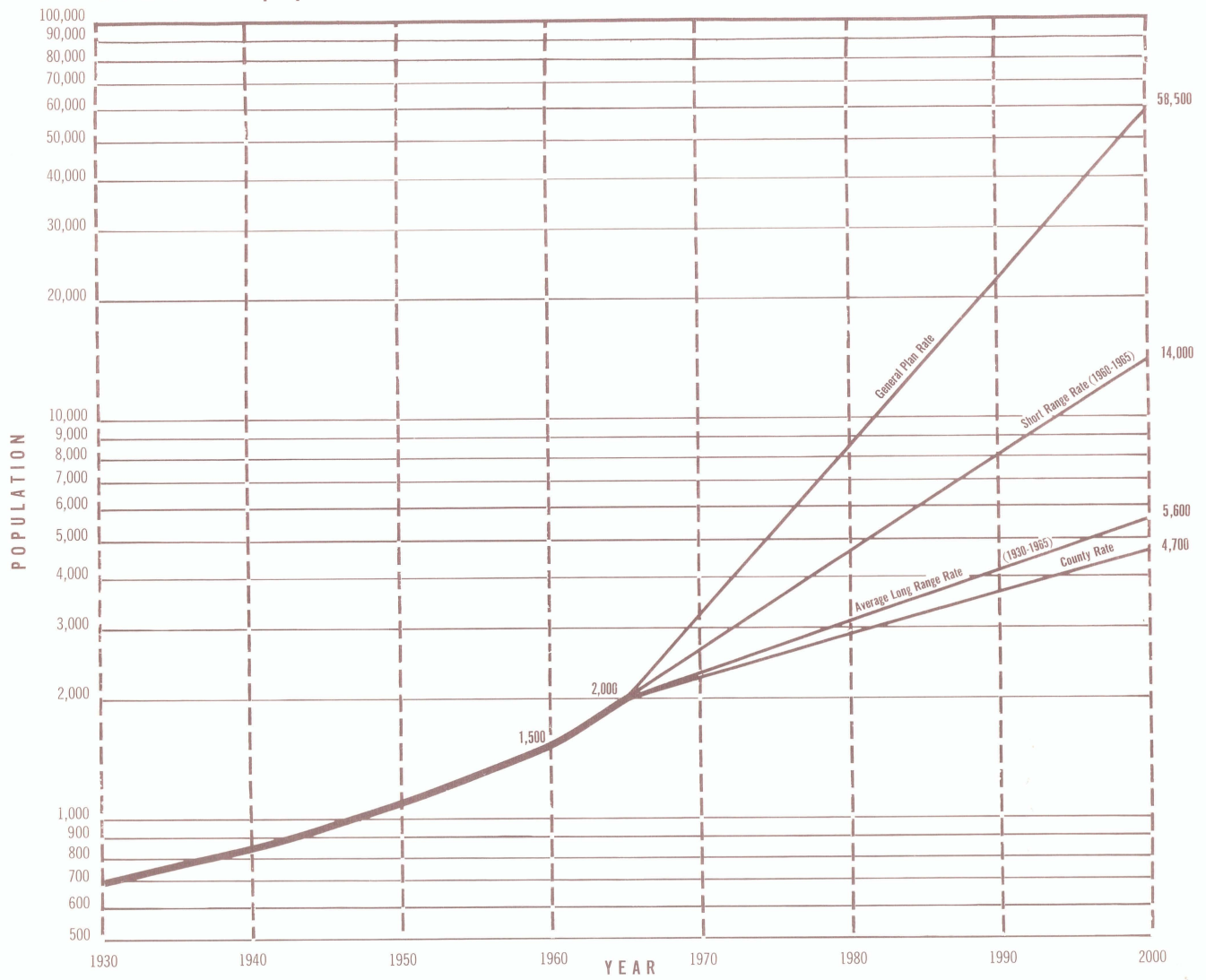
All population growth in the future will not be expected to take place in the corridor cities, however. About 53% of the growth in the next 20 years will take place in the ring of already urbanized land surrounding the District of Columbia. Another 40% of this growth will occur in the corridor cities, while perhaps 3% will be in the large-lot fringe along the edges of the corridors, and the remaining 4% will be in rural or semi-rural villages.

In the period between 1980 and the Year 2000, new growth will be located to a much greater extent in the new corridor cities, some of which will begin to approach their maximum population ranges of 75,000 to 125,000. However, the corridors will not develop overnight and even by the

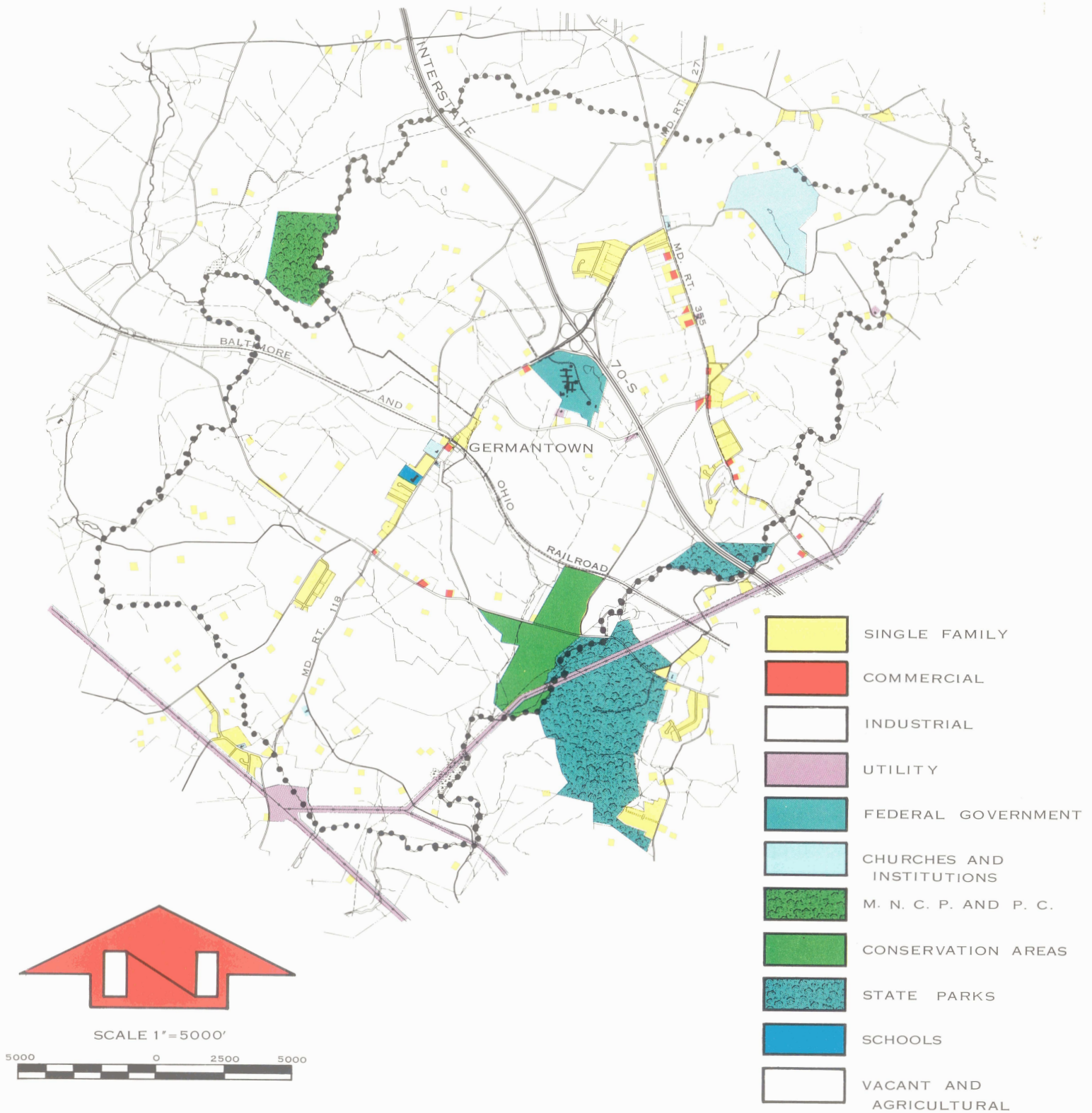
* Maryland-Washington Regional District — The Commission's planning jurisdiction comprising almost the total area of Montgomery and Prince George's Counties, Maryland.

1. Maryland-National Capital Park & Planning Commission. . . . On wedges and corridors, a General Plan for the Maryland-Washington Regional District. Silver Spring, 1964, p. 157.

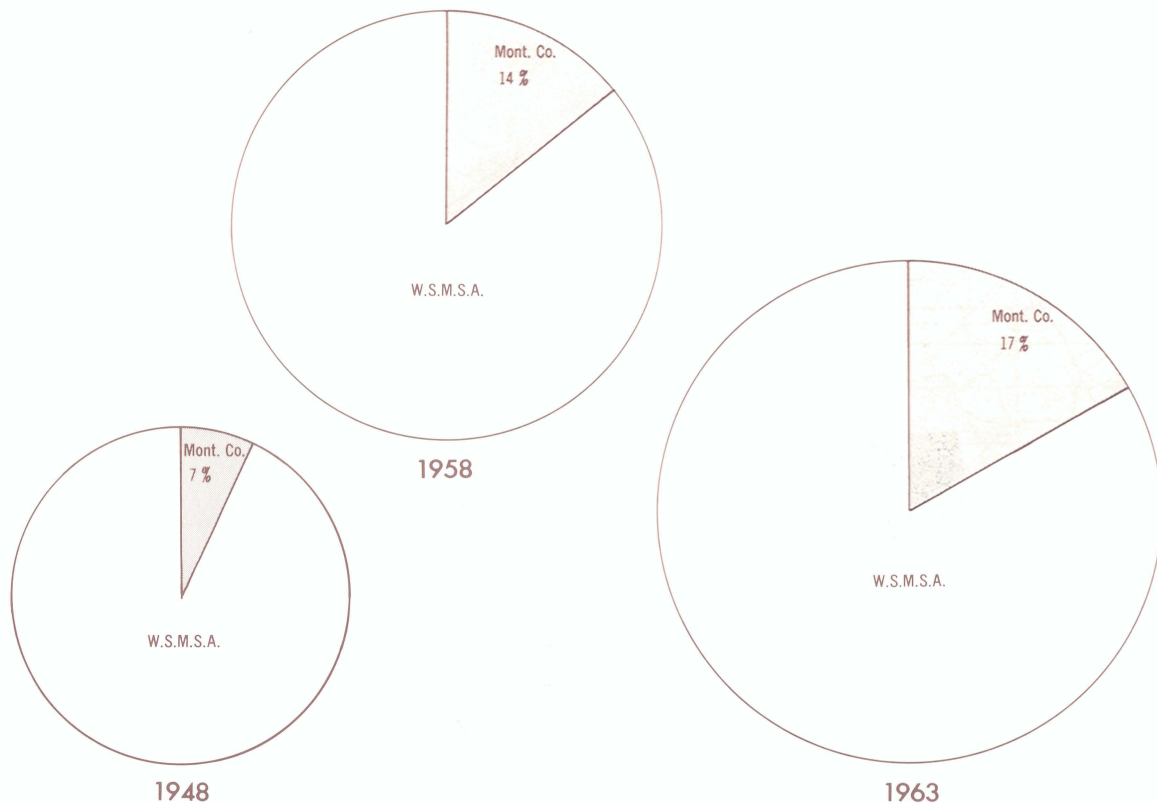
Germantown population trends



GENERALIZED EXISTING LAND USE



Retail sales—Mont. Co. as percent of W.S.M.S.A. — 1948, 1958 & 1963



Year 2000 all the space provided in the recommended urban pattern will not be used to its fullest capacity.

Judging from past trends in the Regional District, Germantown will be largely populated by families with incomes well above the national average and possessing a high level of education. These characteristics will be reflected in the kinds of dwellings, community facilities, and leisure-time activities which will be needed to serve local residents. There will also be a need for living accommodations for service employees with low and medium incomes who will be unable to find a home in a housing market geared to a high income population. For this group there should be a determined effort to augment physical-design proposals with federal aid programs such as the recently enacted 221(d) 3 section of the National Housing Act of 1961.

The Washington area claimed the record for apartment construction in 1965, taking the lead away from Los Angeles and New York City.¹ The rapid rise in apartment demand is shown by the fact that the number of apartments in Montgomery and Prince George's Counties increased from 2,034 in 1935 to 48,407 by the end of 1961. In 1961 alone, 5,065 apartment units were built and in 1965, an estimated 10,000 units were constructed in the two counties.

In the single-family market, there is virtually no inventory of unsold new homes and the five year market for single-family units is excellent. It is estimated that the WSMSA* can absorb on the average of 17,000 single family units and 19,000 apartment units annually until 1970.¹ How much

* Washington Standard Metropolitan Statistical Area. A U. S. Bureau of the Census classification. Includes District of Columbia; Montgomery and Prince George's, Arlington and Fairfax Counties; and the independent cities of Alexandria, Falls Church and Fairfax.
1. National Association of Home Builders. *Economic News Notes*. Library #925. (Washington, D.C.), December, 1965.

of this total will be located in the Regional District will depend partly upon the availability of land for development, but it is expected that the bulk of this growth will occur in areas convenient to transportation and utilities. For this reason, development in Germantown and other corridor cities should be substantially greater than most other areas in the County.

Employment — As of January 1, 1966, the Washington area had the lowest unemployment rate (1.9%) of any area of its size in the country.¹ This is even better than the unemployment rate of 2.4 per cent as of September, 1961.

The reason for the prosperity indicated by low unemployment rates is found in the nature of the area's economic base. Federal employees accounted for 22 per cent of total employment in the Regional District for 1960 and State and local government employed another 10 per cent. The largest single group of non-government employees (18%) are those engaged in retail trade. Manufacturing accounted for only 5.8 per cent of all Regional District employees in 1960.

A rapid rise in commercial employment is expected in the Regional District by 1980, as retail sales are expected to approach \$1.9 billion in 1980, and commercial services will reach about \$309 million.

Industrial employment is another segment of the economy which is expected to increase substantially. Research and development firms are beginning to constitute an important element in the suburban economy, as they find the Washington area especially suited to their operations.

This high level of economic activity in the WSMSA and the Regional District is reflected in Montgomery County where total income, average family income, and assessed value of land and improvements is higher than for other jurisdictions in the Washington area. All this leads to the conclusion that growth in the county and especially along the 70-S corridor, with its present and future transportation facilities, may occur faster than previous projections have indicated.

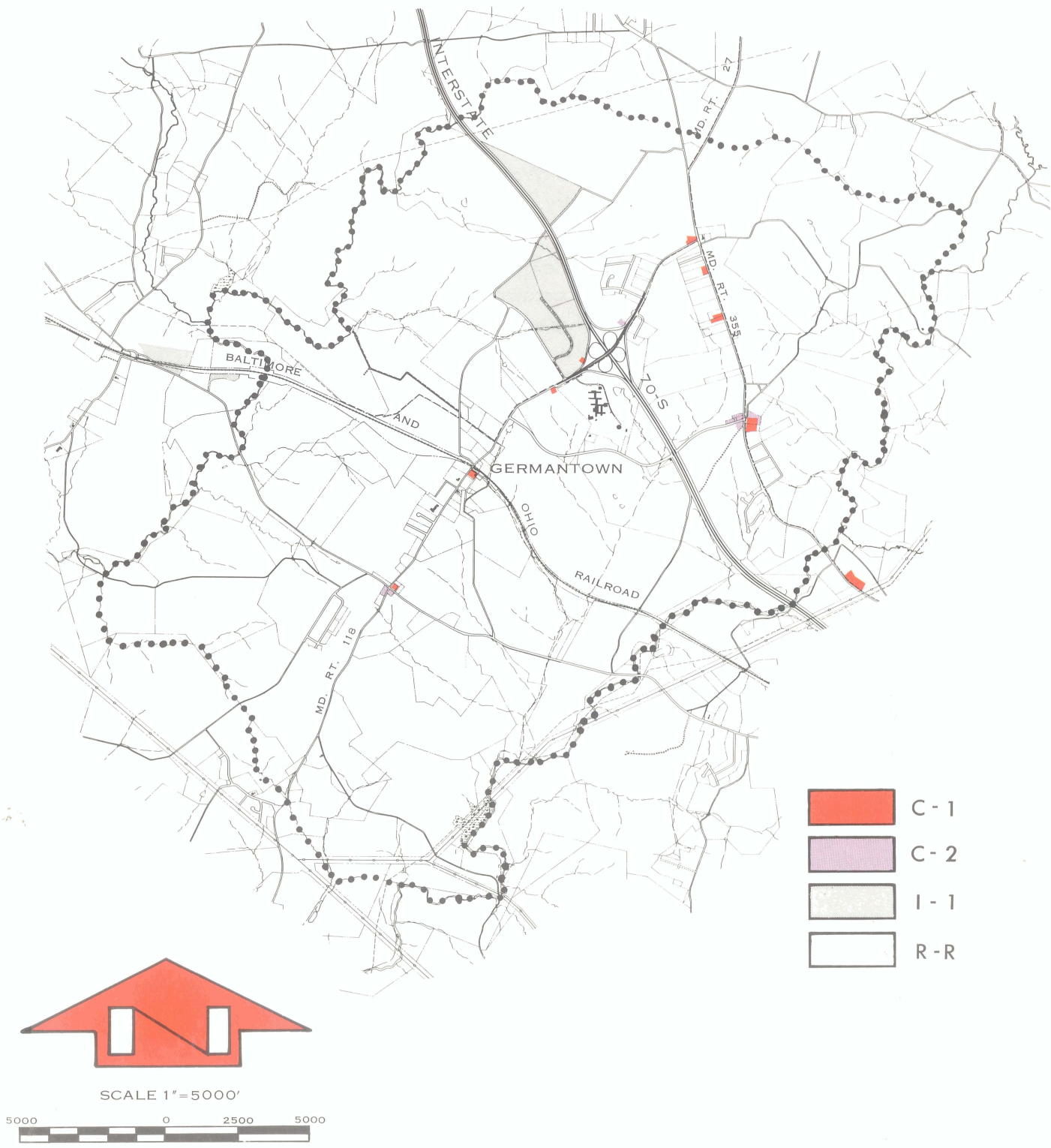
LAND USE

Historically, the pattern of urban growth in the Washington Metropolitan Area has been to develop along principal transportation routes radiating outward from the District of Columbia. Most of the growth in the suburbs has occurred towards the northwest and northeast in Maryland and to the southwest in Virginia. Development in Montgomery County has followed the extension of trunk line sewers up tributaries of the Anacostia and Potomac Rivers, with the bulk of the concentration located in the Rock Creek and Sligo Creek valleys. In the northwest corridor, this urban growth has extended beyond the natural drainage area of the Rock Creek watershed, and a system of pumping stations has been installed to provide sanitary sewer service to the Gaithersburg and Germantown planning areas. These stations will have to be replaced eventually by gravity sewers running up the Muddy Branch and Great Seneca valleys from the Dulles Interceptor* at the Potomac River.

1. National Association of Home Builders. **Economic News Notes**. Library #925. (Washington, D.C.), December, 1965.

* The Dulles Interceptor is a major trunk line sewer extending up the Potomac River from the District of Columbia providing service to the Dulles International Airport and certain specified areas in Maryland and Virginia.

EXISTING ZONING



To a large extent, remoteness from the District of Columbia and the lack of sewers and other public facilities has kept the planning area relatively unchanged during a period when the lower part of Montgomery County has been experiencing phenomenal growth. For example, most of the lots for subdivision were recorded either before or shortly after construction of the Atomic Energy Commission headquarters at Germantown. Some residential subdivisions have developed in various parts of the planning area but activity has been light in recent years as a result of the tightening of subdivision regulations — especially, with respect to the maintenance of minimum lot sizes for dwellings with septic tank disposal systems.

Experience has shown that the move to Germantown by the National Headquarters of the Atomic Energy Commission in 1956 has done little to change the character of development in the planning area. Surveys indicate that very few employees change their place of residence when a federal installation changes its location in the Washington Metropolitan area. However, employees hired after a move is made, are usually found to live within a reasonable distance of the employment center. Even then, convenience to schools, shopping and social and cultural activities rate higher than proximity to the place of work for those employees who are moving into the area to accept employment.





CHAPTER III – THE CORRIDOR CITY CONCEPT

In setting the stage for the proposals to follow, it is necessary to return to the document in which the description of a "corridor city" first appears. This is the Year 2000 Plan for the National Capital Region prepared by the National Capital Planning Commission and the National Capital Regional Planning Council and endorsed by the late President, John F. Kennedy. The General Plan for the Maryland-Washington Regional District, "On Wedges and Corridors," adopted by the Commission in 1964, is based on the corridor concept and represents a further detailing of the Year 2000 Plan, as it applies to Maryland. The Master Plan for Germantown is yet another step in the process of refining the major policies contained in the General Plan as they relate to the development of a corridor city in the radial pattern.

The radial corridor pattern also has inherent advantages which help to establish pleasant surroundings for everyday living. By stretching out along the radial transportation corridors, the urban pattern takes on a star shape with rural open spaces alternating between the points and surrounding the corridor cities. Major rapid transit station locations supply a focus for the core of each of the corridor cities, giving them identities of their own. The new corridor cities offer the opportunity to start fresh far enough from the already urbanized areas to be unaffected by pre-set urban patterns. (Corridor cities, in now rural areas, can be planned for pleasant living much better than if development were to occur in a scattered, haphazard, and uncertain pattern.) Planning for "pieced-on" development at the edges of already urbanized areas and running to catch up with unexpected trends of growth are not satisfactory ways of providing pleasant living conditions compared to starting fresh in a completely new, comprehensively conceived corridor city.

The centers of new corridor cities are spaced about four miles apart so that they can grow large enough to support a full variety of commercial, cultural, and social services, and still not crowd too tightly against the next city. Functionally, each new corridor city will have a densely built but well-designed core in the center, with a rapid transit station under a pedestrian plaza or perhaps an air-rights structure. Tall buildings around the station will house shopping facilities, offices, and apartments, all within easy walking distance. Urban parks, appropriate landscaping, and modern architecture will give a sense of spaciousness. The need for automobiles in the core will be kept to a minimum, but adequate parking space will be provided at the edge of the center for those who arrive by auto rather than by transit. Social, cultural and educational activities will also be provided in each core so that the "downtown" area will have a vital function even after the workday is over.

Tall buildings will be the symbol of a core area, identifiable from several miles away. But their height is more than a symbol. It allows the great number of people, who must come together to make a downtown work efficiently, to be housed within a small area without overcrowding the land.

Surrounding the core will be a number of residential communities, each planned as a unit with a variety of housing types and each being accessible to local shopping, educational, and recreational facilities.

The street and highway system within the corridor city will repeat the radial and circumferential system of the Metropolitan Area itself. But in this case, the core area will be the focus for the radials and the circumferential which encircle the corridor city's own core. The core will be the most accessible part of the corridor city, not only because of the rapid transit stations, but also because of the city's own street and highway system.

Greenways or conservation areas will traverse the central core and surrounding residential communities, providing pedestrian ways in some areas and protecting flood plains from development in others.

Population densities of the corridor city will gradually taper off from apartments in and near the core to half-acre homesites at the outer edge. At the edge, also, will be found spacious regional parks for extensive outdoor recreation. Still another facility to be found in the corridor city is the industrial park with its campus-like atmosphere.

Much of the foregoing was originally cited in the General Plan to illustrate the purpose behind the proposals and recommendations contained herein. Although every effort has been made to follow the requirements of a corridor city, great care also has been taken to provide features which will give a distinctive character to Germantown and which will be most rewarding to future residents.

CHAPTER IV – SPECIFIC ASSUMPTIONS, GOALS AND OBJECTIVES

The primary purpose of this study is to present a Master Plan concept of a corridor city as set forth in the General Plan. This means that the proposals presented here must be more detailed than the generalizations presented in the General Plan, but should still leave a considerable amount of flexibility for those who will actually develop the city and bring the Plan into reality. Many proposals were made only after careful statistical analysis while others were made as human value judgments, which are just as important as those which can be measured. In both cases, these proposals were based upon the following basic assumptions which were then used to develop goals and objectives setting forth the reasons for the specific recommendations presented in the Plan.

ASSUMPTIONS

1. Rapid growth of the Washington Metropolitan Area is making a decided penetration into the rural area to the northwest along the Interstate Highway 70-5 corridor, creating a demand for land to be devoted to housing, commercial centers, employment centers, and public uses.
2. Germantown will be the key regional center for the up-county area north of Gaithersburg, designed in accordance with the "corridor city" concept described in the General Plan, and supported by a number of small towns and villages in the open space "wedges".
3. A rapid transit line will be extended to Germantown as an integral part of the metropolitan transit system.



GOALS AND OBJECTIVES

In addition to the comprehensive goals contained in the General Plan, certain specific goals are considered essential in the development of a corridor city. These goals and related objectives are as follows:

1. If the purpose of planning is to provide a better living environment, then one goal should stand out above all others. This is the goal of achieving "Quality" in every facet of community development. Standards should be improved to: control the placing of signs and billboards; regulate the location of overhead utility wires; and to prevent erosion during the course of development. These are just a few measures which may be taken to correct conditions now blighting other sections.
- ✓ 2. At each stage of its development, Germantown should have sufficient land available for schools, parks, highways and other public facilities. One of the goals of the Plan is to maintain the "Scale" between the number of families in Germantown and the space available for all the uses necessary for healthy community living. Standards for density and distribution of population proposed in the Plan are based on the concept of a concentration of people living in close proximity to a central core with less intensive residential areas near the fringes of the corridor city. These standards establish an ultimate population of 95,000 persons when Germantown is fully developed. Any increase above this figure would result in a lowering of the standards established by this Plan and cause crowding in the residential areas.
3. In view of the newness of the corridor city concept there is a need to establish some means of "Identification" which can be used to distinguish this area from any other in the County or metropolitan area. In the absence of corporate boundaries it may be well to use natural features to establish Germantown as a distinct and separate entity in the urban pattern.
4. "Diversity" is another goal which must be met if Germantown is to offer a full range of choices in all fields: housing, means of transportation, recreation, commerce and industry. Sufficient area should be allocated to shopping and employment centers so that a choice of sites will be available during all stages of development. Attention should be focused on the visual appearance of the community and on the location of social and cultural facilities and natural points of interest.
5. "Accessibility" will be a primary goal in the development of the corridor city, not only from one area to another within the city, but also from other parts of the region and the metropolitan rapid transit system will be essential to the accomplishment of this objective.

In order to accomplish these goals for Germantown it is vitally important that all public and private objectives be coordinated in a common course of action that will endure during the critical development years. This will require substantial agreement among all private owners on the plan to be followed and a firm commitment on the part of public officials to maintain the high standards which must be adopted if this "New Town" is to develop under public guidance in the same way that Reston and Columbia are hoping to develop under private control.

CHAPTER V — PLAN PROPOSALS

The chief aim of the Land Use Plan is to delineate in broad outline, the development of Germantown in such a way as to provide a good environment for family living and economic development at a density somewhat higher than what now exists in most regional centers in the Regional District. This concentration of high density in cities along the corridors or radial transportation routes extending outward from the District of Columbia as shown in the General Plan is envisioned as a means of providing sufficient space for future population growth so there will be little need for large scale development in the open space wedges.

During the preparation of the Plan, numerous studies were made to find a community design best suited to carry out the corridor city concept in Germantown. At present, the most feasible route for rapid transit service appears to be along the Baltimore and Ohio right-of-way. This meant a location for the core reasonably close to the railroad. Convenient access to Interstate 70-S and good topographic conditions are other requirements which had to be met. A central location in the community and the existence of a major north-south highway, (Route 118) traversing the planning area, all led to the core proposal shown on the Plan in general land use categories and on the back of the Zoning and Highway Plan in concept.

Inasmuch as the planning area is traversed by two rather formidable traffic barriers — Interstate 70-S and the Baltimore and Ohio Railroad — a ring road of major highway classification is considered essential to provide circulation between the core and the two community shopping centers located at key highway intersections north of 70-S and south of the railroad. A system of by-pass highways on the outer fringes of the planning area are also necessary to relieve future traffic volumes on 70-S and to funnel through traffic around the two community shopping centers.

A system of lakes providing much needed water recreation is a major proposal which will enhance the living environment in the community. Germantown has a number of scenic natural water courses available for this purpose. The establishment of a greenbelt surrounding Germantown will serve to give definition to the community and can be used as a means of supplying the local and regional park needs of the corridor city.

With the delineation of basic land uses — industry, regional highways and open space — other land uses and public facilities tend to fall into place according to the pattern of neighborhood and community areas. The basic technique used in the development of a plan is to define a workable pattern of neighborhood units and the larger community areas encompassing a group of neighborhoods. These units are the basic building blocks of a plan and the key to an understanding of what otherwise would appear to be an arbitrary assignment of land uses.

According to the Urban Land Institute, a neighborhood is defined as the geographic area within which residents may all conveniently share the common services and facilities required in the vicinity of the dwellings. (The extent of the neighborhood is determined by the service area for an elementary school. The unit should be bounded by main traffic arteries and not cut by them. Local streets within the neighborhood should be designed to serve the local needs of residential access, and use of the streets by through traffic should be discouraged. Neighborhoods may have a balanced composition of various dwelling unit types — single-family houses, row houses, two-family houses, garden apartments, high-rise apartments, etc. — at various densities appropriately located for variety.

The proposals set forth in this plan are in accordance with these neighborhood principles. Groups of three to five neighborhoods form each community. A total of six communities combine to constitute the Planning Area. The focal point of the neighborhood is the elementary school, the focal point of the community is the junior high school and the neighborhood-community shopping center. The town center is the focal point of the entire Planning Area and a substantial portion of the county beyond the greenbelt.

With the neighborhood and community structure clearly defined, it is then possible to make detailed studies of each existing or future neighborhood. The proper location of schools, multi-family and shopping areas to serve each neighborhood can then be ascertained in accordance with community planning principles.

These are the principal features which have played a part in the overall design. The following sections contain specific recommendations related to proposals shown on the Land Use Plan.

PARKS, LAKES, OPEN SPACES AND CONSERVATION AREAS

An important element in the design of the Germantown corridor city is the emphasis on recreation facilities provided by a system of state, regional and local parks reinforced by conservation areas and community open spaces achieved through the use of new design concepts.

Germantown is fortunate in having the proposed Great Seneca State Park located adjacent to its southeastern boundary. Although the acreage in this park is not used to compute local and regional park needs in the county, it does provide a useful service in forming a portion of the greenbelt proposed as a boundary for the corridor city. Additions to the park systems already established in the Great Seneca and Little Seneca Valleys, along with connecting links on the northern and southern boundaries and a number of small parks within the planning area, will supply residents in Germantown with approximately 35 acres of local and regional park land for every 1000 persons. This ratio is in accord with present Commission standards and will involve the acquisition of some 3,325 acres of public park land both inside and outside the planning area boundary.

Part of the local park system will be in the form of park-school combinations which allows the economical use of school grounds and adjoining park land for outdoor recreation and the school building as a recreation center when classes are not in session. Other public spaces will consist of small greens in the two community centers which will serve as focal points for public buildings. A 40 acre "Civic Center" located in the central core opposite the regional shopping center would be developed as a plaza with a pedestrian mall crossing over the proposed relocation of Route 118.

The proposal for a number of lakes to be created by locating impoundment structures at strategic locations on existing streams is an important element in the plan to make Germantown a water oriented community. In addition to providing flood protection and control of siltation further downstream, these lakes can provide much needed water recreation of all types and substantially add to the aesthetic beauty of the community.

The larger lakes in the system may be bordered by both public and private development. For example, several levels may be desirable in the lake area proposed northwest of the central core, with one level financed from private funds and another level to be a public project. Joint participation may be desirable, also, with public uses bordering the western side of the lake area in the Little Seneca Regional Park and private development abutting the eastern side. To a lesser extent, the same procedure could be used for the lake proposed in the Great Seneca Valley north of Highway M-5, as this facility is proposed to be primarily within the stream valley park system.

Unfortunately, the rush for buildable land also means that trunk line sewers may have to be constructed in the stream valleys before engineering data can be made available to enable the Washington Suburban Sanitary Commission to construct them above the proposed water line of the lakes. The Commission is now working with the U. S. Soil Conservation Service on lake feasibility studies to determine if the construction of dams for multi-purpose projects (flood prevention, erosion control, recreation) will be eligible for financial assistance under various federal-aid programs.

In addition to the proposed public park system, a considerable amount of open space is recommended as conservation areas extending into the planning area from the main stream valleys. These areas usually follow natural drainageable channels of flood plains indicated by soil deposits and are shown on the Land Use Plan as guides to be used in the subdivision of land under average density regulations which: "provide a method of development for land to permit variation in lot sizes without an increase in the density of population or development, to encourage subdivisions with varying lot sizes so as to allow home buyers a choice of lot sizes according to their needs, to preserve open space, tree cover, recreation areas, scenic vistas, outstanding natural topography, and to prevent soil erosion by permitting varying lot sizes according to the nature of the terrain within the development."¹

These regulations and the new Town Sector and Planned Neighborhood Zones may be used to implement a number of the smaller lake proposals shown on the Preliminary Land Use Plan. Only in rare cases would conservation areas be purchased by public funds.

RESIDENTIAL AREAS

Residential development proposals follow the neighborhood unit concept within the framework provided by the proposed highway network. Topographic conditions controlling the location of highways resulted in a number of neighborhood units of varying sizes. (Zoning classifications were then selected permitting dwelling unit combinations which will yield a desirable elementary school enrollment. School yield factors for zoning categories used in the Plan are shown in the Appendix.)

Additional variety in development also is possible by using other residential categories listed in the Zoning Ordinance, especially the Town Sector and Planned Neighborhood Zones which permit considerable flexibility in design. (However, in order to maintain proper scale in overall community growth, densities in each neighborhood should be kept within population limits proposed by this Plan.)

The R-60 zone is proposed for two neighborhoods (11 and 12) to provide an opportunity for residential development for low and medium income families working in Germantown. Use of federal subsidies now available for this purpose should make such development economically feasible.

EMPLOYMENT CENTERS

Considerable space is proposed for future industrial park development along Interstate 70-S in recognition of the trend already established by the Atomic Energy Commission, National Bureau of Standards, I.B.M., Fairchild-Hiller and other firms in the corridor, and the need for an adequate reserve of land to provide a choice of sites for new employers interested in locating in Germantown. In addition to the 374 acres already zoned for industrial use in the vicinity of the Route 118 interchange, the Plan recommends that some 648 acres be added for future industrial development. In view of the close proximity of these areas to existing and proposed residential neighborhoods and

1. Maryland. **Montgomery County Zoning Ordinance.** (Silver Spring, MNCPPC). "R-R Density Control Development, Sect: 104-7g, adopted 3/7/61." p. 43.

the central core, it is recommended that practically all rezoning in the vicinity of 70-S for major employment centers be to the 1-3 (Industrial Park Zone).

In addition to the 70-S industrial complex, it is recommended that approximately 85 acres located just south of the Baltimore and Ohio Railroad and west of the proposed relocation of Route 118, be provided to accommodate the various industrial uses needed to serve the Germantown community.

Employment in the proposed industrial areas should be about 10,000 workers when Germantown reaches a mature stage of growth. Economic studies indicate that employees in basic industries will create additional jobs in the trade and service lines at a ratio of from 1:1.5 to 1:2. This means that between 15,000 and 20,000 additional workers will be employed in Germantown by retail trade, service commercial organizations, business and professional offices, construction firms and public agencies. These employees will be located mainly in the core and the community and neighborhood shopping centers.

COMMERCIAL CENTERS

Regional — A compact, high density regional commercial center is proposed to be located in the core area of the northwest side of the proposed relocation of Route 118 approximately 1500 feet northeast of the railroad. Retail shopping facilities will be arranged around a pedestrian mall which could be extended over Route 118 to connect with the proposed civic center. These two elements are considered to be the center of this core concept. West of the retail center will be a service commercial area catering to lumber yards, repair shops and parts warehouses, to name a few. Office buildings with substantial setbacks and landscaping will provide an entrance to the retail and civic centers from the main rapid transit station. Northwest and southeast of the commercial center will be an area of high-rise and garden apartments, and town houses with schools, churches and other community facilities. Between the core center and 70-S there will be space devoted to uses catering to transient highway trade such as motels, auto showrooms, filling stations and restaurants.

Community — Supporting the regional commercial center will be two community shopping centers, one located near the intersection of Routes 118 and 355, and the other at the northeast corner of Clopper Road and Route 118. These two centers will contain junior department stores for comparison shopping and many of the business and service commercial firms which often locate in a regional center because of lack of suitable space elsewhere. In addition, the community centers will have a full range of local shopping outlets and selected public facilities.

Neighborhood — In view of the concentrated development proposed for Germantown, only four neighborhood centers are recommended at this time. Additional commercial area is proposed at Middlebrook, which is located at a key intersection in the highway pattern. Three new centers will serve newly developing areas, one at the crossing of the Baltimore and Ohio Railroad by Waring Station Road adjoining a park-and-ride rapid transit station, a second north of M-8 adjoining a proposed lake and the third at the northeast corner of M-2 (Clopper Road) and proposed arterial highway A-7.

As Germantown continues to grow, it may be desirable to add other small commercial centers at strategic locations in conjunction with planned neighborhoods. Still others may be located as a result of Town Sector applications.

NEIGHBORHOOD STRUCTURE



COMMUNITY STRUCTURE



- ★ Fire Station
- Community College
- Junior High School
- ▲ Senior High School
- ↑ Community Park
- ▴ Community Shopping Center

- Regional Shopping Center
- Library
- ✚ Hospital
- Community Boundary
- E Community Identification

COMMUNITY FACILITIES

Selected public uses are shown on the Preliminary Land Use Plan by symbol to allow flexibility in location when a site is selected for development. Public schools, local parks, libraries, fire stations, and a youth center are shown in this manner with specific tracts designated for a health clinic, a community college and a hospital. The proposed civic center may contain private structures as well as public uses, such as a theater, auditorium, and a bandshell. A more detailed description of these facilities is provided under the following headings:

Schools — A total of 19 new elementary, six junior high and three senior high schools are recommended for the Germantown corridor city. The neighborhood concept has been used in planning elementary school service areas which should be of sufficient size to support an enrollment, somewhere between 450 and 760 students. Boundaries of neighborhoods were selected so that insofar as possible, no elementary student would have to walk more than ½ mile to school or cross a major highway.

Residential densities were selected for each neighborhood through the use of selected zoning classifications, which have been known to produce school enrollments within the desirable range. Factors used to compute school yields from different dwelling types are shown in the Appendix. Other combinations of land uses will be acceptable in each neighborhood only if the total school yield does not exceed the desirable maximum. It is anticipated that the new Town Sector and Planned Neighborhood zones can be used effectively in carrying out the proposals shown on the Land Use Plan.

The two junior high schools proposed northwest of Route 118 will serve areas outside the planning area as well as neighborhoods within the corridor city. Eventually, each school will accommodate between 1000 and 1200 students.

Enrollments at the three senior high schools proposed will range between 1500 and 1800 students. Key locations at important intersections in the two community centers are recommended — one at the northwest corner of the Germantown-Boyd's road and the proposed relocation of Route 118 and the other near the intersection of Routes 118 and 355. One senior high school is proposed to be located in the central core. A junior college is also proposed at the southeast corner of M-1 and M-5 and a scientific college at Black Hill.

Libraries — A regional library is proposed to be located in the civic center development in the core area. Sufficient space should be provided for this facility to begin as a community library and be expanded later when increased population warrants. Two branch libraries also are recommended, one in each community center, appropriately located with respect to the public open space previously proposed as part of the local park system. These facilities also may serve as transitional uses between commercial and residential areas.

Fire Stations — At least three fire stations are proposed in this Plan in keeping with minimum standards adopted by the National Board of Fire Underwriters and the Maryland Board of Fire Underwriters. These standards call for a station to be located within ¾ of a mile of commercial and industrial areas and within 1½ miles of densely built up residential areas. Of necessity, one station should be in close proximity to the high value intensively developed central core. A site for this station is recommended on the west side of major highway M-9 approximately 300 feet south of M-1.

A second station is recommended to be located on Route 118 near the southern boundary of the planning area and the third to be situated to the northeast near the intersection of M-1 (Route 118) and M-7 (Route 355).

Medical — A hospital site with room for related laboratory and research facilities is proposed to be located on the south side of Route 118, immediately east of the 70-S interchange. Excellent access to this site will be provided from all directions by way of 70-S and other highway proposals contained in the Plan.

Development of a medical complex at this point may create a demand for additional office space to house doctors, dentists, and other professional personnel. A commercial office area on both sides of M-1 (Route 118) east of the hospital is recommended for this purpose. Inasmuch as the frontage is now occupied by a number of dwellings of better than average quality, no change in land use on this side of the highway is recommended until the proposed hospital development becomes a reality.

In addition to the proposed hospital, a health clinic is recommended to be situated on a tract of land on the west side of Route 118, south of the B & O Railroad. This tract is presently occupied by a nursing home and would be acquired by the Montgomery County Health Department. Convenience to a future rapid transit line is considered to be a desirable factor in the location of this facility.

Miscellaneous Public Facilities — It is not within the scope of this Plan to propose a location for all public buildings and offices which eventually will be located in Germantown. In some cases, sites will be acquired for specific uses in commercial areas through lease agreements, while in others, they may be incorporated into the design of land use plans submitted for approval of Town Sector and Planned Neighborhood zoning applications.

PUBLIC UTILITIES — Sanitary System

A large part of the Germantown corridor city will be served by a system of gravity sewers and force mains already constructed or scheduled for construction in the 1966-70 Sewerage Program of the Washington Suburban Sanitary Commission. Sewage will be collected at two pumping stations, one known as the Fairchild station, located on Little Seneca Creek northwest of the proposed central core, and the other, located near the junction of Long Draught Branch and Great Seneca Creek.

The existing sanitary sewer system in Germantown will have to be expanded to accommodate the proposals presented in this Plan. An extension of this system as shown on the map entitled "Sanitary Sewer Plan" is included in this report. The proposed extensions involve areas previously recommended to be served by Montgomery County and the Washington Suburban Sanitary Commission, plus other areas recommended for intensive development within the greenbelt by this Plan. Additions to the major sewerage system to serve this proposed development will require the construction of trunk line gravity sewers approximately 5000 feet north of the Fairchild Pumping Station in Little Seneca Creek and approximately 3000 feet north of Cabin Branch in Great Seneca Creek.

Water Supply — Water service to the planning area will be furnished by a 24 inch line recently installed along Route 355 north to Route 27. A spur line running south along Route 118

will serve Germantown in 1967 and will reach Old Germantown by 1970 according to the WSSC Water Program 1966-70.

Churches — According to information derived from a study of future church needs in the new community of Columbia now being planned in Howard County¹ some 40% of the total population will probably be members of Protestant churches. Relating this percentage to the proposed Germantown population and assuming an average church size of from 1000 to 1500 members means that some 30 to 40 protestant churches will be needed. In addition, it is assumed that between 5 and 10 additional sites will be needed for Catholic churches and Jewish synagogues.

In selecting a future church site, a minimum of three acres should be acquired exclusive of any portion needed for future highway widening. Future church locations also should have access to public streets which are planned with arterial or major classifications.

TRANSPORTATION SYSTEM

The principal elements of the proposed transportation system for Germantown are a highway network which will consist of major arterial and primary thoroughfares, and a rapid transit line which will be an extension of the metropolitan system approved by Congress.

A route for the future third beltway was explored during the preparation of the plan, but was not considered as a possibility in the Germantown area as it would create substantial problems in community design and interchange treatment at its intersection with 70-S.

The possibility of a small airport in the corridor city also was considered and discarded as impractical due to the density of proposed development and the lack of suitable topographic conditions. Heliports may be feasible in Germantown in the future. However, selection of sites is not possible at this time.

For the first time in the preparation of a local area master plan, an attempt is being made to evaluate highway needs in relation to the proposed land use pattern by computer methods. Working in cooperation with the Washington Metropolitan Area Transportation Study, preliminary population and employment estimates for Germantown are being submitted to detailed analysis to determine the number of vehicle trips which will be generated by the development in the corridor city. The results of this analysis may be used to adjust the proposals for highway classifications and number of lanes required on major and arterial roads shown on the Plan. These proposals for amendments to the Master Plan of Highways in the Germantown corridor city are as follows:

Highways — The basic consideration in the design of a highway network for Germantown is the development of a system to supplement the present highway pattern and at the same time provide a framework for a number of residential neighborhoods.

Particular attention has been paid to the need for a ring road M-8 and M-9 to provide circulation around the central core and as a means of connecting the core with the two community centers in addition to Route 118. These additional crossings of 70-S and the B & O Railroad are considered to be vitally important in preventing congestion at the Route 118 interchange.

1. Hallett, Stanley J. *Working Papers in Church Planning; Columbia, Maryland*. Prepared for the National Council of Churches of Christ in the U.S.A., New York, 1964.

Additional lanes on 70-S are recommended to accommodate future traffic volumes expected on this freeway as the corridor cities continue to grow. Two new highways, M-3 and M-5, are proposed to serve as parallel routes to 70-S and to permit traffic to by-pass the two community centers. Route 355 is scheduled to serve as a portion of the ring road between Middlebrook and Neelsville and will be replaced as a major highway to the up-county area by M-5. A new major highway M-4 to the Laytonsville area (Route 27 is proposed to be relocated and extended across Route 355 to connect with Route 118 between Neelsville and the 70-S interchange.)

Other recommendations for major highway improvements involve the widening and extension of Middlebrook Road with a relocation in the vicinity of Route 355 to by-pass the present intersection and the widening and relocation of Mateney Road from the proposed ring road to Clopper Road.

Arterial roads shown on the plan are intended to carry traffic from residential areas to major highways and to serve as connecting links between major highways within the planning area. Business district and individual streets are proposed in those areas where abutting frontage is recommended for commercial or industrial uses. A minimum number of primary residential streets are recommended, mainly as means of access to elementary schools. Additional primaries will probably be needed in these areas in the course of development.

Proposed park roads are shown solely as connecting links in the road system. Precise location will depend upon an overall park development plan for the greenbelt.

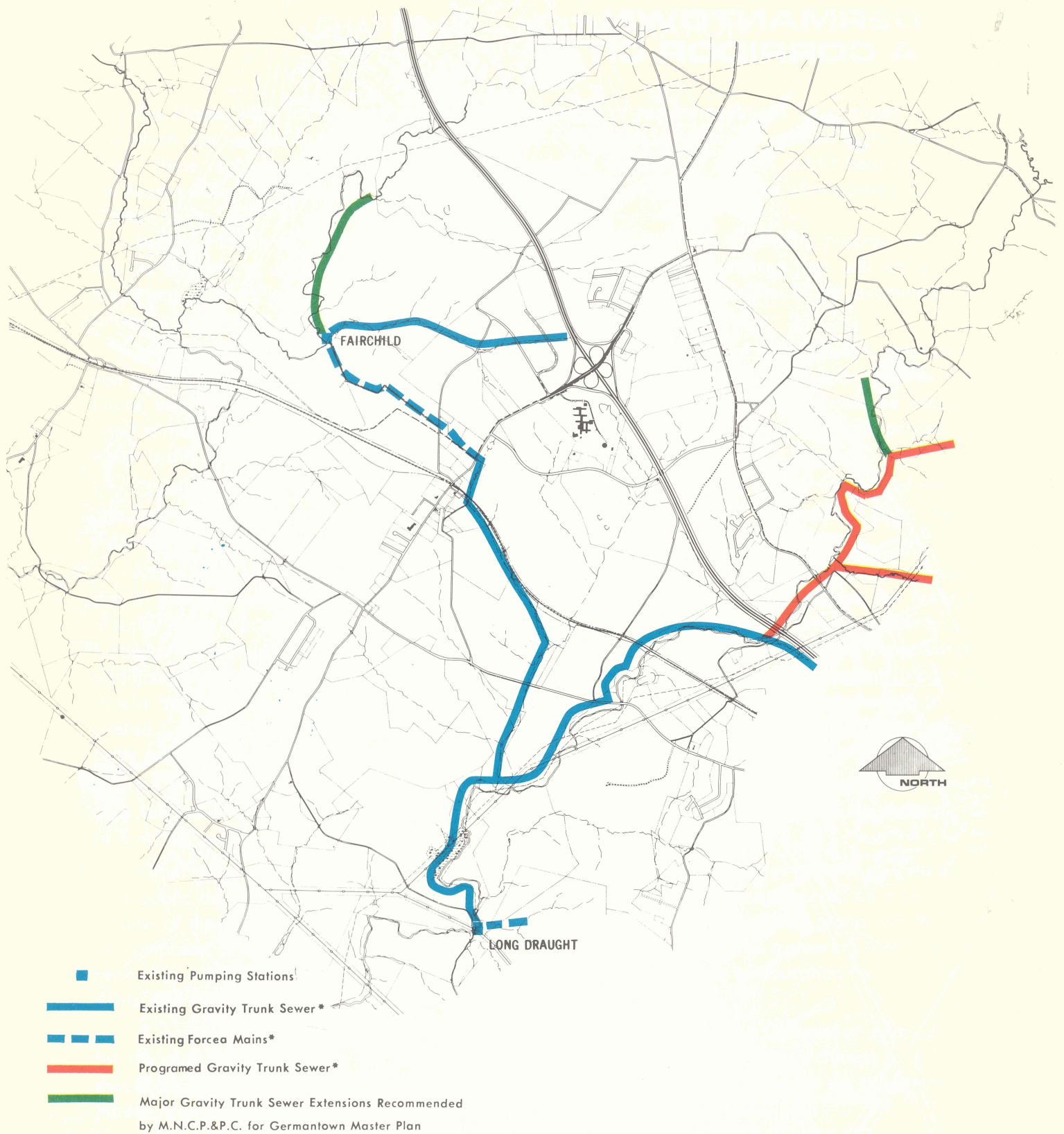
Proposed classification, width of right-of-way, lanes of pavement and other data for highways are shown in the Appendix.

Rapid Transit — The General Plan concept of a corridor city calls for service by a rapid transit line. According to present plans for extending these lines into the suburbs, the main route in Montgomery County probably will follow the alignment of the B & O Railroad. Relying on this assumption, the Germantown Master Plan proposes that a main station be situated in the vicinity of Route 118 crossing (as relocated) with a park and ride commuter station at Waring Station Road, and a terminal station near Little Seneca Creek. This facility could be a combination commuter and college stop station.

Proposals for rapid transit will be reviewed in the near future by the Washington Suburban Transit Commission, the agency charged with the responsibility of planning and coordinating future transit extensions with the rest of the metropolitan area. Therefore, the recommendations presented here are made for the purpose of calling attention to the need for a rapid transit line to serve the Germantown community.

Bus System — A well-developed system of bus routes will be needed to support the rapid transit facility and to serve those residents who do not drive. One type of bus system which could be used to advantage in the central core is the minibus. Larger buses will be needed for outlying areas and eventually a regular express bus schedule to the metropolitan center will be an essential part of the transportation system.

SANITARY SEWER PLAN



*W.S.S.C. Sewerage Program, Fiscal 1966-1970

GERMANTOWN: A CORRIDOR CITY



A CORE CONCEPT.



CHAPTER VI — IMPLEMENTATION

The Master Plan for Germantown contains a number of recommendations for changes in land use which are needed to carry out the development of a corridor city as envisioned in the General Plan. These recommendations have been reviewed and debated at several public hearings, and the Master Plan has been adopted by the Commission and approved by the Montgomery County Council.

Implementation of the Master Plan now must be considered as a continuing process, wherein full use is made of all available codes, regulations, procedures and policies that will carry out the intent of the Plan. New approaches to community planning also should be examined as future programs are developed and used by other jurisdictions.

(Since zoning is one of the most important tools used to implement land use proposals, consideration should be given to applications for reclassification, either pending or to be submitted in the future, which will carry out the intent of the Plan.) Use of new zoning categories should be encouraged so that larger tracts will be planned as units instead of a piecemeal amendment procedure which is difficult to relate to an overall plan.

Careful review of subdivision proposals will be necessary to insure the proper location of streets and highways, the reservation of lands needed for public purposes, and the protection of flood plains and other areas not suitable for development.

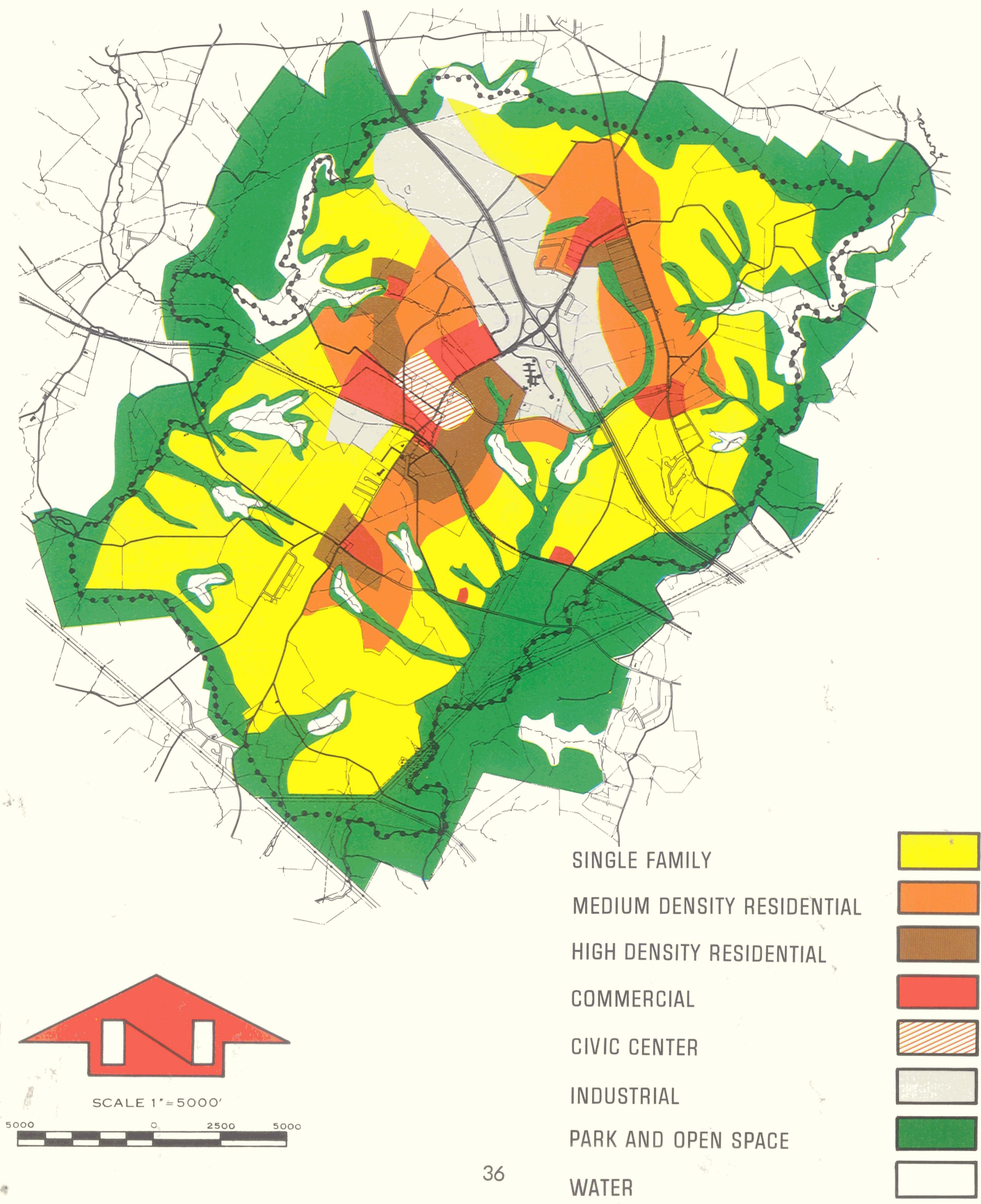
Many parts of the Plan can become reality by the judicious expenditure of public funds. Selection of sites for key public facilities in the early stages of development often provides the nucleus around which the remainder of the neighborhood community, or central core develops. Sources of funds for worthwhile projects should be explored making full use of state and federal aid programs in addition to local bond issues and tax levies. In this connection, a capital improvement program should be prepared scheduling public improvements in order of priority and their relationship to the overall County budget. Actually, most development in the corridor city will have to be staged in order to program county projects.

An attempt should be made to inform the public on the realty tax concessions which are available for providing permanent open space and the income tax advantages related to the dedication of land for public use.

Other sources of assistance should be explored, both on a public and private level. Creation of a public development organization to guide the growth of Germantown appears to be a necessity in view of the diverse ownership of land which exists in the planning area. This group, which may be composed of both private land owners and public officials, should act as a steering committee in reviewing plans for development and conducting a continuing program of education for a new residents and prospective businesses and industries.

A program of periodic review of the Plan should be scheduled by the Commission and Council for the purpose of assessing the adequacy of the original proposals. Any major change considered should be analyzed with respect to the goals and objectives of the plan before an adjustment is made.

GENERALIZED LAND USE PROPOSALS



CONCLUSIONS

All of the proposals contained in the preceding section are aimed at achieving the goals and objectives outlined in Chapter IV. How this is accomplished can be explained by relating specific proposals to specific goals and objectives. For example:

QUALITY	The goal of "Quality" can be reached by the provision of lakes and adequate recreation facilities, the proper location of land uses in relation to each other, the provision of open spaces in the central core and community centers, as well as, residential areas and by constant review of regulations affecting all areas of development.
SCALE	The goal of maintaining a proper "Scale" in the development of Germantown can be achieved by adherence to a density pattern for each neighborhood which will provide a well balanced elementary school system, adequate open space, and sufficient area for public and semi-public facilities.
IDENTIFICATION	The goal of "Identification" can be reached by concentration of intensive development in a central core, the provision of a greenbelt surrounding the corridor city, and the various methods, policies and approaches used to carry out the Plan.
DIVERSITY	The goal of "Diversity" is reflected in the proposals for variety in design of residential communities through use of new zoning categories, the provision of space for employment centers, commercial development, civic, cultural and social facilities, methods of transportation and opportunities for a wide variety of recreational activities.
ACCESSIBILITY	In achieving the goal of "Accessibility" the Plan proposes a highway system for internal circulation, as well as, by-pass routes for through traffic and a rapid transit line which will connect the corridor city with other important centers in the metropolitan area.

In reaching the above goals and objectives through a plan for the physical design of the Germantown area, only a part of the task of creating a corridor city on the order of a "New Town" has been accomplished. The following chapter will deal with the implementation of the Plan, or the ways and means of coordinating public and private action toward a common goal of building the community described above.

APPENDIX A

Development Potentials Under Proposed Zoning — Germantown

Neighborhood	R-R	R-90	R-60	R-30	R-20	R-T	R-H	C-0	C-1	C-2	I-1	Acres	Total D.U.	Pop.
1. a. Acreage b. Dwelling Units c. Population				79.83 1133 3399			110.00 4675 9350	60.15		246.67		496.65	5808	12,749
2. a. Acreage b. Dwelling Units c. Population				50.60 718 2154		79.50 954 3244	27.16 1154 2308					157.26	2826	7,706
3. a. Acreage b. Dwelling Units c. Population		114.06 342 1265				68.80 826 2808	18.80 799 1598		20.00			221.66	1967	5,671
4. a. Acreage b. Dwelling Units c. Population	27.55 43 159	77.83 233 864		35.81 508 1524		26.85 322 1095						168.04	1106	3,642
5. a. Acreage b. Dwelling Units c. Population	21.50 34 126			39.39 559 1677		9.10 109 371	19.12 813 1626	17.00		53.27		159.38	1515	3,800
6. a. Acreage b. Dwelling Units c. Population	106.07 166 616	39.95 120 444			24.77 528 1399							170.79	814	2,459
7. a. Acreage b. Dwelling Units c. Population	46.84 73 270	150.16 450 1667			47.30 1007 2670	39.84 478 1625						284.14	2008	6,232
8. a. Acreage b. Dwelling Units c. Population	12.67 20 74			71.18 1011 3033	18.06 385 1020		30.06 1277 2554	5.28				137.25	2693	6,681
9. a. Acreage b. Dwelling Units c. Population		130.04 390 1443			7.91 168 445	44.47 534 1815				12.40		194.82	1092	3,703
10. a. Acreage b. Dwelling Units c. Population	60.47 95 351	49.60 149 551		29.70 422 1266	9.25 197 522	7.01 84 286				25.27		181.30	947	2,976
11. a. Acreage b. Dwelling Units c. Population		76.62 230 851	94.94 399 1476	11.02 156 468					8.03			190.61	785	2,795
12. a. Acreage b. Dwelling Units c. Population			115.72 486 1798	38.57 548 1644	24.80 528 1399							179.09	1562	4,841
13. a. Acreage b. Dwelling Units c. Population		84.37 253 936			70.13 1494 3959	26.85 322 1095			2.87			184.22	2069	5,990
14. a. Acreage b. Dwelling Units c. Population	32.20 50 187			27.74 394 1182	30.14 642 1701	9.40 113 384	29.34 1247 2494	11.70			85.18	225.70	2446	5,948
15. a. Acreage b. Dwelling Units c. Population	268.60 422 1561			16.41 233 6.99		20.89 251 853						305.90	906	3,113

Proposed Land Use Summary – Germantown

Type of Use	Proposed Acreage	Percent of Total
Federal and Local Government Facilities	158.20	1.62
Utilities	60.47	.62
Churches and Institutions	312.49	3.20
Regional and Local Public Parks and Recreation	1602.11	16.41
Maryland State Park Land	576.30	5.90
Conservation and Private Open Spaces	793.27	8.12
Public Schools	352.87	3.61
Single-Family Residential	2517.18	25.79
Medium Density Apartments	1101.41	11.28
High-Rise Apartments	279.40	2.86
Commercial Offices	94.13	.96
Retail and Service Commercial	400.75	4.10
Light Industrial	426.28	4.37
Industrial Park	596.70	6.11
Freeway and State Routes	493.60	5.05
TOTAL	9765.16	100.00

APPENDIX C

STREET AND HIGHWAY CLASSIFICATIONS — GERMANTOWN

No.	Name Freeways & Highways	LIMITS	Right of Way	Recommended Paving Width	Miles
F-1	(I 70-S)	From Old Baltimore Rd. to PEPCO Transmission Line	200'	6 Lane Divided	4.6
MAJOR HIGHWAYS					
M-1	(Md. Rte. 118 Relocated)	From Brink Rd. to PEPCO Transmission Line	Varies 120' to 200'	4-6 Lane Divided	6.1
M-2	(Old Germantown-Boyd Rd. & Clopper Rd.)	From West of Little Seneca Creek to Game Preserve Road	120'	4-6 Lane Divided	4.0
M-3	New		120'	4 Lane Divided	3.6
M-4	New	From M-1 to ¼ mile East of Great Seneca Creek	120'	4-6 Lane Divided	2.5
M-5	New	From Jctn. Old Baltimore Rd. & Brink Rd. to PEPCO Transmission Line	120'	4-6 Lane Divided	4.2
M-6	Middlebrook	From M-9 to M-5	120'	4-6 Lane Divided	2.1
M-7	(Md. Rte. 355 Urbana Pike)	From M-1 to Game Preserve Road	120'	4-6 Lane Divided	2.7
M-8	New	From M-2 to M-1	120'	4-6 Lane Divided	4.2
M-9	New	From M-8 to M-8	120'	4-6 Lane Divided	2.6
ARTERIAL					
A- 1 (u)	New	From M-5 to M-6	80'	48'	2.5
A- 2 (u)	New	From Old Baltimore Road to M-7	80'	48'	3.4
A- 3 (u)	New	From A-2 to A-1	80'	48'	0.6
A- 4 (u)	New	From Boyds-Clarksburg Rd. to M-8	80'	24'-48'	1.6
A- 5 (u)	New		80'	24'-48'	2.2
A- 6 (r)	New	From M-3 to M-2	80'	24'-48'	1.1
A- 7 (r)	New	From M-2 to M-2	80'	24'-48'	2.3
A- 8 (u)	New	From A-6 to M-2	80'	24'-48'	2.4
A- 9 (u)	Existing Md. Rte. 118	From M-1 to B-2	80'	48'	1.7
A-10 (u)	New	From A-12 to M-2	80'	24'-48'	1.3
A-11 (u)	New	From M-2 to M-9	80'	48'	1.4
A-12 (r)	Riffle Ford Road	From M-1 to M-3	80'	24'-48'	2.1
A-13 (u)	New	From M-1 to A-10	80'	48'	0.5

(u)—Urban Classification
(r)—Rural Classification

APPENDIX C — (Continued)

STREET AND HIGHWAY CLASSIFICATIONS — GERMANTOWN

No.		LIMITS	Right of Way	Recommended Paving Width	Miles
PRIMARY STREETS					
P- 1	Blunt Road	From M-4 to Brink Road	70'	24'	1.0
P- 2	Watkins Mill Road	From P-7 to East of Great Seneca	70'	24'	1.0
P- 3	Neelsville Church Rd.	From M-7 to P-7	70'	24'-36'	1.1
P- 4	Relocated Blunt Rd.	From A-1 to P-7	70'	24'-36'	0.4
P- 5	New	From M-7 to M-6	70'	24'-36'	0.6
P- 6	New	From A-2 to M-1	70'	24'-36'	1.2
P- 7	New	From A-1 to M-4	70'	24'-36'	1.0
P- 8	New	From A-2 to P-6	70'-80'	24'	0.6
P- 9	New	From M-8 to A-4	70'	24'-48'	1.5
P-10	New	From P-9 to P-9	70'	24'	0.6
P-11	New	From A-7 to M-8	70'	24'	1.4
P-12	New	From A-6 to P-11	70'	24'	1.0
P-13	New	From A-11 to M-6	70'	24'-36'	0.6
P-14	New	From A-11 to M-6	70'	24'-36'	1.0
P-15	Hoyles Mill Road	North of Little Seneca Creek to M-3	70'	24'	0.6
P-16	New	From A-7 to M-1	70'	24'	0.6
P-17	New	From M-9 to A-7	70'	24'-36'	0.8
P-18	Schaeffer Road	From M-3 to M-2		24'	1.2
BUSINESS STREETS					
B-1	Middlebrook Road	From M-1 to M-9	80'	48'	0.4
B-2	New	From M-8 to B-1	80'	48'	1.0
INDUSTRIAL STREETS					
I-1	Fairchild Road	From M-9 to M-9 (Loop)	80'	48'	0.8

APPENDIX D

Summary of Zoning Ordinance for Montgomery County

RESIDENTIAL, SINGLE-FAMILY DETACHED—Asterisk (*) indicates additional information in remarks column.

Zone	Minimum Area	Min. Frontage (Bldg. Rest. Line)	Front Setback	Max. Bldg. Coverage	Min. Green Area	Maximum Height	Remarks
R-A	2 acres	150'	50'	25%	—	50' *	No limit on agricultural build- ings
R-E	40,000 sq. ft.	125'	50'	15%	—	50' *	No limit on agricultural build- ings
R-R	20,000 sq. ft. min.	100'	40'	25%	—	50' *	No limit on agricultural build- ings
R-R, DC	20,000 sq. ft. av. 15,000 sq. ft. min.	100'	40'	25%	—	50' *	No limit on agricultural build- ings
R-150	15,000 sq. ft. av. 10,500 sq. ft. min.	80'	30'	30%	—	35'-40' *	Maximum height permitted with additional setback
R-90	9,000 sq. ft. av. 8,000 sq. ft. min.	75'	30'	30%	—	35'-40' *	Maximum height permitted with additional setback
R-60	6,000 sq. ft.	60'	25'	35%	—	35'-40' *	Maximum height permitted with additional setback

RESIDENTIAL, MULTIPLE-FAMILY

Zone	Lot Area	Area p/Unit					
R-40 (S-Det)	8,000 sq. ft. 4000 sq. ft.	40' p/unit	25'	40%	—	35'-40' *	Maximum height permitted with additional setback.
R-T (Town House)	20,000 sq. ft. 3500 sq. ft.	100'	25'	35%	50%	35'-40' *	Maximum height permitted with additional setback.
R-30	12,000 sq. ft. 3000 sq. ft.	75'	30'	18%	65%	35'	
R-20	16,000 sq. ft. 2000 sq. ft.	85'	30'	18%	60%	30' *	On 5 acre site-80'.
R-10	20,000 sq. ft. 1000 sq. ft.	100'	30'	12%	50%	—	
R-H	40,000 sq. ft. 1000 sq ft.*	200'	Equal to Hgt.	8%	50%	—	Increased coverage permitted with decreased density.
R-CBD	—	150 sq. ft.	—	10**	—	—	No limit* (Permitted in CBDs only) plus 1' for each foot above 143'.

COMMERCIAL

Zone	Minimum Tract	Minimum Lot	Maximum Bldg. Coverage	Maximum Height	Remarks
C-0	—	—	—	90' *	123' with interior parking
C-P	5 acres	2 acres	20% (green area, 40%)	50' *	Plus 1' for each foot over 50'.
C-1	None	None	—	35'	—
C-2	None	None	—	110' *	142' with interior parking.

INDUSTRIAL

I-1	None	None	—	Same as C-2	—
I-2	None	None	—	Same as C-2	—
I-3	50 acres	2 acres	25% *	—	Setback varies depending on type of road.

MISCELLANEOUS

TOWN SECTOR—Subject to plan approval, permits development, on minimum of 1500 acres, of "Town Sector." Population limited to 15 persons per acre. All types of residential buildings. Commercial limited to 10% of land, industrial to 5%.

PLANNED NEIGHBORHOOD—Subject to plan approval, permits Planned Neighborhood of sufficient size to support an elementary school. All types of residential structures, limited to 15 persons per acre. One acre of commercial use of each 1000 population.

PLANNED RETIREMENT COMMUNITY—Subject to plan approval, permits development on minimum of 750 acres of residential community for people over 50 years of age. Maximum of 10 D.U. per acre. 15% building coverage, 35 feet height (except that 20% of units may be 90 feet—a distance of 500 feet from the perimeter.)

NOTE: The above summary lists selected regulations in each zone. For further details, consult the Montgomery County Zoning Ordinance.

APPENDIX E METHODOLOGY

This section of the appendix contains selected standards and factors used to develop proposals for land use contained in the Master Plan for Germantown.

RESIDENTIAL

Table 1 illustrates the method used to obtain gross residential acreage, i.e., net residential plus abutting residential streets, but excluding schools, parks, local commercial, institutions and other non-residential uses. Gross residential acreage was then used with factors developed by the Commission and the Montgomery County Board of Education to obtain dwelling unit and population totals and school yields as shown in Table 2.

TABLE 1—PERCENTAGE OF TOTAL RESIDENTIAL LAND USED FOR RESIDENTIAL PURPOSES

Dwelling Type	Zoning Classification	Percent of Total Land
Single Family	R-R, R-90, R-60	60%
Medium Density Multi-Family	R-T, R-30, R-20	65%
High Density Multi-Family	R-H	70%

TABLE 2—RESIDENTIAL DENSITY AND SCHOOL YIELD FACTORS*

ZONE	DU's/ac	Pop/DU	Pop/ac	Elem.	Jr.	Sr.	Total
R-R ¹	1.57	3.70	5.81	.80	.34	.30	1.44
R-90 ¹	3.00	3.70	11.10	.80	.34	.30	1.44
R-60	4.20	3.70	15.54	.80	.34	.30	1.44
R-10	12.00	3.40	40.80	.50	.22	.20	.92
R-30	14.20	3.00	42.60	.35	.15	.13	.63
R-20	21.30	2.65	56.45	.27	.12	.11	.50
R-H	42.50	2.00	85.00	.05	.02	.02	.09

* Factors apply to gross residential acreage.

¹ Density control provisions of zoning regulations used in 50% of area.

APPENDIX E — (Continued)

COMMERCIAL LAND REQUIREMENTS

Using development standards which call for at least 1 acre/1000 population for local neighborhood centers and 3 acres/1000 population for community and regional facilities, commercial land needs for the Germantown corridor city are estimated to be approximately **380 acres**. An additional **115 acres** also are included in the Plan to accomodate those commercial facilities serving transients using 70-S and to provide a reserve for future expansion.

INDUSTRIAL LAND REQUIREMENTS

Inasmuch as most industrial development in Germantown is proposed to be in the performance type category, space needs will vary considerably. Also, the emphasis on the concentration of employment centers along the 70-S corridor requires the reservation of a relatively high proportion of the planning area for industrial use. For these reasons, the Plan proposes that approximately 10% of the total land area within the planning area boundary to be zoned in the 1-3 and 1-1 zoning categories. This will provide approximately a 100% reserve over anticipated need and permit considerable flexibility in site selection.

PARK REQUIREMENTS

Estimates for park land to serve the proposed population of approximately **95,000** have been derived from the Commission's present park acquisition program which calls for some 35 acres/1000 persons to provide for local and regional park facilities. This means that a total of **3325 acres** will be required to satisfy park needs for Germantown. Some **1400 acres** of the total park land required is within the planning area boundary (excluding acreage owned or proposed to be acquired by the State of Maryland). An additional **1925 acres** will have to be provided outside the planning area.

APPENDIX F — Resolution of Approval by the Montgomery County Council

COUNTY COUNCIL FOR MONTGOMERY COUNTY, MARYLAND

IN EXECUTIVE SESSION

Resolution No. 6-157

Re: Approval of Germantown Master Plan

WHEREAS, on June 13 and 14, 1966, the Maryland-National Capital Park and Planning Commission conducted public hearings on the proposed Germantown Master Plan; and

WHEREAS, on October 19, 1966, said Planning Commission adopted the Germantown Master Plan; and

WHEREAS, on November 1, 1966, said Planning Commission referred the adopted Plan to the County Council; and

WHEREAS, on November 2, 1966, said Planning Commission filed with the Clerk of the Circuit Court for Montgomery County the adopted Plan; and

WHEREAS, on January 25 and 26, 1967, the County Council conducted public hearings on the Germantown Master Plan; and


WHEREAS, the County Council has reviewed the adopted Plan including the text and concurs in the Plan as adopted by the Maryland-National Capital Park and Planning Commission,

NOW, THEREFORE, BE IT RESOLVED by the County Council for Montgomery County, Maryland, that

Pursuant to Chapter 599, Laws of Maryland 1965, the Germantown Master Plan be and it is hereby approved.

A True Copy

ATTEST:


Richard E. Frederick, Clerk
to the County Council
for Montgomery County, Maryland

January 27, 1967

Notes

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