COMPREHENSIVE DEVELOPMENT PLAN

Loudoun County, Virginia

A part of the Comprehensive Plan for the physical development within the jurisdiction of Loudoun County, Virginia; pursuant to the provisions of Title 15.1, Chapter 11, Article 4, the Laws of the Commonwealth of Virginia.

LOUDOUN COUNTY PLANNING DEPARTMENT
18 East Market Street, Leesburg, Virginia
1969

This page left blank intentionally.

COMPREHENSIVE DEVELOPMENT PLAN

Loudoun County, Virginia

CERTIFICATION OF ADOPTION

This Comprehensive Development Plan, providing a general plan for the physical development of Loudoun County, Virginia, has been duly adopted by the Loudoun County Board of Supervisors, William S. Leach, Chairman, on December 2, 1969, pursuant to the provisions of Title 15.1, Chapter 11, Article 4, Laws of the Commonwealth of Virginia:

Larry J. Brown, Executive Secretary

December 2, 1969

COUNTY OF LOUDOUN
DEPARTMENT OF PLANNING AND ZONING

Joseph R. Trocino
Acting Director

This page left blank intentionally.

BOARD OF SUPERVISORS

William S. Leach, *Chairman*
Huntington Harris, *Vice Chairman*
Charles L. Waddell
James F. Brownell
Robert P. McClain
Douglas N. Myers
Larry J. Brown, *Executive Secretary*

PLANNING COMMISSION

Thomas G. Slater, *Chairman*
Fred A. Brock, *Vice Chairman*
Dr. Thomas W. Orme
W. S. Francis
Col. Derryfield Smith
Anna F. Hedrick
C. P. Poland
Ruth Miller, *Secretary*

LOUDOUN COUNTY DEPARTMENT OF PLANNING
P. O. BOX 702
LEESBURG, VIRGINIA 22075

May 27, 1969

Mr. Thomas G. Slater, Chairman
Loudoun County Planning Commission
Leesburg, Virginia

Dear Mr. Slater:

The Planning Staff is pleased to transmit the proposals for revisions to the county's Comprehensive Plan.

Many individuals and organizations concerned with the future of Loudoun County have contributed to the plan. Based on this interest and assistance, it is felt that the plan not only contains principles of good technical planning, but coordinates these with the goals of the citizens of Loudoun County.

The document presented is a staff proposal and must follow the procedures established in the State Code, including appropriate public hearings. The Planning Staff will be pleased to work with any individuals or organizations on suggested modifications to the staff proposals during the public hearing process.

Respectfully submitted,

Beckham W. Dickerson, Jr.

Beckham W. Dickerson, Jr.
Director of Planning

TABLE OF CONTENTS

LIST OF PLATES

repeated 5/75

LIST OF TABLES

LIST OF GRAPHS

ACKNOWLEDGEMENTS

The Planning Commission and staff would like to voice their appreciation to the people who made this work possible. It is not the work of any individual or single group of people but a compilation of the interest and efforts of many.

The citizens of Loudoun County have contributed in many ways including cooperation in data collection and general advice. Without this participation the plan could not reflect the goals of the people and would therefore be of little value.

Many county boards, agencies, and personnel have been instrumental in providing guidance with respect to their individual specialities, and some sections of the plan reflect totally the efforts of agencies other than the planning staff. Since planning effects and is affected by most other disciplines, this assistance was invaluable.

Other governmental and private agencies have also been of assistance through the provision of existing data from their libraries and files. This has saved staff time, effort, and expense, and projects a climate of cooperation.

It is hoped that the atmosphere of cooperation and assistance will continue to grow and involve all the people interested in the welfare of Loudoun County. The success of this or any plan rests in the participation of the people affected by its implementation. This participation has been instrumental in the adoption of this plan, and will be vital to the attainment of its goals, as the plan is implemented in the years to come.

INTRODUCTION

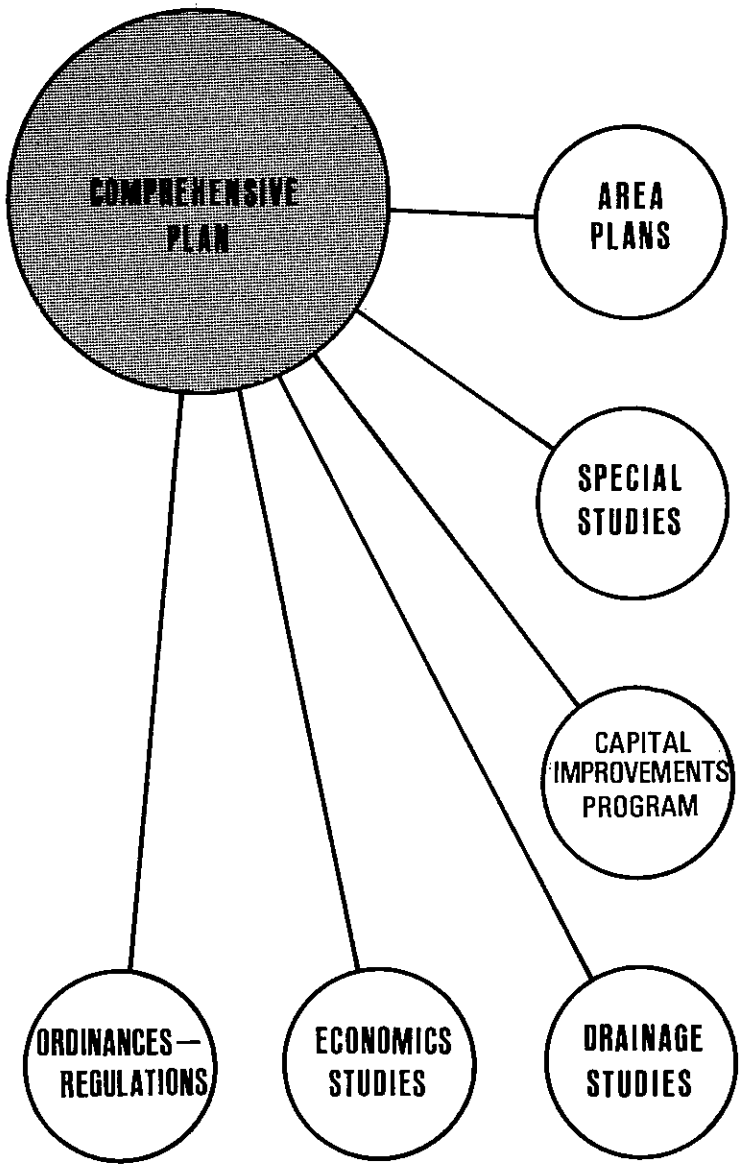
OATLANDS

The Oatlands estate is located 6 miles south of Leesburg on Route 15. This federal style mansion was built in 1800 by Colonel George Carter, the grandson of Robert "King" Carter. The home, gardens, and 260 acres have been deeded by the daughters of Mr. and Mrs. William Corcoran Eustis to the National Trust for Historic Preservation as a memorial to their parents.

INTRODUCTION

Although the planning process is a familiar function in the daily conduct of business and personal life, advanced planning to achieve coordination in the public and private sectors of development in accordance with a predetermined community pattern is a relatively recent concept. The need for this type of community planning is making itself increasingly obvious. The dynamic rise in the population, the growth of technology, and the expansion of the national economy all point to the fact that change must occur, particularly in those areas located on the perimeter of a large urban center. Because the impact of the accelerated growth of the Washington area is just beginning to exert an influence in Loudoun, the county is in an excellent position to prevent many of the problems that so often accompany the transition from rural to suburban orientation.

As a member community of the Washington Metropolitan area, Loudoun County must accept its share of the responsibility for the inevitable growth resulting from the expansion of the region. However, it is equally important that this growth be required to conform to the high environmental standards presently enjoyed by the county residents. The maintenance of a well balanced community atmosphere will require the concern and cooperation of both the rural and urban oriented segments of the population. It must be the responsibility of all residents to work together to accommodate change without causing disruption and chaos to the physical, social, and economic functions of the county. Considering the unique and valuable historic heritage abundant in Loudoun County, effective measures must be taken in future development plans to preserve and protect these historic sites and areas.



HISTORY OF PLANNING AND ZONING

Loudoun County's Board of Supervisors formally recognized the need for advanced planning in 1942 by establishing a Planning Commission and adopting a Zoning Ordinance. The Planning Commission acts primarily as an advisory body to the Board on questions which will affect the community environment. The Zoning Ordinance permits the Board to fit new development into the framework of county goals by establishing zones for controlling the location and extent of the various types of land use.

In 1946 a Zoning Administrator was employed to enforce the Zoning Ordinance, and a Board of Zoning Appeals was established with the power to grant certain exceptions to the Zoning Ordinance in order to provide a degree of flexibility. As in all growing rural areas, much of Loudoun's development is occurring in the form of subdivisions of large tracts of land. Therefore, in order to protect the health and welfare of the general public, a Subdivision Ordinance was established in 1948.

Because of the increasing volume of work and sophistication of the planning function, a Planning Director was appointed by the Planning Commission in 1961 to assist in the daily conduct of business, to carry out the community goals established by the Planning Commission, and to coordinate the planning functions performed by the various county departments. Table 1 records a full listing of the agencies and ordinances presently operating in Loudoun County, as well as the regional organizations in which the county holds membership.

TABLE 1 – PLANNING AGENCIES & ORDINANCES

AGENCY/ORDINANCE	YEAR ESTABLISHED
Planning Commission	1942
Zoning Ordinance	1942
Board of Zoning Appeals	1946
Zoning Administrator	1946
Subdivision Ordinance	1948
Sanitation Authority	1959
Planning Director	1961
1980 Land Use Plan	1964
Soil Scientist	1966
MEMBERSHIPS	**YEAR ESTABLISHED**
Northern Virginia Regional Planning Commission	1950
Metropolitan Washington Council of Governments	1963

THE PLAN

The comprehensive plan so sought after by most communities has little intrinsic value; it provides, at best, a weak legislative and judicial tool. The value of the plan depends directly on the degree to which the following conditions can be developed: *first,* the plan must be a product of and completely understood by the citizens: *second,* it must be effective in coordinating public and private interests; *third,* it must become the basis for the daily decision making process of both the public and private sectors.

The comprehensive plan is presented in two basic segments. *First,* the background information states the existing situations and factors which influence planning decisions. This section is of value to private citizens as well as government officials because it provides a basis for the planning proposals and a frame of reference for future private decisions.

The proposals set forth in the second section of the plan provide guidelines for directing the new growth of the county. Because the proposals are based on the existing situation, they must be re-evaluated frequently in order to retain the plan's validity. It must also be recognized that a single proposal should not be examined in isolation, but only in the context of the entire system of community goals and objectives.

It is important to clearly understand the functional relationship between planning and zoning. Zoning is regarded as the most effective legal means of implementing the adopted comprehensive plan. The validity of the zoning regulations, therefore, is based on the merits of the plan and the ability of the county's regulations to achieve the community's planning goals.

LEGAL SIGNIFICANCE

The legal basis of the planning and zoning function is drawn from the enabling legislation contained in Title 15.1, Chapter 11 of the Laws of the Commonwealth of Virginia. Section 15.1-427 states that the governing body "...may by resolution or ordinance create a local planning commission...in order to promote orderly development..." within the territory of its jurisdiction. Any Planning Commission so created is required by Section 15.1-446 to "..prepare and recommend a comprehensive plan for the physical development..." of the area. The Planning Department, acting as the agent of the Planning Commission, has gathered the background data necessary for the completion of the Comprehensive Plan for Loudoun County, and a continuing program for planning has been adopted by the Planning Commission. The first and second phases of this program are the collection and analysis of background data and the completion of a comprehensive development plan.

PROGRAM FOR PLANNING

The development plan, when recommended and adopted by the Planning Commission and the Board of Supervisors, respectively, will become a guide to both public and private agencies in making decisions which will affect the community environment. The Comprehensive Plan takes on legal significance in determining the approximate location, character, and extent of public structures, utilities, and services. The Planning Commission must hold a public hearing to review the construction of all such facilities, and must approve each as being substantially in accordance with the adopted plan.

The completion and adoption of the comprehensive plan marks the end of the first phase of the current planning program. The plan should establish the county's present stage of development, and, based on the goals of the county, present a framework for Loudoun's future growth. The remainder of the initial two year planning program deals with the implementation of the adopted plan.

The next phase is concerned with updating the Zoning and Subdivision Ordinances so that they may effectively promote orderly growth and development in accordance with the planning goals of the community. The changing attitude of the county makes it necessary that the governing body have more effective instruments with which to secure and maintain the orderly and healthy community environment envisioned by the comprehensive development plan.

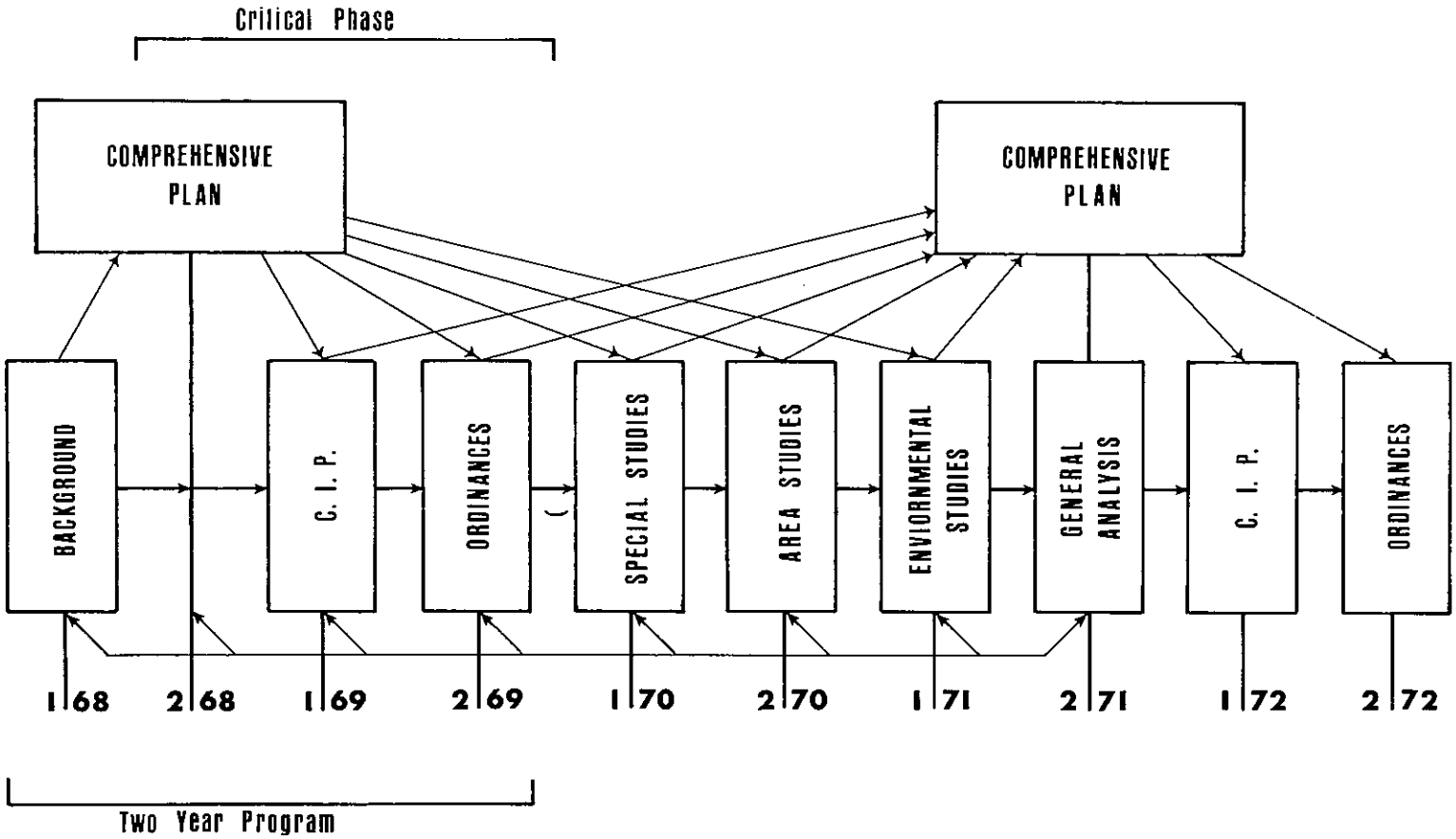
A five year program for capital expenditures will be drafted with the cooperation of all departments and agencies within the county government. The Capital Improvements Program deals primarily with the provision of adequate public facilities to meet the demands of the community in a systematic and economical manner.

The revision of the county's ordinance and the drafting of the Capital Improvements Program completes the initial two year phase of the planning program. At this time, having reviewed and evaluated the results of the previous two years, the Planning Commission shall proceed with the five year program outlined in Table 2.

REGIONAL LOCATION

Loudoun County is located in the north central section of Virginia, bounded by Fairfax County on the east, Fauquier and Prince William Counties on the south, Clark County and the West Virginia State line on the west, and the Potomac River on the north (see PLATE 1). These boundaries enclose an area of 517 square miles with an estimated population of 39,400. The nation's capital lies 38 miles to the east of the county seat of Leesburg.

TABLE 2 – FIVE YEAR PLANNING PROGRAM



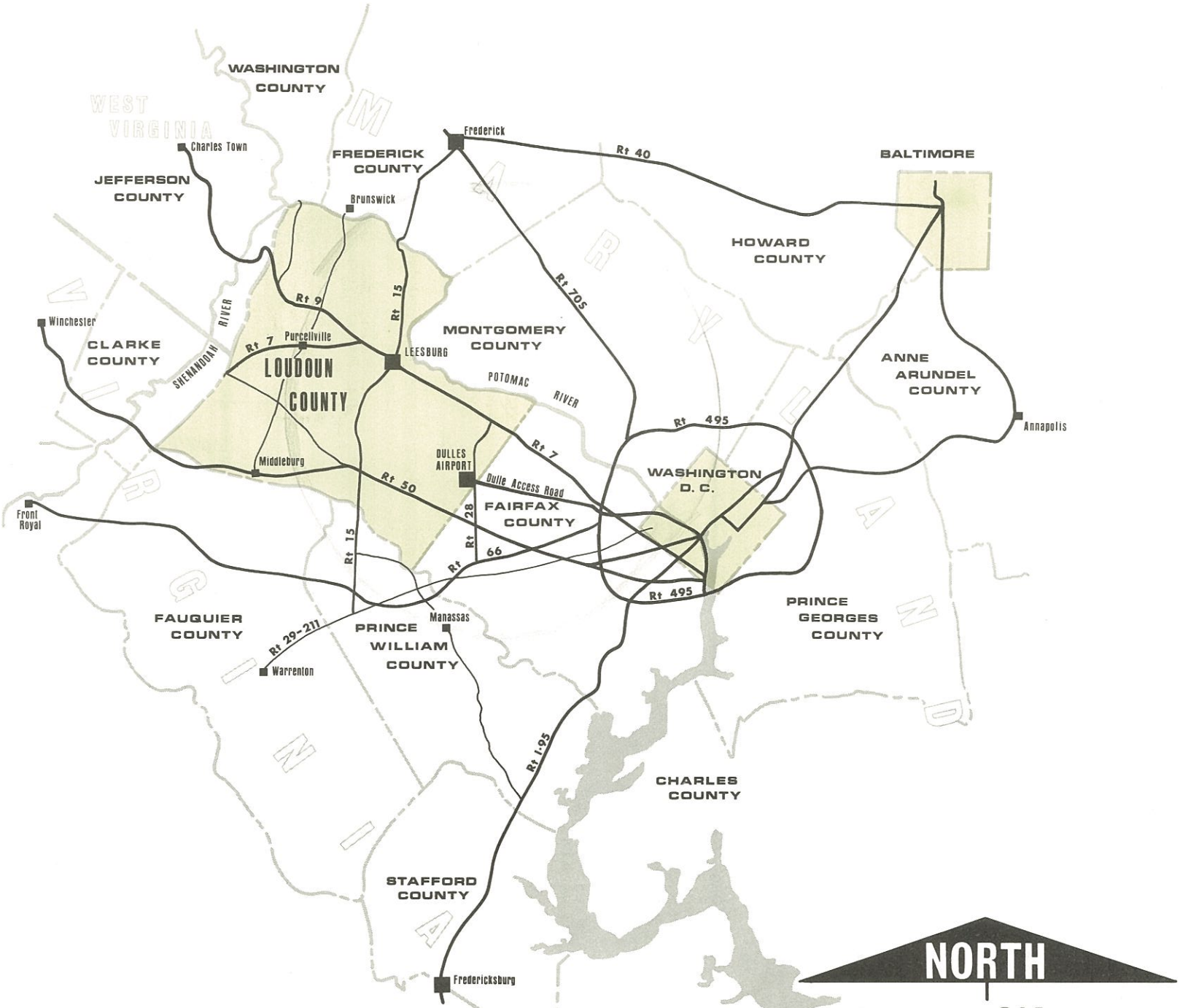


PLATE 1

REGIONAL LOCATION

BACKGROUND

POWELL'S MILL

Leven Powell, the founder of the town of Middleburg, built this large stone mill in 1771. Powell played an important role in the economic development of Loudoun County, and by the 1770's, Loudoun had become a prominent wheat growing area. In 1773, the Loudoun Court ordered that the grist mill be recorded in the name "Sally", Colonel Powell's wife's name; this name was used as the trademark of the mill.

NATURAL CHARACTERISTICS

Although modern engineering techniques have given man a certain degree of control over the attitude of his natural environment, the elemental characteristics of the land area remain strong determinants in urban development. The availability of water and the suitability of topography and soils for the construction of foundations and roadways remain major considerations in the selection of sites for urban development.

The ultimate goal of land use planning is to achieve a harmonious blending of natural and man-made elements, an ecological balance in which man neither threatens nor is threatened by nature. This balance is a vital element to the health and welfare of the area's residents. Streams and rivers are valuable natural resources; they must be protected from drainage and erosion problems that may lead to siltation and flooding. Water and air pollution must be prevented in order to provide safe and healthful living standards.

SOILS

In drawing a rational comprehensive land use plan, it is important to consider the dominant soil associations comprising the area in relation to their adaptability for construction, agriculture, roadways, etc. PLATE 2 provides a graphic representation of the generalized soil associations of Loudoun County, and Table 3 records the acreage and characteristics of each category.

The soil associations can be broken down into nine categories. Reference to PLATE 2 and the accompanying table will point out the disparity in the adaptability of the soils of the eastern sector and the western sector of the county. Generally, the soils

west of the Catoctin Mountains are well suited for agriculture, the construction of roads and foundations, and have acceptable rates of percolation. Much of the eastern section of the county, however, presents a problem for development. From Table 3, it can be seen that soils #3,4,6,7, and 9, accounting for 36.4% of the total acreage, are generally poor for urban construction, percolation, and agriculture. Very little new development of any magnitude is likely to occur in these areas until public water and sewer become available; even with the provision of these services, development in these areas will be somewhat retarded because the characteristics of the soils make development economically infeasible at the present time. Again referring to Table 3, soils #5 and 8, totaling 44,247 acres, offer the best possibility for urban construction. It is advisable that concentrated development be restricted from the flood plain areas (#9 on Table 3) in order to prevent dangerous flooding and erosion situations. Because these areas cannot support development and are unsuited for agricultural use, it is desirable that they remain in their natural state and be used as stream valley parks or conservation areas.

TABLE 3 – GENERALIZED SOILS ASSOCIATIONS

SOILS	ACREAGE	% OF TOTAL	ROADS	FOUNDATIONS	DRAINAGE	PERCOLATION	DOMINANT SLOPE GRADIENT	AGRICULTURE	DEPTH TO BEDROCK
1. Chester, Elioak, Brandywine, Brandywine, Glenelg, Manor	117,820	35.6	Good	Good	Good	Good	Undulating to Hilly 2-25%	Good	6-100'
2. Brandywine, Meyersville, Fauquier, Catoctin	48,667	14.7	Good	Good	Good	Fair	Good - but Steep 2-25%	Poor to Fair	0-8'
3. Penn, Calverton, Croton, Readington	46,526	14.1	Generally Poor	Generally Poor	Poor to Good	Generally Poor	Level to Hilly 0-25%	Poor	0-8'
4. Clifton, Laidig	26,016	7.9	Poor	Poor	Fair	Poor to Fair	Rolling to Steep 2-14%	Poor	6-25'
5. Athol, Emory, Bucks, Penn, Calverton, Ruxton, Mantalto	25,290	7.6	Generally Good	Generally Good	Generally Good	Generally Good	Undulating to Hilly 2-25%	Good	2-15'
6. Belvoir, Worsham, Chester, Brecknock, Catlett, Croton	22,202	6.7	Generally Poor	Generally Poor	Poor to Good	Generally Poor	Level to Undulating 0-25%	Fair to Poor	1-15'
7. Iredell, Mecklenburg, Kelly, Brecknock, Catlett	20,017	6.1	Poor	Poor	Poor to Good	Poor	Level to Undulating 2-14%	Poor	0-8'
8. Dyke, Elbert, Braddock, Thurmont, Hiwassee, Captina, Robertsville, Elk	18,957	5.7	Fair to Poor	Fair to Poor	Poor to Good	Poor	Level to Rolling 2-14%	Fair to Poor	2-35'
9. Chewacla, Congaree, Rowland, Bermudian, Huntington, Lindside, Bowmansville, Melvin*	5,165	1.6	Poor	Poor	Good to Poor	Poor	Level 0-2%	Fair to Poor	5-25'

* *Subject to flooding.*

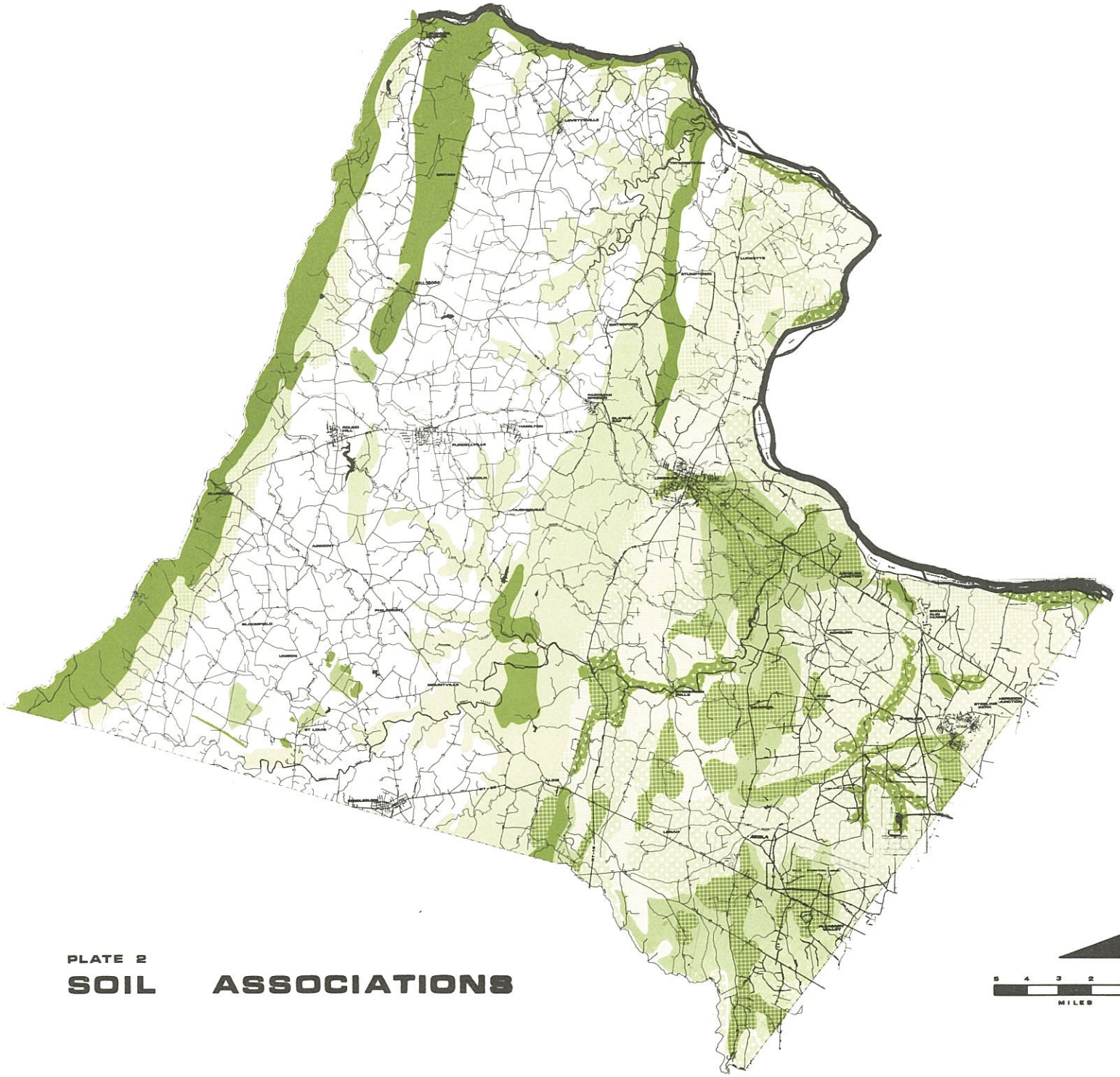


PLATE 2

SOIL ASSOCIATIONS

WATERSHEDS

A watershed refers to a contiguous land mass draining ultimately into a particular body of water. Loudoun County lies within the Potomac River Basin, with all land draining either directly into the Potomac River or into one of its tributaries.

PLATE 3 is a graphic representation of the major watersheds within the county; the acreage in each of these drainage areas is reported on Table 4.

TABLE 4 – WATERSHEDS

	ACRES	% OF TOTAL
Goose Creek	147,894	44.8
Catoctin Creek	60,319	18.2
Broad Run	46,475	14.0
Potomac #3	26,369	7.9
Occoquan Basin	18,332	5.4
Potomac #4	11,841	3.5
Piney Run	9,761	2.9
Sugarland Run	5,325	1.5
Potomac #1	4,336	1.2
Nichol Run	228	.6
Total	330,880	100.0

Goose Creek is the largest of the primary watersheds, accounting for almost 45% of the total county acreage. With the exception of Potomac #1,3, and 4, all of the primary drainage basins include some area outside of the county's boundaries. It is important, however, that the development of a land use plan take the entire watershed into consideration because development within any section of a watershed will affect the entire basin.

Development must pay close attention to the effect it may generate on drainage conditions. Because development increases the intensity of water run-off, it is vital that density restrictions be placed on certain critical drainage areas, such as flood plains; these restrictions will help to prevent the erosion and siltation conditions that may result in an overloading of the streams and rivers.

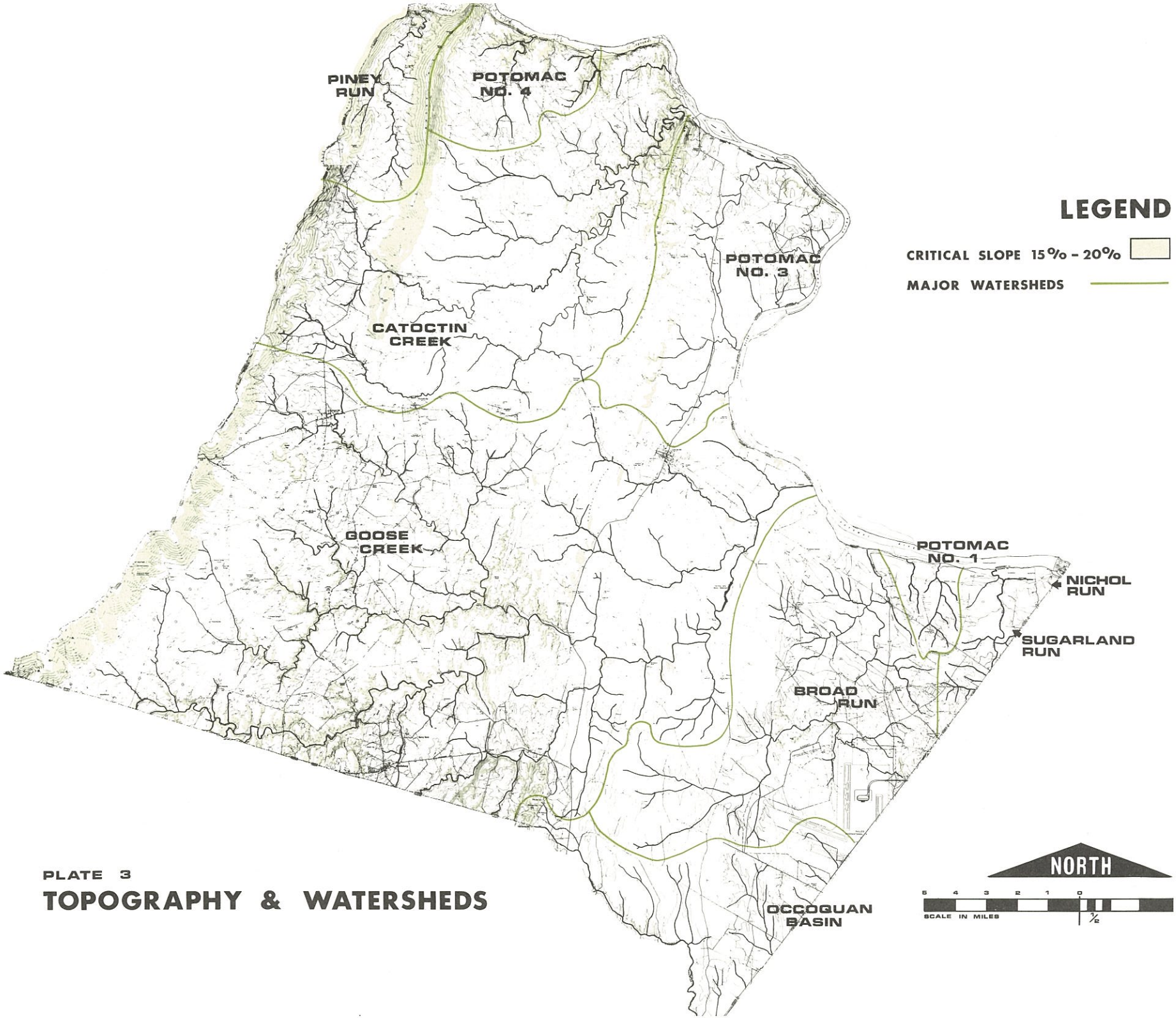


PLATE 3

TOPOGRAPHY & WATERSHEDS

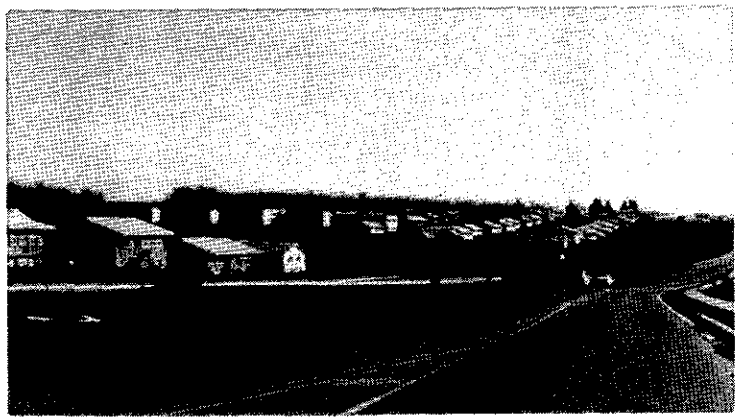
TOPOGRAPHY

Because topography is such a basic characteristic, it is of essential concern in land use planning. Loudoun County lies primarily within the Northern Piedmont physiographic province, with only a narrow strip in the western portion of the county lying in the Blue Ridge province. Elevations range from a low of 180 feet above sea level at Seneca Falls to 1,900 feet above sea level north of Paris in the Blue Ridge Mountains. The topography is high, generally level to gently rolling, and well drained. Two mountain ranges and the Potomac River offer some of the most scenic beauty in the county, and provide an excellent opportunity for the development of outstanding recreational facilities. PLATE 3 presents a picture of the contours and critical slope (15 – 20+% grade or greater) within the county. The terrain is not generally critical, as is shown clearly on the topography map; only approximately 33,300 acres or 10% of the total area contains a dominant slope gradient in excess of 15 – 20+%.

POPULATION AND HOUSING

Advanced planning is an effort to provide healthy and well balanced community living by ensuring the adequacy of public facilities and the strategic location of residental, commercial industrial, and public development areas. This would be an impossible task without sufficient knowledge of the general characteristics of the population to enable the planner to accurately forecast the future needs of the residents.

Thus, although the significance of the area's physical features should not be underrated, it is important to recognize that this alone does not present a complete picture. The total community environment is the result of the interaction between social and



physical aspects. Therefore, in order to formulate a rational comprehensive plan for the physical development of an area, it follows that the planner must have a sound knowledge of the significant demographic characteristics of the community.

Graph 1 shows the population growth for Loudoun County for the period 1910 to 1968. This graph clearly points out the sharp increase in the population growth rate beginning in 1960, when the county came under the direct influence of the expanding Washington Metropolitan area.

The existing population figures for Loudoun County are based on the results of a field survey of land use conducted by the planning staff in May through July, 1968. The distribution of housing types, i.e. single family detached, townhouse, multi-family, etc., was computed for each Magisterial District and community of interest. The results of this breakdown are recorded in Appendix I, and are represented in a generalized manner on the existing land use map, PLATE 7. It is obvious that single family units are the predominant housing type in the county, accounting for almost 89% of the total existing housing.

LEGEND

1 DOT = 38 PEOPLE

NORTH

6 4 3 2 1 0 FEET IN THOUSANDS

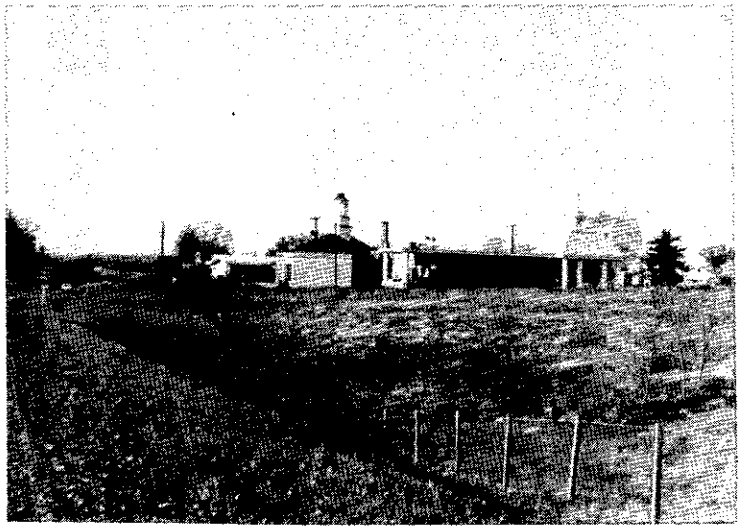
MILES 1 2 3 4 5 10 15

PLATE 4
JANUARY 1969

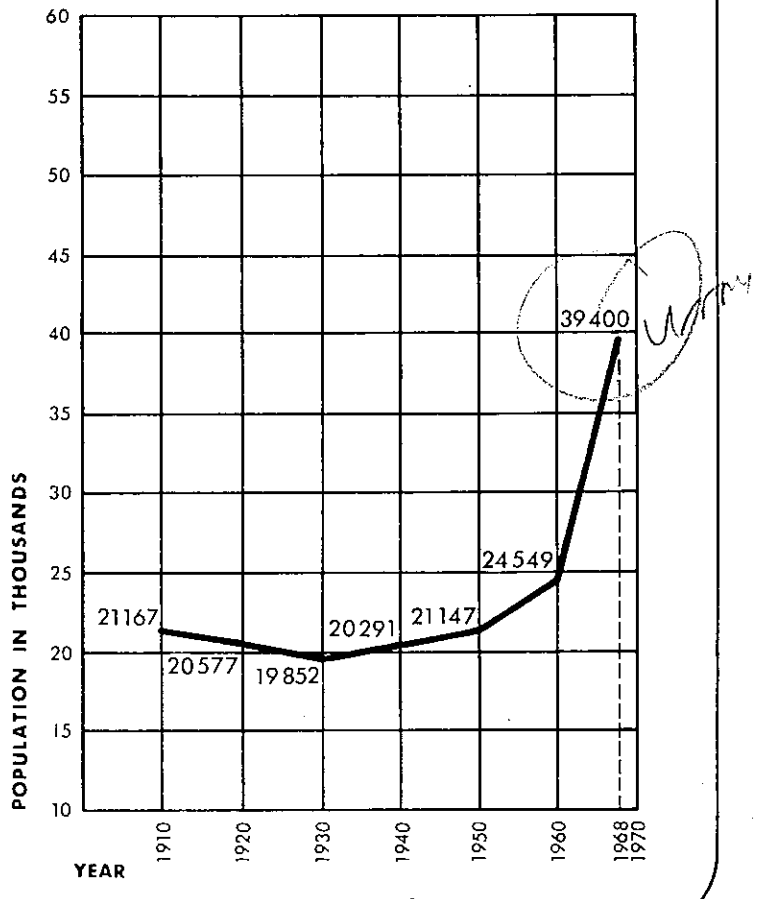
POPULATION DISTRIBUTION

In order to verify the accuracy of these figures and to calibrate the model, the staff compiled a complete list of location permits on an annual basis from 1960 to 1968. The percentage of error revealed by these figures was found to be statistically insignificant, and was distributed among the incorporated towns which are not under the jurisdiction of the county Zoning Ordinance. This information is reported in Appendix II.

Because no recent reliable information is available concerning the ratio of population to dwelling units, the staff has employed the figure of 3.8 reported in the 1960 census and verified again in 1968. This ratio yields an existing population of approximately 39,400. The distribution of this population is represented on PLATE 4, and magisterial district totals are shown on Graph 2.



GRAPH 1 .... POPULATION GROWTH 1910—1968 .....

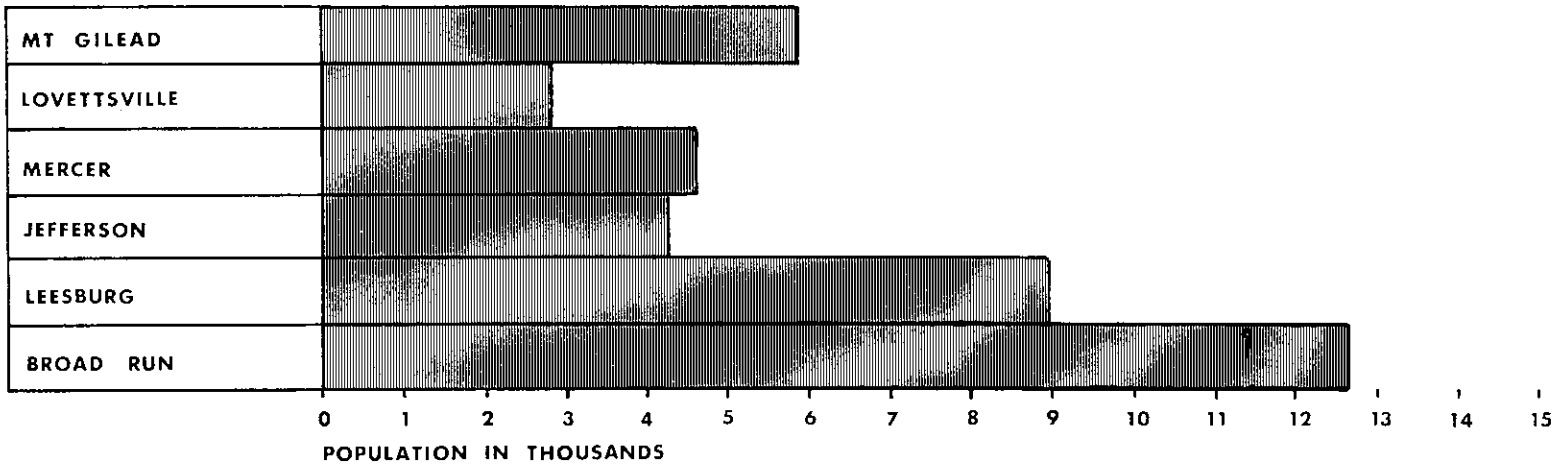


SOURCE — U S BUREAU OF CENSUS

Disposable family income is an important concept because it determines the standard of living for the family unit. The average disposable family income for 1967 was $7,637*. Graph 3 delineates the percentage of the population falling into each income classification compared to the percentage of the total county income earned by each income group. This data points up the tremendous disparity in the standard of living of the county residents. The graph shows that 29% of the population earns less than $3,000, and that this group contributes only 6% of the total county income. On the other hand, 3% of the population earns over $25,000, and contributes 19% of the county's total income. The graph also points out that almost 50% of the county's population earns less than $5,000. The figures indicate that Loudoun County faces a serious social and economic problem. The need for social and economic planning is vital. A Health Planning Program designed to upgrade the county's environmental conditions, coordinated with a more widely diversified and specialized educational system and expanded employment opportunities, should do much to increase the economic productivity of this segment of the population.

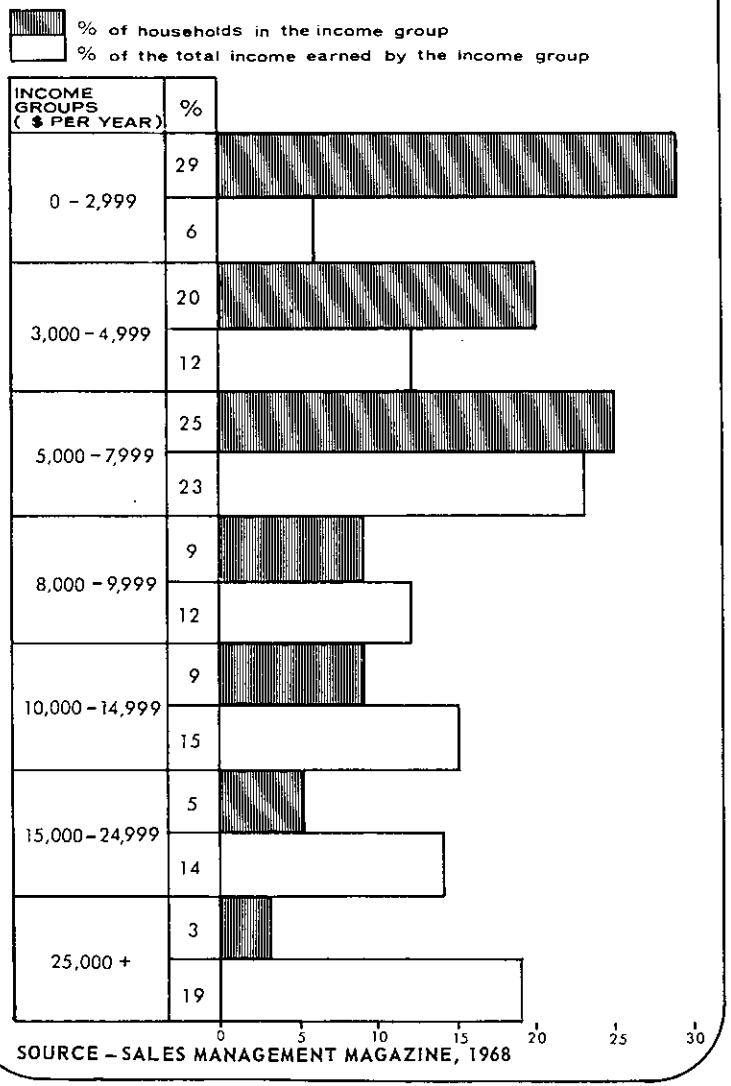
* *Sales Management Survey of Buying Power*, June 10, 1968.

GRAPH 2.....MAGISTERIAL DISTRICT POPULATION.....



SOURCE – LOUDOUN COUNTY PLANNING DEPT. JAN. 1969

GRAPH 3 ..... FAMILY INCOME .....



SOURCE – SALES MANAGEMENT MAGAZINE, 1968

ECONOMICS

EMPLOYMENT

Population figures provide the base for the determination of the size of the labor force. All residents fifteen years and older have been considered in the estimate of the potential civilian labor force. The size of the active labor force was estimated by applying adjusted participation rates for selected age groups by race and sex. These figures, recorded on Table 5 for all the metropolitan jurisdictions, show that Loudoun County has an estimated total active labor force of 13,679 as of December, 1967. This is an increase of almost 47% over the April, 1960 figure. During this same time period, the total Standard Metropolitan Statistical Area registered only a 28% increase in the civilian labor force. If this trend continues, employment opportunities in the immediate area will also increase.

The estimate of the labor force is further broken down into employed and unemployed segments; this information is listed on Tables 6 and 7. This data reveals that unemployment in Loudoun County has decreased from 2% in April, 1960 to 1.36% in December, 1967. Although this rate does not present a significant problem at this time, it probably does not fully reflect the extent of disguised unemployment or seasonal employment. This type of unemployment is particularly prevalent in those rural areas in which agriculture is an important economic factor.

Agriculture still forms a vital segment of the economy of Loudoun County, although its slowly declining role is reflected in the decreasing proportion of agricultural employment. As shown on Table 9, agricultural employment has fallen from 44% of the total labor force in 1950 to 16% in 1967. It is expected that the trend toward an increasing percentage of non-agricultural employment will continue as the population rises. Only 2.7% of the

TABLE 5 – Projection of Civilian Labor Force By Race

FOR THE WASHINGTON METROPOLITAN AREA

(By Jurisdictions - April 1960 to December 1970)

	APRIL 1960 1/		DECEMBER 1967 2/		DECEMBER 1970 2/	
	TOTAL	NONWHITE	TOTAL	NONWHITE	TOTAL	NONWHITE
Prince George's County	136,938	11,751	240,197	14,708	300,765	16,603
Montgomery County	128,818	5,805	179,118	6,161	207,107	6,498
Subtotal	(265,756)	(17,556)	(419,315)	(20,869)	(507,872)	(23,101)
District of Columbia	356,297	181,220	350,722	197,837	349,825	206,624
Alexandria City	37,769	4,491	44,730	4,200	48,109	4,211
Arlington County	70,105	3,588	73,680	4,005	75,013	4,213
Fairfax County	81,333	3,507	135,899	4,717	167,526	5,154
Fairfax City	3/	3/	6,790	156	8,492	187
Falls Church	3,796	4/	5,340	64	6,229	73
Loudoun County	9,314	1,727	13,679	1,740	16,932	1,835
Prince William County	12,436	1,158	22,376	1,354	28,484	1,495
Subtotal	(214,753)	(14,471)	(302,494)	(16,236)	(350,785)	(17,168)
TOTAL SMSA	836,806	213,247	1,072,531	234,942	1,208,482	246,893

1/ Civilian Labor Force for 1960 is based on Population 14 years old and over.
2/ Civilian Labor Force Projections for 1967 and 1970 are based on Population 15 years old and over.
3/ Included in Fairfax County for 1960.
4/ Falls Church nonwhite civilian labor force is included in Fairfax County for 1960.

SOURCE: U. S. Census of Population, 1960 and Hammer, Green, Siler Associates.

TABLE 6 – Projection of Resident Employed Population by Race

FOR THE WASHINGTON METROPOLITAN AREA

(By Jurisdictions - April 1960 to December 1970)

	APRIL 1960 1/		DECEMBER 1967 2/		DECEMBER 1970 2/	
	TOTAL	NONWHITE	TOTAL	NONWHITE	TOTAL	NONWHITE
Prince George's County	133,973	11,200	239,335	14,300	296,652	16,136
Montgomery County	127,100	5,641	177,573	6,043	205,227	6,373
Subtotal	(261,073)	((16,841)	(416,908)	(20,343)	(501,879)	(22,509)
District of Columbia	341,563	170,950	341,276	190,510	340,380	198,884
Alexandria City	36,776	4,235	43,977	4,032	47,298	4,041
Arlington County	68,996	3,454	72,970	3,917	74,280	4,116
Fairfax County	79,785	3,355	134,505	4,647	165,769	5,075
Fairfax City	3/	3/	6,722	156	8,404	184
Falls Church	3,728	4/	5,277	63	6,156	72
Loudoun County	9,126	1,695	13,489	1,720	16,700	1,811
Prince William County	12,025	1,100	22,064	1,323	28,089	1,459
Subtotal	(210,436)	(13,839)	(299,004)	(15,858)	(346,696)	(16,758)
TOTAL SMSA	813,072	201,630	1,057,188	266,711	1,188,955	238,151

1/ Based on civilian labor force 14 years and over.
2/ Based on civilian labor force 15 years and over.
3/ Fairfax City employed are included in Fairfax County.
4/ Falls Church nonwhites employed are included in Fairfax County nonwhite total.

SOURCE: U. S. Census of Population, 1960 and Hammer, Green, Siler Associates.

TABLE 7 – Projecton of Resident Unemployed Population By Race

FOR WASHINGTON METROPOLITAN AREA

(By Jurisdictions - April 1960 to December 1970)

	APRIL 1960 *1/*		DECEMBER 1967 *2/*		DECEMBER 1970 *2/*	
	TOTAL TOTAL	NONWHITE	TOTAL	NONWHITE	TOTAL	NONWHITE
Prince George's County	2,965	551	3,260	407	4,112	468
Montgomery County	1,718	164	1,543	116	1,880	125
Subtotal	(4,683)	(715)	(4,803)	(523)	(5,992)	(593)
District of Columbia	14,734	10,270	9,444	7,326	9,445	7,740
Alexandria City	993	256	752	166	811	171
Arlington County	1,109	134	710	88	733	97
Fairfax County	1,548	152	1,394	71	1,757	79
Fairfax City	*3/*	*3/*	67	2	88	3
Falls Church	68	*4/*	62	1	73	1
Loudoun County	188	32	187	22	232	24
Prince William County	411	58	308	31	395	36
Subtotal	(4,317)	(632)	(3,480)	(381)	(4,089)	(411)
TOTAL SMSA	23,734	11,617	17,727	8,230	19,526	8,744

1/ Based on the civilian labor force 14 years and over
2/ Based on the civilian labor force 15 years and over
3/ Unemployed in Fairfax City are included in Fairfax County.
4/ Nonwhite unemployment in Falls Church are included in Fairfax County.

SOURCE: U. S. Census of Population, 1960 and Hammer, Green Siler Associates.

non-agricultural labor force is employed in manufacturing. The government, service, and wholesale and retail trade components constitute the largest share of the non-manufacturing sector of employment (See Table 9).

AGRICULTURE

The agricultural base of Loudoun County rests heavily on livestock and livestock products; according to the 1964 census of agriculture, these commodities accounted for 83% of the total value of all farm products sold. Table 8 presents a breakdown of agricultural income by product for Loudoun County in 1964. Many of the problems and trends in the agricultural sector will be discussed in some detail in the following sections; however, it is worth mentioning that dairy farming is the only agricultural endeavor that can successfully compete with urban land uses.

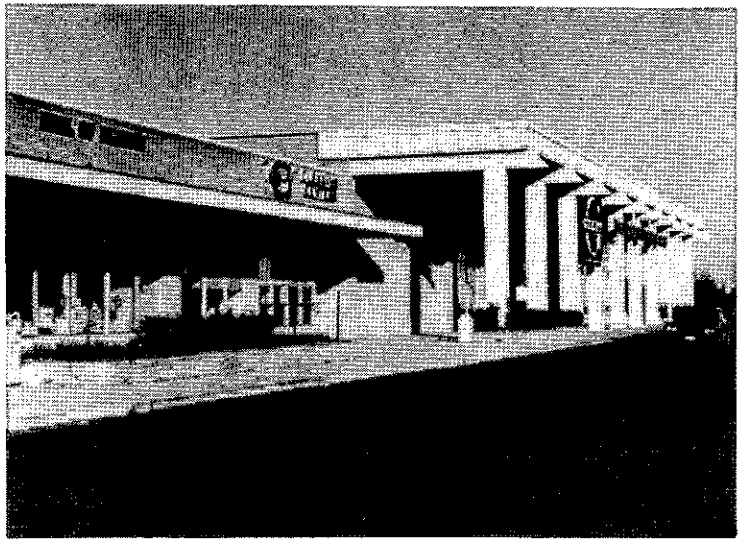
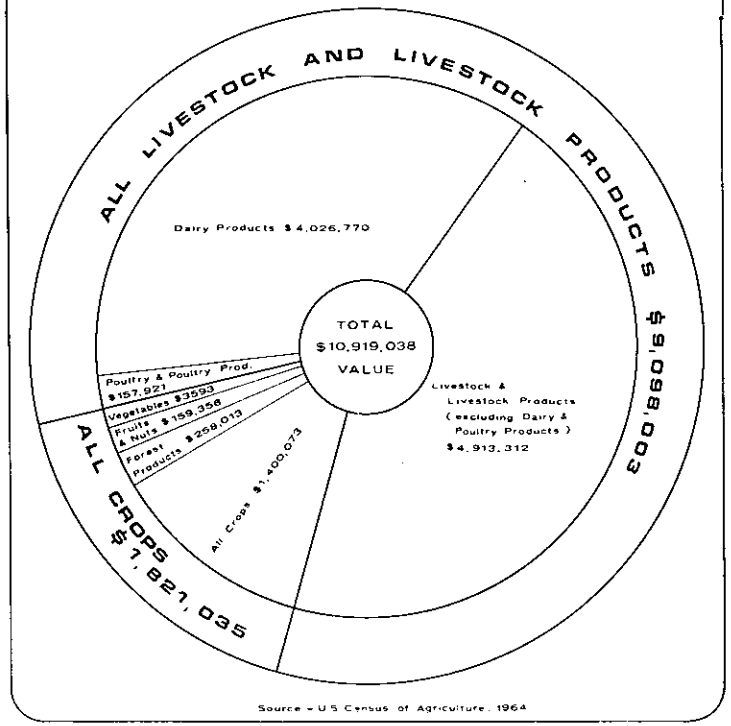


TABLE 8.....1964 Value of Farm Products Sold.....
.....Loudoun County.....Virginia.....



Source - U.S. Census of Agriculture, 1964

COMMERCE

The primary county shopping facilities are located in the incorporated towns and Sterling Park. Although these areas are relatively small at present, their expansion is evident in the growth of the dollar volume of retail sales; the U. S. Census of Retail Trade shows an increase of 31.7% to $29,908,000. between 1958 to 1963. Sales Management magazine reports a total dollar volume of retail trade of $38,949,000. in 1967. Food stores accounted for approximately 24% of this total (See Table 10).

TABLE 9 – ESTIMATED WORK FORCE COMPONENTS

Selected Years

	1950	1960		1966		1967
	MARCH	MARCH	SEPTEMBER	MARCH	SEPTEMBER	MARCH
Total Work Force	6,694	7,870	8,847	10,643	10,893	11,058
Total Employment	6,547	7,480	8,637	10,273	10,647	10,738
Total Nonagricultural	3,663	5,150	5,845	8,505	8,823	9,044
Manufacturing	174	204	203	259	278	294
Nonmanufacturing	2,443	3,037	3,492	5,428	5,706	5,997
Contract Construction	206	338	726	511	487	518
Wholesale & Retail Trade	601	765	795	1,159	1,227	1,215
Transportation & Public Utilities	284	348	359	566	587	597
Finance, Insurance & Real Estate	93	142	148	216	246	280
Service	447	627	645	1,102	1,290	1,375
Government	726	706	705	1,733	1,712	1,854
Other Nonmanufacturing	86	111	114	141	157	158
All Other Nonagricultural	1,046	1,909	2,150	2,818	2,839	2,753
Agricultural	2,884	2,330	2,792	1,768	1,824	1,694
Unemployment	147	390	210	370	246	320
Per Cent of Work Force	2.2	5.0	2.4	3.5	2.3	2.9

SOURCE: Virginia Employment Commission

TABLE 10 – RETAIL SALES ESTIMATES - 1967

	TOTAL RETAIL SALES	% OF U.S.A.	FOOD ($000)	MDSE. ($000)	FURNITURE HOUSE. APPL. ($000)	AUTO ($000)	DRUG ($000)	BUYING POWER
Loudoun	38,949	.0125	9,381	1,761	440	6,830	2,272	.0136
Prince William	100,451	.0323	23,428	6,882	4,889	25,857	5,580	.0367
Fauquier	37,074	.0119	8,325	4,462	1,307	5,496	1,679	.0108
Fairfax	571,870	.1836	170,518	78,789	23,793	97,430	34,111	.2378

SOURCE: Sales Management Magazine - Survey of Buying Power, June, 1968.

INDUSTRY

Loudoun contains primarily non-manufacturing industries such as agriculture and related products. New industries are being actively sought in order to expand the county's economic base and to provide jobs for the area's population. Loudoun will be a likely target for industrial development in the future as the size of the potential labor force rises. The Dulles International Airport facility and the improved transportation corridors will contribute to the creation of a desirable industrial environment: the favorable existing tax structure will be presented in detail in the following section.

The county's present primary non-agricultural industries, along with their functions and approximate employment, are shown below on Table 11.

TABLE 11 – MAJOR INDUSTRIES IN LOUDOUN COUNTY

NAME	PRODUCT OR FUNCTION	APPROXIMATE EMPLOYMENT MARCH 1, 1968
Arlington Stone Company	Crushed Stone	25
Automation Industry Incorporated	Aero-Space Components	25
Barber and Ross	Pre-fab Homes	175
Chantilly Crushed Stone Company	Crushed Stone	50
J. Lynn Cornwell, Incorporated	Meat Processing	70
DECO Communications Laboratory	Electronics	230
Hamilton Milling	Feed	25
Hill High Food Products, Incorporated	Orchards and Food Processing	45*
Tri-County Asphalt, Incorporated	Road Builders	50
Virginia Trap Rock Company, Incorporated	Crushed Stone	20

*Seasonal High 150

SOURCE: LOUDOUN COUNTY, VIRGINIA : An Economic Study, Virginia Electric and Power Company, May 1968

COMPARATIVE TAX ANALYSIS

The following graph presents the comparative tax advantages of each of the communities in the Washington Metropolitan area. For purposes of illustration, a hypothetical corporation has been created; the taxes computed apply only to the values stated in the illustration. Appendix III records the actual statistics for each jurisdiction.

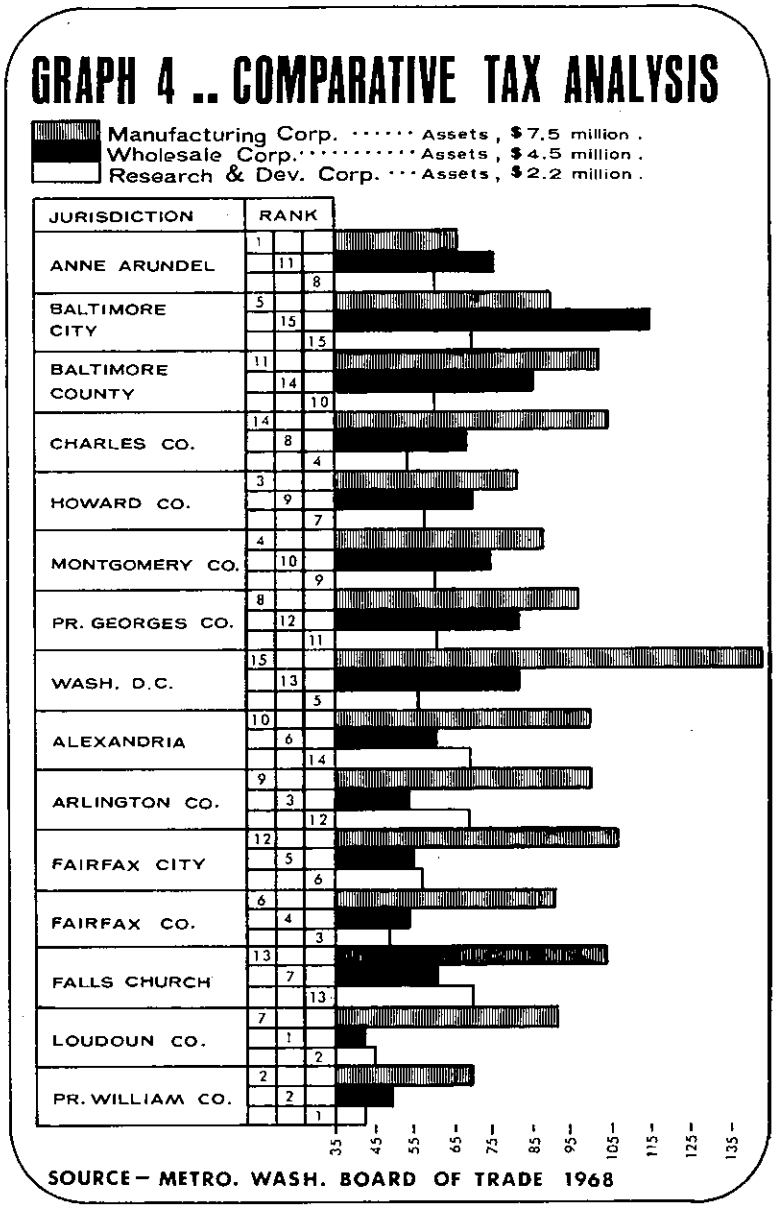
Loudoun County appears to have an attractive tax position relative to the surrounding jurisdictions. Although taxes are not generally the primary factor in the determination of a suitable industrial site, they are an important consideration and will contribute to the industrial desirability of the county.

TRANSPORTATION

In order to be most efficient, the area's transportation system must serve the two principal functions of movement and access. High speed arteries which by-pass densely populated and commercial areas facilitate the movement of traffic; smaller local roads promote access and penetration into land masses devoted to residential, commercial, industrial, recreational, and agricultural uses. Although the two functions of movement and access often overlap, the development of an efficient circulation pattern must be based on recognition of the fundamental difference in the demands which will be made on the primary and secondary road systems serving Loudoun County.

TRAFFIC FLOW

The existing system of traffic flow is presented on PLATE 5 along with the design capacity standards formulated by the Virginia Department of Highways. The flow and capacity figures



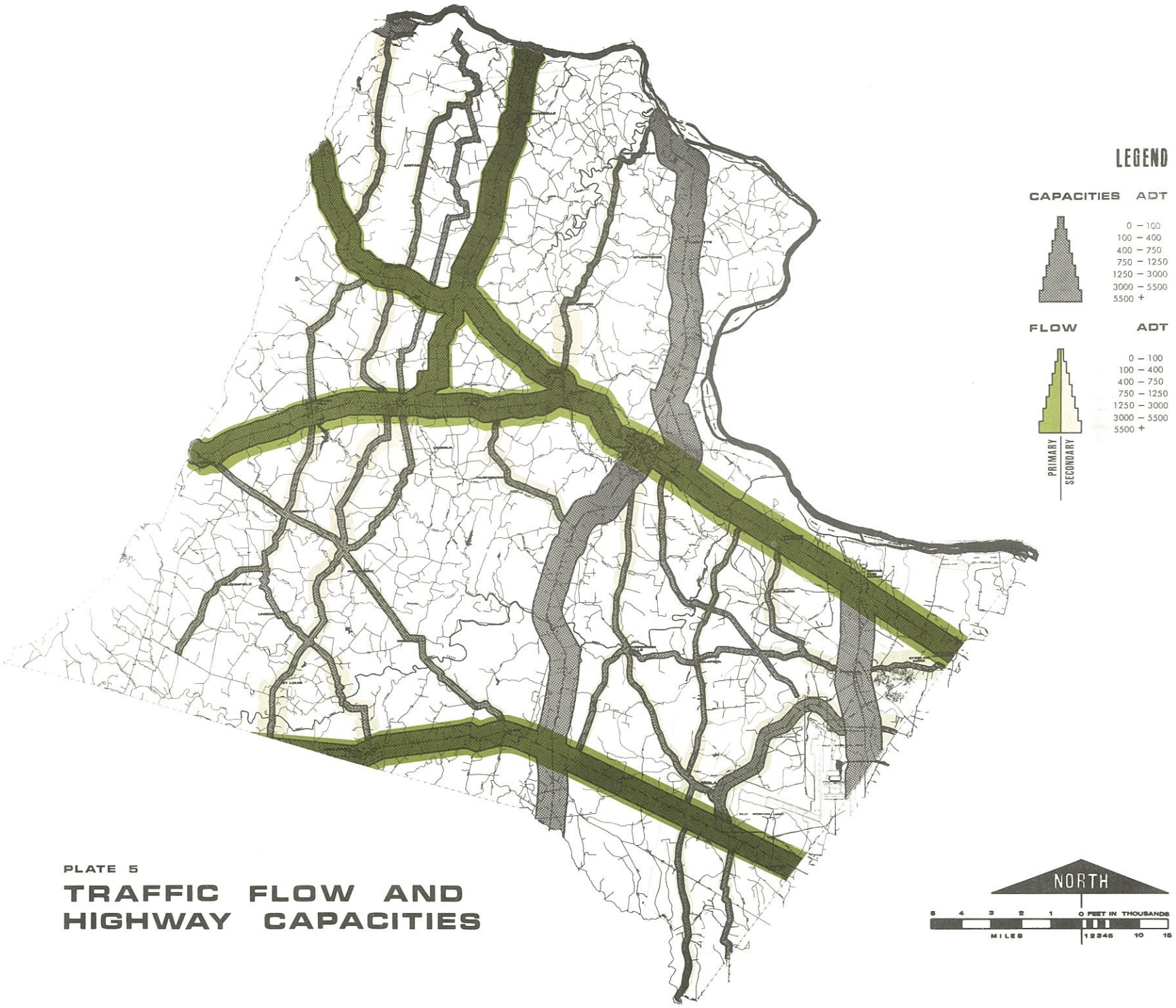
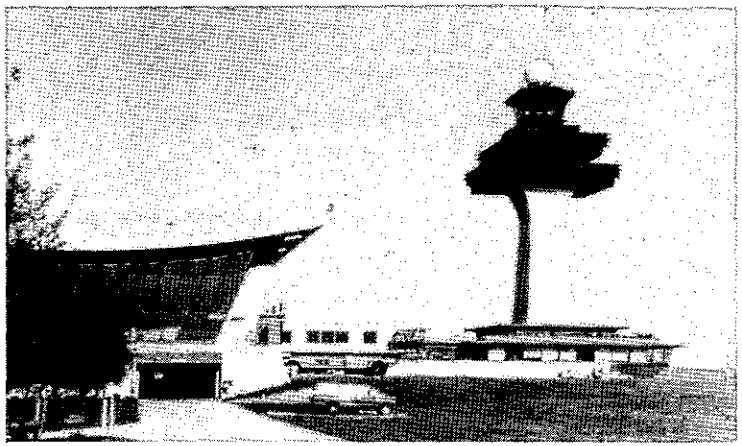


PLATE 5

TRAFFIC FLOW AND HIGHWAY CAPACITIES



are shown as continuous through the incorporated towns although this data may not be applicable. The actual traffic counts for the primary roads per 24 hour period are listed in Appendix IV of this report. The design capacity of each road is determined primarily by the type of surfacing and the width of pavement, although there are other factors such as terrain, the degree of curvature, etc., which may have an affect on road capacity. As PLATE 5 points out, most of the primary and major secondary roads serving Loudoun County are being utilized at or above design capacity. This is probably the result of scattered parcel by parcel development with little or no coordination or advance planning being given to the system of traffic flow. As the population continues to grow at an increasing rate, the fundamental problems of circulation and over-capacity usage of the road system will become increasingly critical.

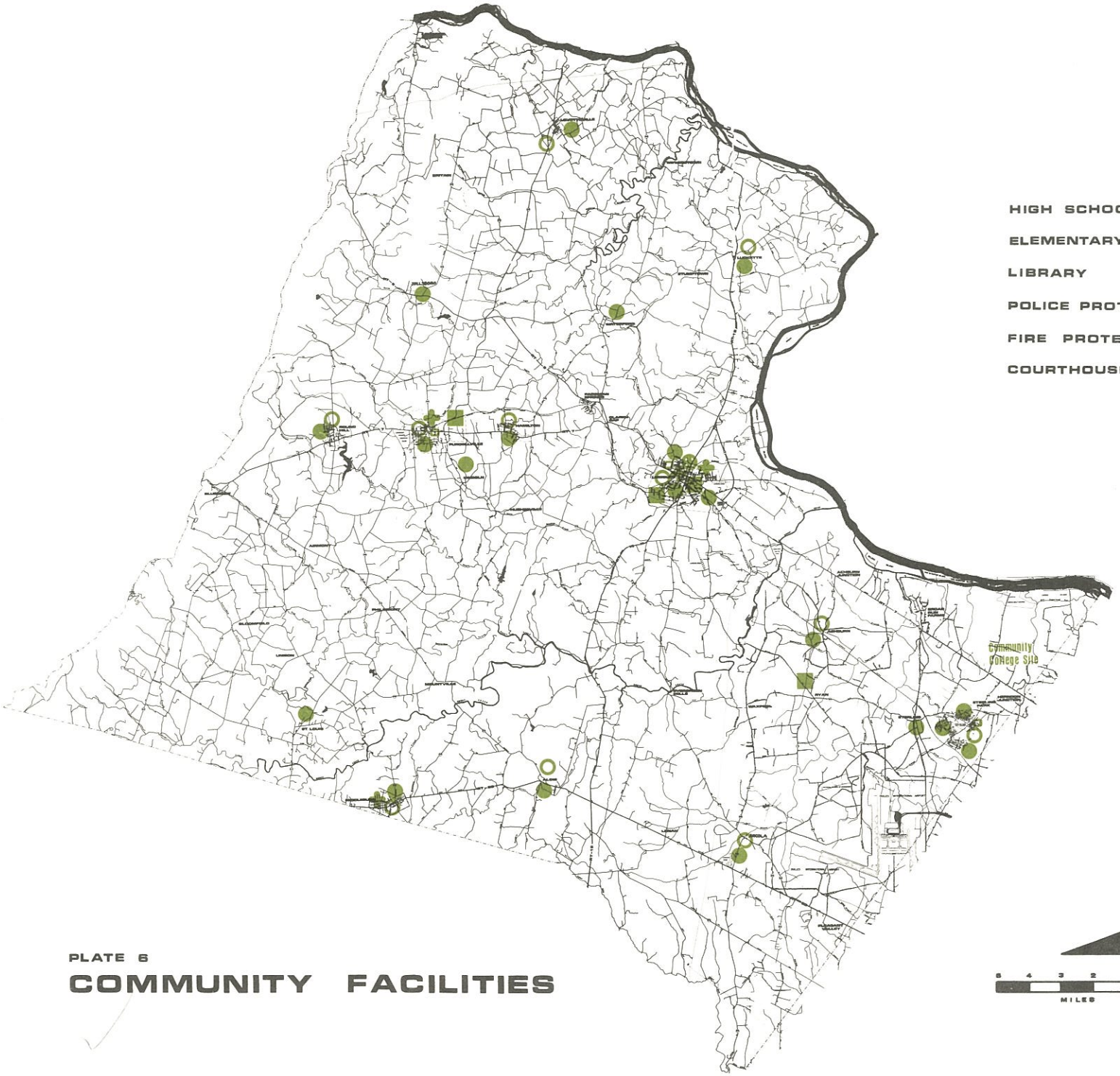
The map clearly shows the need for improved future road connections between Route 7 and Route 50. These two arteries are the county's primary means of ingress and egress, and provide access to the vast employment centers of the Washington Metropolitan area. Both Route 50 and Route 7 presently experience a 24 hour traffic volume considerably above their design capacity. As the county's population continues to grow, the need for planning the patterns of traffic flow will become increasingly obvious. Much of the county's projected growth will occur in planned communities or large subdivisions; this provides the county with an opportunity to coordinate new development with the expansion of the county's highway system. The updating and strengthening of the road provisions in the Subdivision Ordinance and the planned community section of the Zoning Ordinance are vital elements in the achievement of this coordination.

AIR

Loudoun County houses one of the most modern airport facilities in the country. The location of Dulles International Airport will have a profound impact on the future growth of the county. It is an industrial and commercial magnet which will serve to draw development interests toward Loudoun County. As the airport provides expanded passenger and freight service, its importance as a major regional transportation facility will become increasingly obvious.

COMMUNITY FACILITIES

The caliber of the services provided by any community for the benefit of its residents plays a large part in determining the standard of the area's living environment. Therefore, much consideration should be given to the adequacy of existing services, and future needs must be carefully projected in order to ensure the provision of superior community facilities. PLATE 6 shows the locations of the public facilities serving the citizens of Loudoun County.



LEGEND

- HIGH SCHOOL
- ELEMENTARY SCHOOL
- LIBRARY
- POLICE PROTECTION
- FIRE PROTECTION
- COURTHOUSE

NORTH

6 4 3 2 1 0 FEET IN THOUSANDS

MILES 1 2 3 4 5 10 15

PLATE 6

COMMUNITY FACILITIES

EDUCATIONAL FACILITIES

Schools probably receive more attention and interest from the general public than any of the other facilities provided by the community. In a developing area, the provision of adequate educational facilities poses a difficult problem. The rapid influx of new residents means that the demand for public schools will increase dramatically in a short time. It is advisable that school demands be accurately forecasted so that sufficient sites for new construction may be selected in advance of actual need.

At present, Loudoun County contains 19 elementary and three high schools. Information relating to the capacity and enrollment of each is recorded on Table 12. Although the figures do not reveal serious overcrowding conditions at present, several of the school buildings are so obsolete and antiquated as to interfere with the conduct of a modern educational program. Many of the school sites are not large enough to allow adequate expansion of the buildings, thus making extensive renovation infeasible. Therefore, it is of the utmost importance that the construction and staffing of new facilities to replace these inadequate buildings be planned with sufficient foresight to ensure that a high standard of education will be provided for the young people of Loudoun County.

RECREATION

Loudoun County, being primarily rural in character, has not in the past felt the need for developed public recreational space. As the population density rises, however, the need for community recreation and open space will experience a sharp increase. At the present time, the only county recreation facilities are located on various school sites. Many of these sites have inadequate area to provide properly developed playgrounds and ballfields. Sterling Park provides recreational facilities, including an 18 hole golf course, for the use of the residents. The volunteer firemen of Leesburg and Purcellville provide recreation fields for their respective municipalities, and Middleburg provides a community center.

Numerous private recreational facilities serving a limited portion of the area's population are available in Loudoun County. In addition, Loudoun contains several thousand acres of land devoted to the preservation and public enjoyment of historic landmarks.

TABLE 12 – SCHOOLS IN LOUDOUN COUNTY

NAME	ENROLLMENT	CAPACITY	ACRES	YEAR CONSTRUCTED
ELEMENTARY SCHOOLS:				
Aldie Elementary	245	210	6	1928, '52, '65
Arcola Elementary	295	270	11	1939, '51, '56
Ashburn Elementary	235	270	23	1945, '58
Banneker Elementary	302	360	19	1947, '58, '62
Catoctin Elementary	391	600	17	1966
Douglas Elementary	232	360	10	1958
Emerick Elementary	383	360	11	1967
Guilford Elementary	522	600	14	1966
Hamilton Elementary	256	240	11	1952, '64
Hillsboro Elementary	172	210	7	1966
Leesburg Elementary	337	520	10	1925, '41, '62
Lincoln Elementary	224	210	10	1926, '41
Lovettsville Elementary	327	300	6	1927, '37, '62
Lucketts Elementary	124	150	5	1912, '24, '29
Middleburg Elementary	235	210	4	1911, '24, '60
Round Hill Elementary	327	360	8	1930, '63, '68
Sterling Elementary	762	600	15	1964
Sully Elementary	432	600	15	1968
Waterford Elementary	167	210	10	1965
HIGH SCHOOLS:				
Broad Run High*	429	1,000	40	1969
Loudoun County High	1,329	1,200	31	1954, '66
Loudoun Valley High	1,127	1,000	36	1962

*Not Completed
SOURCE: Loudoun County School Board

POLICE PROTECTION

Police protection for Loudoun County is provided by the county Sheriff's Office, which has headquarters in Leesburg. The staff of this office consists of the Sheriff and twenty deputies. Eight state troopers are assigned to Loudoun County. The Sheriff's headquarters contain detention facilities, and 24 hour patrol service is provided by the deputies on rotating shifts. The incorporated towns of Leesburg, Purcellville, Round Hill and Middleburg each provide municipal police protection within the territory of its jurisdiction.

FIRE PROTECTION

Loudoun County is served by twelve fire companies manned by approximately 450 volunteers. The stations are coordinated by the County Fire Control Board; Table 13 records the types of equipment housed at each location. Each of these stations provides 24 hour protection with modern equipment to serve the county's residents.

LIBRARY

At the present time, Loudoun County contains two public libraries. The Thomas Balch Library in Leesburg contains approximately 13,000 volumes and has an average monthly circulation of 1,485. The Purcellville public library offers 31,571 volumes, with a monthly circulation of approximately 9,600. These facilities are supplemented by the libraries in the public school system.

EXISTING LAND USE

Understanding the pattern of existing land use is an important fore-runner to sound planning in any area. The picture presented by the existing scheme of development is an aid to both public and private agencies in determining the need for various service facilities as well as pointing the direction in which development is moving. The data recorded on PLATE 7 and statistically summarized on Table 13 was collected through a field survey by the Loudoun County Planning Department in the spring of 1968. The availability of this information makes it possible for future planning to be based on a solid statistical foundation.

TABLE 13 – FIRE PROTECTION FACILITIES*

	TANKER	PUMPER	BRUSH TRUCK	LADDER TRUCK	UTILITY	AMBULANCE
Leesburg	1	3	1	1	0	0
Purcellville	0	2	0	0	1	0
Middleburg	0	3	0	0	0	1
Round Hill	0	2	0	0	0	1
Hamilton	0	2	0	0	0	0
Ashburn	0	2	1	0	0	0
Aldie	1	2	0	0	0	0
Philomont	1	1	0	0	0	0
Arcola	1	1	1	0	0	1
Lucketts	1	1	0	0	0	0
St. Park	1	3	1	0	1	0
Lovettsville	0	2	0	0	0	2

* Two independent rescue squads: Loudoun County Rescue and Sterling Park Rescue.

RESIDENTIAL

Residential usage comprises the largest percentage of developed land in Loudoun County, accounting for slightly more than 51%

of the total developed acreage. Within this category single family units predominate, accounting for 16,497 acres or 50.42%. The Broad Run Magisterial District contains almost 30% of the total residential development, and the Leesburg and Broad Run Districts together account for almost 44%. The rate of growth as reflected in the number of location permits issued reveals that this percentage will increase substantially in the immediate future. This clearly points out the obvious trend toward growing suburban development in those eastern sections of the county which have access to the major regional transportation corridors, while the western section of the county remains in its relatively rural state, experiencing a limited amount of growth and development. This trend will be emphasized by the widening and improvements planned for Routes 7 and 50.

At the present time, multi-family development accounts for only an insignificant percentage of the developed land. However, a strong trend is developing toward this category of residential use in the Washington Metropolitan Area because of the rapidly rising demand for relatively low cost housing units.

PUBLIC AND QUASI-PUBLIC

The public acreage (438 acres) noted on Table 14 refers to all municipal and county uses such as schools, municipal parking, county and town owned water and sewer systems, libraries, protection facilities, etc. Quasi-public usage includes churches, private recreation areas, private schools, etc. The state highway system accounts for approximately 3,984 acres or almost 12.2% of the developed land in the county.

COMMERCIAL

Loudoun County is relatively free of commercial development. PLATE 7 indicates that the bulk of concentrated commercial activity is located in the towns, with only scattered development in the rural areas. This situation is due partly to the lack of need for excessive commercial services in the county. The efforts of the Board of Supervisors in restricting commercial development from arterial highways have also been instrumental in keeping these corridors free of the strip commercial activity that plagues other jurisdictions.

TABLE 14 – EXISTING LAND USE

	ACREAGE	% OF TOTAL	% OF DEV. LAND
RESIDENTIAL			
Single Family	16,497	4.99%	50.42%
Multi - Family	130	.04%	.39%
Mobile Home	305	.09%	.93%
Subtotal	16,932	5.12%	51.74%
PUBLIC AND QUASI - PUBLIC			
Public	438	13%	1.34%
State Highway System	3,984	1.20%	12.18%
Quasi - Public	8,127	2.46%	24.84%
Utility Easements	1,964	.59%	6.00%
Subtotal	14,513	4.38%	44.36%
COMMERCIAL	487	.15%	1.48%
INDUSTRIAL	790	.24%	2.42%
TOTAL	32,722	9.89%	100.00%

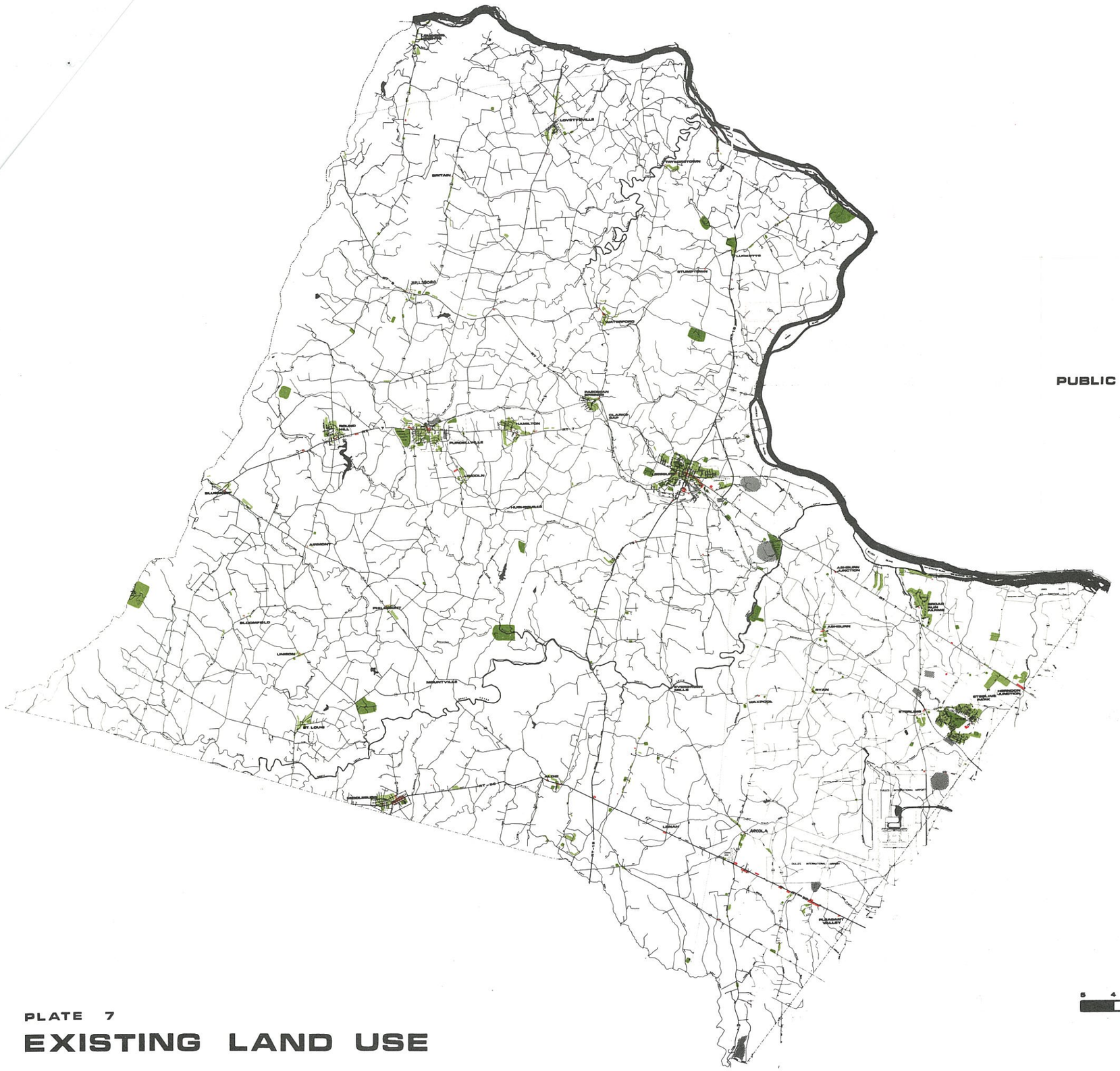


PLATE 7

EXISTING LAND USE

This page left blank intentionally.

INDUSTRIAL

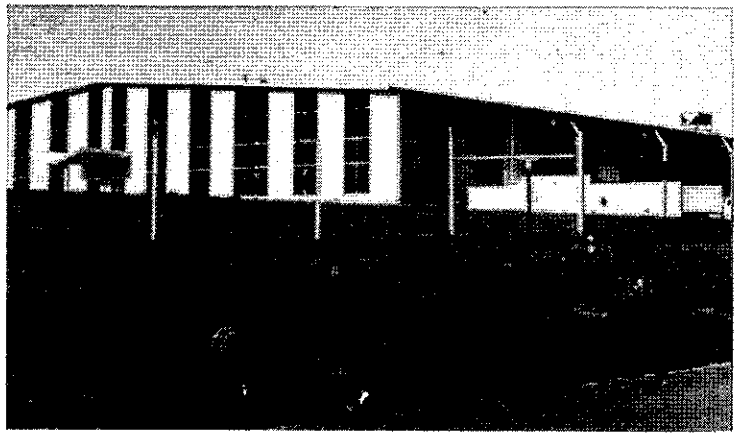
Industrial development accounts for approximately 790 acres or 2.4% of the total developed land. The vast majority of this land is located in the Broad Run and Leesburg Magisterial Districts. The acreage figure may be somewhat distorted by the presence of several quarry operations which are relatively large industrial space consumers, thus exaggerating the importance of industry in the county.

Although industry does not presently play a significant roll in the county's economy, the presence of the Dulles International Airport facility and the growing labor force will result in an increasing industrial interest in the Loudoun area. This interest is already making itself evident; the location of D E C O and the F A A facility as well as the land acquisition by I B M all reflect Loudoun County's attractiveness to technical and research and development industries.

EXISTING ZONING

The purpose of advanced planning is to draw up an orderly and compatible pattern of land use; zoning provides the legal means of implementing such a scheme. Land left uncontrolled often develops undesirable functions which result in the destruction of land values, disintegration of the visual continuity, and general disorientation of the systematic arrangement of land uses. Thus zoning aims primarily at insuring that the well balanced pattern of land use relationships envisioned by the development plan may be realized.

Zoning patterns in the unincorporated areas of Loudoun County are established by the governing body. PLATE 8 and Table 15 present a graphic and statistical picture of the county's existing zoning. A comparison of this map to PLATE 7, *Existing Land Use*, reveals that much of the land zoned residential, commercial, and industrial is not used as intensively as the respective zone permits. It is important to recognize that overzoning, particularly in the commercial or industrial zones, may result in a diffusion of facilities over large areas rather than the concentration of these facilities into nodes of more efficient activity. PLATE 8 also points out that much of the existing zoning is inappropriately located. This problem is obvious in the extensive residential zoning in close proximity to Dulles Airport. Growing utilization of this facility and the introduction of larger jet aircraft will result in an increasingly undesirable residential environment.



The zones provided by the present ordinance are grossly inadequate to deal with the myriad uses associated with the developing community. Additional zones are required to provide the governing body with sufficient control over developing areas to ensure that the highest and best use is made of each parcel of land. A general revision of the zoning and subdivision ordinances has begun and will be completed in the near future.

TABLE 15 – EXISTING ZONING

ZONE		ACREAGE	% OF TOTAL
A-1	Agricultural, Restricted	167,614	50.68
A-2	Agricultural	109,205	33.00
R-1	Residential	4,455	1.35
R-2	Residential-Agricultural	39,085	11.81
R-17.5	Residential	558	.17
PC	Planned Community	3,129	.94
C-1	Commercial	1,425	.43
I-P	Industrial Park	1,863	.56
I-R	Industrial Restricted	2,797	.84
I-1	Industrial	749	.22
	TOTAL	330,880	100.0%

PROPENSITY TO DEVELOP

One of the most important considerations in the drafting of any plan must be the goals of the land owners. Although individual desires must not be the only consideration in determining the future status of property, the wishes of the land owners must receive close attention; to ignore the personal goals of the property owners will lead to the development of a plan that cannot be implemented.

The development propensity investigation is a generalized documentation of the status of land in Loudoun County. The five categories range from land held for active speculation to land devoted to large farms. It is important to stress that PLATE 9 presents only a generalized picture; each parcel is considered in the context of the trend established by the surrounding parcels.

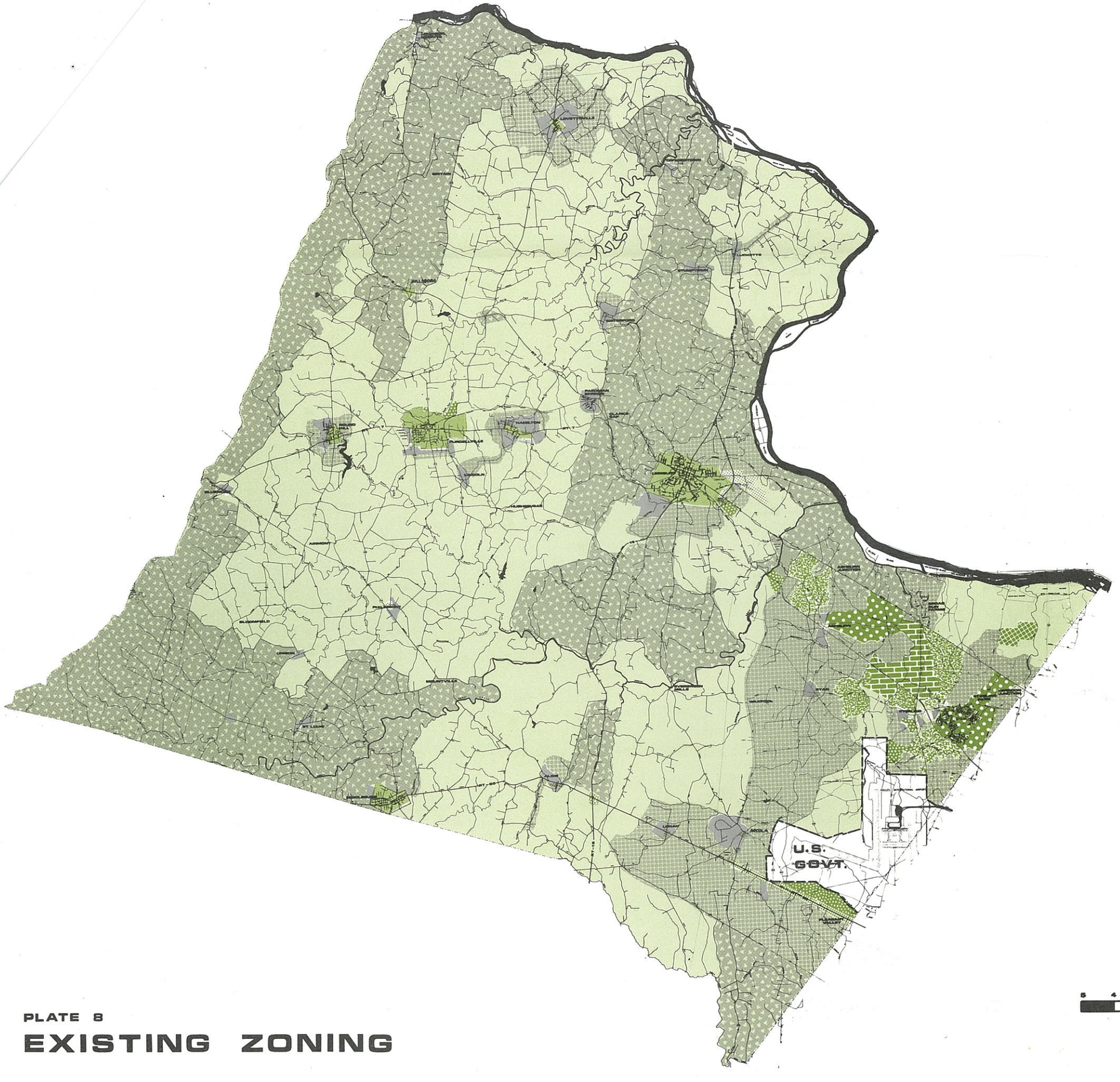
The area designated as #1 on PLATE 9 covers 25.7% of the county and includes over 90% of the total county population. This property is generally developed or held in speculation; the land owners in these areas generally favor development because of its economic implications.

The area designated as category #2 presently accounts for 23.2% of the county's total acreage. The area includes large lot home sites and small farms. The growing affluence of the region's population and the county's improved accessability to the Washington employment centers will probably cause an expansion of this category.

Medium-sized farms, making up 31% of the county, are becoming less economically feasible. These farms (category #3) will have a long range tendency to be subdivided and put to a more intensive use.

Large farms, category #4, account for 20.1% of the total county acreage. This land area will probably continue to be actively farmed for many years in the future with little chance for more intensive utilization.

Based on this analysis of the status of the county, it becomes obvious that the majority of the property owners in Loudoun are in favor of more intensive development of the county than presently exists.



LEGEND

- A-1
- A-2
- R-1
- R-2
- INC. TOWN
- R-17,5
- P-C
- C-1
- I-1
- I-R
- I-P

NORTH

6 5 4 3 2 1 0 FEET IN THOUSANDS

MILES 1 2 3 4 5 10 15

PLATE 8

EXISTING ZONING

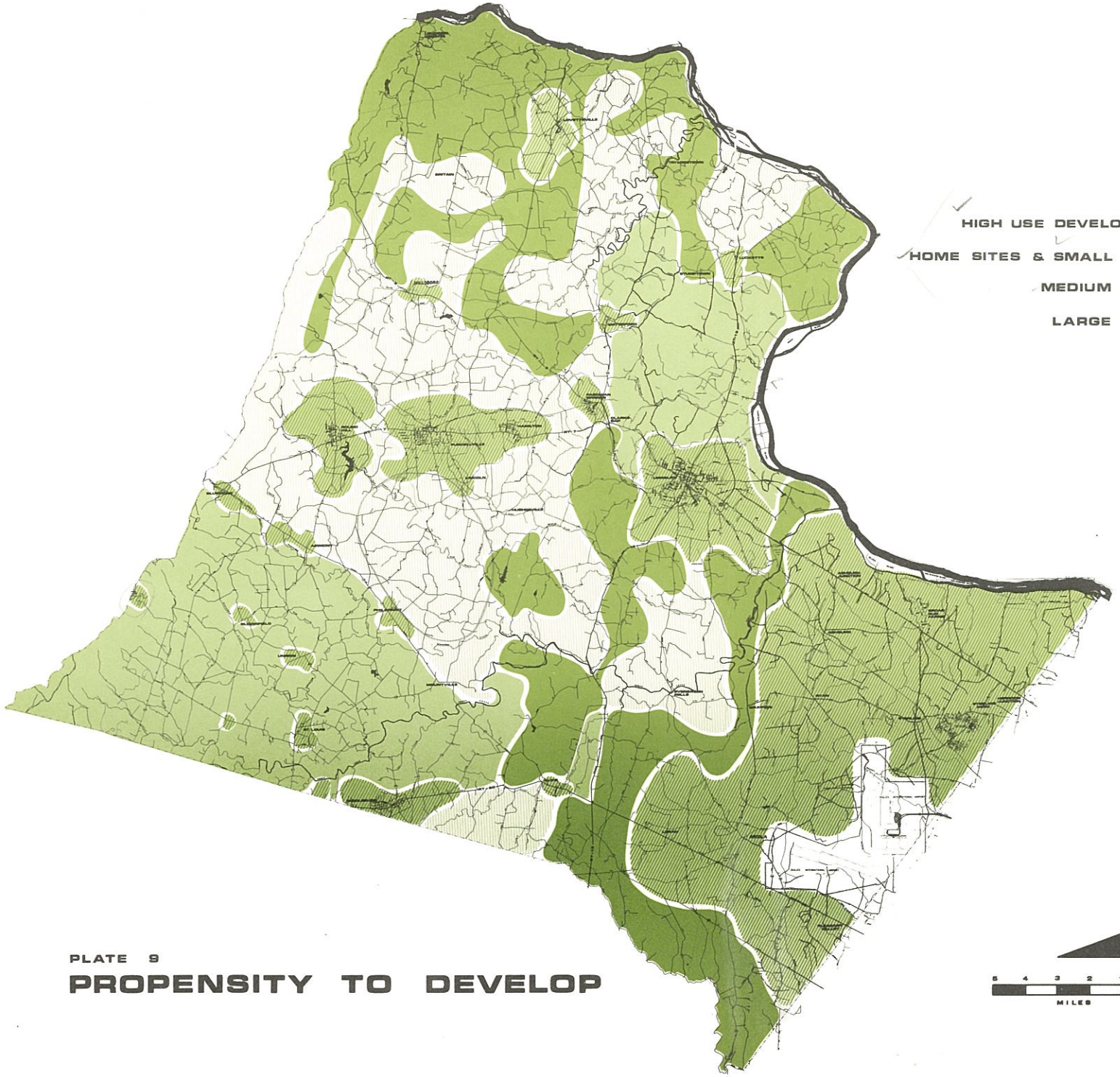


PLATE 9

PROPENSITY TO DEVELOP

This page left blank intentionally.

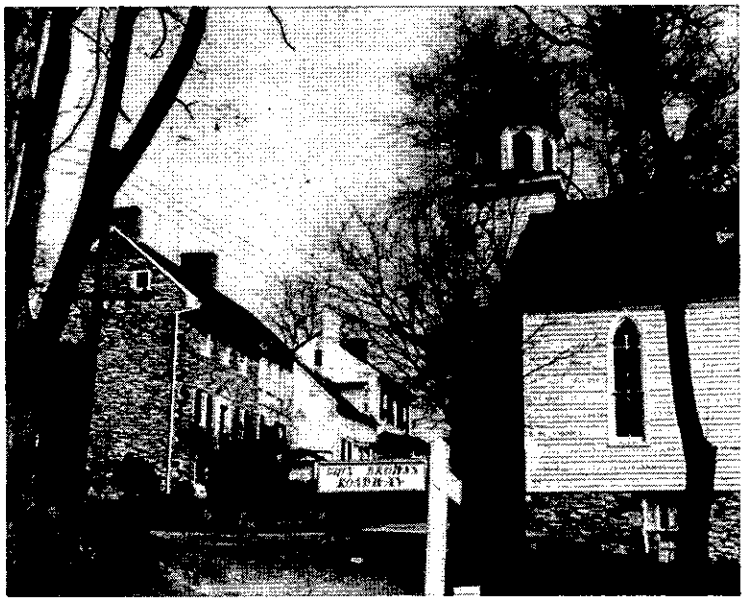
VISUAL IMAGE

The visual image refers to that quality of an area which transmits to the observer a sense of orientation. When the image is clear, it enables even one unfamiliar with the area to orient himself and to recognize the basic social and structural fiber of the area. Visual features may be classified and analyzed; land uses are recognizable as separate districts or nodes with definite boundaries. Highways, railroads, and pedestrian areas should be distinguishable, and may either form boundaries of districts or pass through these districts.

The total visual image projected by Loudoun County is one of exceptional scenic beauty and an almost unspoiled rural environment, augmented by the abundant evidences of the early cultural and historic heritage of the region. Thanks to effective efforts, various significant residences and grounds of prominent historic interest have been privately restored. Throughout most of the county the observer is presented with a pleasing view of rolling hills, valleys, woodland and farms interspersed with small and often scenic communities. These towns project a nineteenth century image while performing twentieth century functions.

The secondary roads in the western section of the county provide a panoramic view of natural beauty and buildings of historic and architectural significance. The three mountain ranges, innumerable streams, and the Potomac River are aesthetic assets which cannot be valued in economic terms, and contribute heavily to the county's physical beauty. Only a lack of urban oriented development combined with the active concern of the county residents makes such a visual environment possible.

The primary and secondary roads providing access to the county from the east project a somewhat different image. The effects of active land speculation are beginning to become obvious. Both Routes and 7 and 50 leading into Loudoun County from Fairfax County display increasingly less concern for visual and environmental control. As farming has become economically infeasible, the land has often been allowed to grow up in undesirable scrub, and fences have been left in disrepair. The beginning of the projected growth of the county is rather dramatically visible from Route 7 at Sterling Park. One of the challenges the county faces is the assimilation of this type of new development into the environment while maintaining the assets of the existing visual image.



AGRICULTURE

Before entering into a discussion of the present agricultural situation in Loudoun, it may be interesting to review a report published by the Northern Virginia Regional Planning Commission in 1959. The report, prepared by Howard A. Clonts, Jr. and W. L. Gibson, Jr. of Virginia Polytechnic Institute, is summarized in part by the following quotations taken from the text. In this statement, Area I refers to the area east of Route 15 and Area II is west of Route 15.

> *Results of the analysis indicated that only one major farm enterprise considered was competitive with urban uses of land. Grade A dairies were found to be profitable, and capitalized land values varied directly with the number of cows on the farm. Land values in Area I were found to be $307 per acre for dairy farms with 60 cows in milk, and $638 for farms with 90 cows.*
>
> *Exclusion of the dairy enterprise as an alternative resulted in negative returns to land in Areas I and II of $9,680 and $5,450, respectively, for livestock enterprises consisting of market hogs and sheep. An alternative program was run in Area II which would allow only beef herds on the farm. However, beef herds never proved to be profitable under the assumptions employed, and negative returns of land of $6,579 were incurred.*
>
> *In general, land values in the Northern Virginia Region which can be sustained by farming were found to be lower than values sustained by urban uses. Urbanization pressures have raised land values and real estate taxes. Without alternative ownership patterns, and rent and tax consideration farming cannot compete for the land in Area I or II, although Area II is somewhat more conducive to farming, and effects of urbanization are relatively light at present.**

It is obvious that farm conditions have not shown an economic improvement since 1959. Although this situation is well understood by the area's farmers, it is important that all residents of the county be made aware of the problem.

Table 16 points out that Loudoun County has risen in rank in some fields of agriculture relative to other Virginia counties. Since this increase in rank was accompanied by an actual decrease in the production of hogs, dairy cows, corn and sheep, and with only slight increases in other categories, (see Appendix V), this change in relative standing must be primarily due to more radical changes throughout the State.

TABLE 16 – FARM PRODUCTION IN LOUDOUN AS COMPARED TO OTHER VIRGINIA COUNTIES

	1900	1964	1965	1966	1967
Hogs	6th	15th	14th	13th	
Dairy Cows	5th	3rd	3rd	3rd	4th
Corn	3rd	3rd	3rd	2nd	2nd
Wheat	3rd	4th	2nd	2nd	2nd
All Hay			5th	3rd	3rd
All Cattle		4th	4th	3rd	3rd
Sheep	2nd	17th	17th	15th	15th

SOURCE: Loudoun County Extension Service

Table 17 reveals a somewhat encouraging trend. The number of farms containing more than 500 acres has increased since 1950. If this increased acreage is actually devoted to farm use rather than speculation, farming may be able to compete with urban uses.

TABLE 17 – FARMS BY SIZE

	1950	1954	1959	1964
Under 10 acres	235	210	41	33
10 - 49 acres	304	299	166	152
50 - 69 acres	91	81	44	149
70 - 99 acres	121	98	71	49
100 - 139 acres	170	133	95	67
140 - 179 acres	128	115	74	56
180 - 219 acres	108	78	73	61
220 - 259 acres	78	60	52	49
260 - 499 acres	256	236	187	149
500 - 999 acres	97	104	116	117
1000 or more acres	21	24	28	36
2000 - up				

1954 Places less than 10 acres counted as farms if the estimated sales of agricultural products for one year amounted to at least $1,250. Places of 10 or more acres counted if estimated sales of agricultural products amounted to $50.

SOURCE: Loudoun County Extension Service


ANTICIPATED POPULATION

BROWN HOUSE

The original log section of this home was built by Richard Brown in 1735. Brown, a Quaker, had migrated from Bucks County, Pennsylvania during William Penn's time. Although the stone section of the house does not have a marked date of construction, it is generally believed to have been added between 1740 – 1750. The brick section is dated 1790. The home, located near Lincoln, has been continuously occupied by the descendants of Richard Brown since its original construction.

POPULATION PROJECTION AND DISTRIBUTION

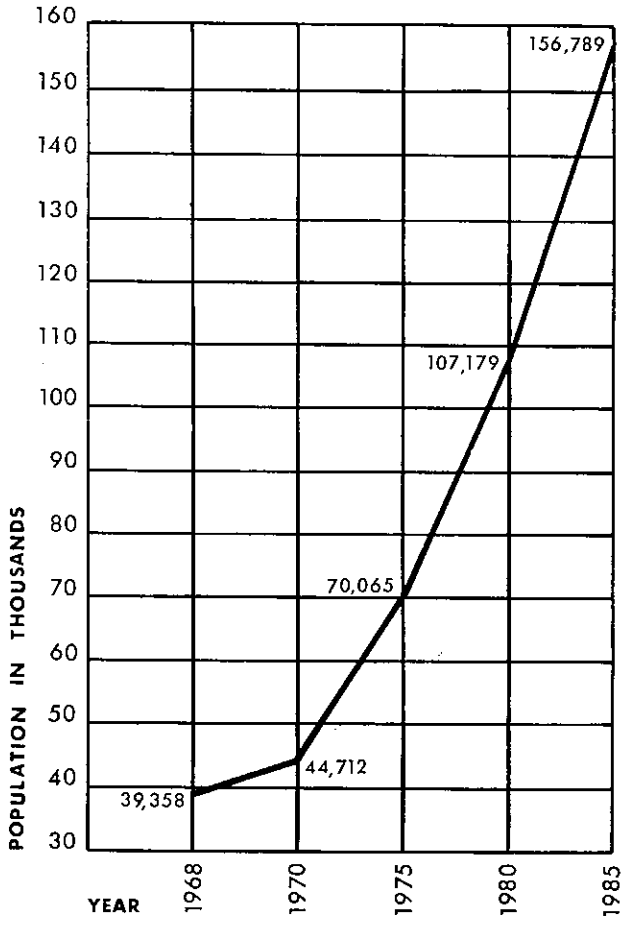
The ultimate goal of planning is to provide a pleasing environment in which to live. If this goal is to be achieved, the planning agencies must have accurate knowledge of the size, distribution, and characteristics of the population. Although it is relatively easy to determine the make-up of the existing population, it is extremely difficult to predict future demographic characteristics. Projections of population size are, at best, only an educated guess. The further into the future the projection is made, the greater is the chance of error. However, in order to provide a basic guide for the development plan, certain projections must be made.

The population information discussed earlier provides the necessary data for the computation of a simple mathematical projection through 1975, the results of which are shown on Table 18. Due to the stage of Loudoun's development, trend figures drawn from past growth should not be considered valid

TABLE 18 – MATHEMATICAL POPULATION PROJECTION 1968 – 1975

YEAR	TOTAL
1968	39,358
1969	42,230
1970	45,357
1971	48,728
1972	52,346
1973	56,208
1974	60,312
1975	64,671

GRAPH 5.....POPULATION PROJECTION 1968–1985



SOURCE – LOUDOUN COUNTY PLANNING DEPT.

TABLE 19 ..... POPULATION PROJECTION ..... 1968 — 1985 .....

YEAR	MAGISTERIAL DISTR'CT															TOTAL
	BROAD RUN			LEESBURG			MT. GILEAD & JEFF. *			MERCER			LOVETTSVILLE			
	Migration	Natural Increase	Population	Migration	Natural Increase	Population	Migration	Natural Increase	Population	Migration	Natural Increase	Population	Migration	Natural Increase	Population	
1968	–	–	12,675	–	–	8,991	–	–	10,255	–	–	4,607	–	–	2,830	39,358 *
1970	3,154	189	16,018	562	113	9,666	737	130	11,122	228	57	4,892	146	36	3,014	44,712
1975	15,888	833	32,739	4,449	338	14,453	2,234	296	13,652	703	121	5,716	418	73	3,505	70,065
1980	24,000	2,057	58,796	5,300	615	20,368	2,928	416	17,046	952	181	6,849	508	107	4,120	107,179
1985	32,000	3,923	94,719	6,400	981	27,754	3,500	677	21,223	1,160	251	8,260	572	141	4,833	156,789

* THIS FIGURE ROUNDED TO 39,400 FOR PROJECTION

SOURCE – LOUDOUN COUNTY PLANNING DEPT.

* MT GILEAD AND JEFFERSON DISTRICTS CAN NOT ACCURATELY BE SEPARATED

H, G, & Siler

41,845

51,406

62,846

72,309

1990 96,076

1995 127,914

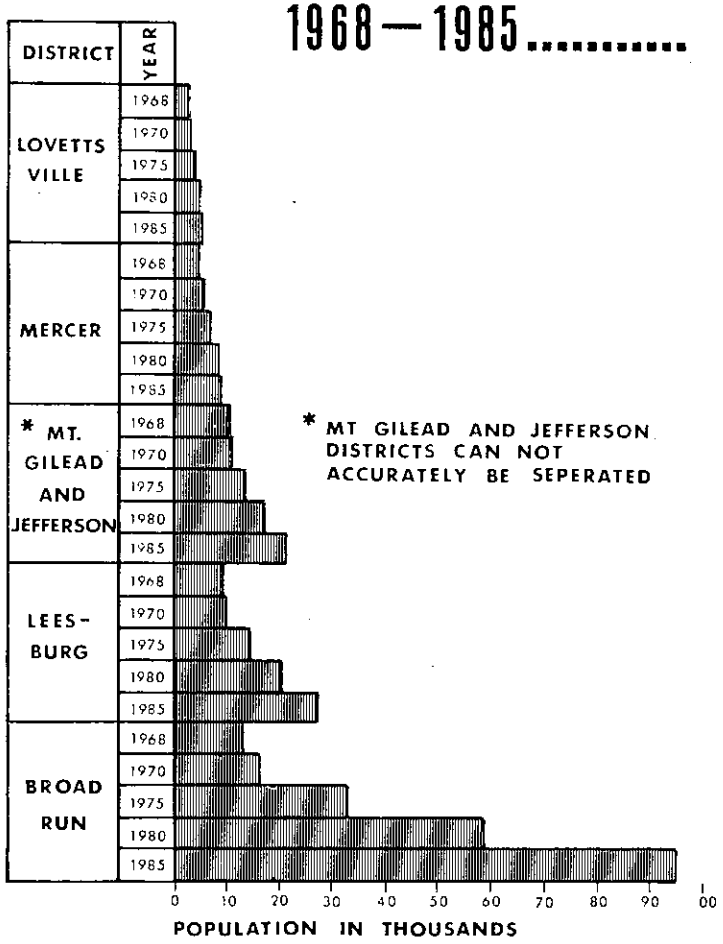
2000 172,037

for a period exceeding five years; however, in order to provide a control figure, the mathematical projection was carried through 1975 based on a 3.8 population per dwelling unit ratio.

Because of the obvious invalidity of this projection, the planning staff has constructed a modified, Cohort-Survival model of population growth through 1985. This projection is plotted on Graph 5; Table 19 represents a breakdown of the Cohort-Survival population projection for each magisterial district by in-migration and natural increase. This projection is based on certain assumptions: the improvement of Route 7 to four lanes, the growth of the county's industrial base, the increasing regional importance of Dulles Airport, the rising cost of land in the adjacent counties of the Washington Metropolitan area, and the continuing growth and decentralization of federal employment. The migration figures are based on the expected increase in the number of dwelling units for each area by year, assuming a ratio of 3.8 people per unit up to 1975, increasing to 4.0 from 1975-1985. Births were added and deaths were subtracted by age groups from the migration figures plus the existing population.

This work reveals an astounding rate of growth. It is interesting to note the percentage distribution of the population as applied to existing magisterial district lines (see Graph 6). Broad Run district increases from 32% of the county's population in 1968 to about 60% in 1985. The more rural districts have less than half the percentage in 1985 than they accounted for in 1968.

GRAPH 6....PROJECTED MAGISTERIAL DISTRICT POPULATION 1968—1985.....



* MT GILEAD AND JEFFERSON DISTRICTS CAN NOT ACCURATELY BE SEPERATED

SOURCE—LOUDOUN COUNTY PLANNING DEPARTMENT

POPULATION CHARACTERISTICS

Although the size of the population is of extreme importance, it is also necessary to understand some of the characteristics of the people if planning is to be an effective tool. In order to estimate the basic characteristics of the anticipated influx of new residents, the staff, with the cooperation of the Eastern States Mortgage Company, collected data concerning family size, age distribution, occupation and employment, etc., for the new residents of Sterling Park. The staff feels that these statistics will basically be representative of the new growth expected to occur during the coming decade, particularly in the Broad Run District, although it should not be interpreted as being a representative sample of the existing county population.

DISTRIBUTION BY AGE

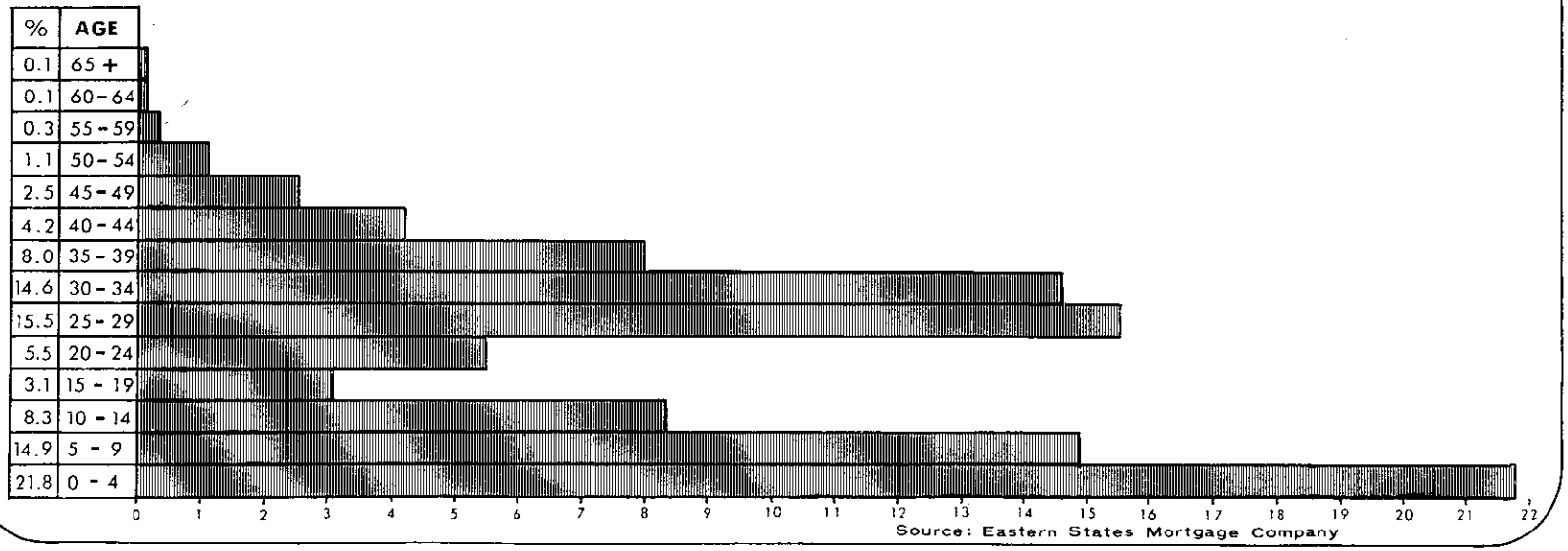
The sample data reveals that the average family size is approximately 3.8. However, the trends in other rural jurisdictions of the metropolitan area have shown that family size in new developments is rising; therefore, it may be reasonable to assume that by 1975 the population per dwelling unit ratio will increase to 4.0. The trend is further exemplified on Graph 7 which shows both graphically and statistically the rising percentage of the population in the lower age brackets. The implications of this trend are obvious; the immediate effects will be felt in a tremendous expansion of school enrollment, with particular strain placed on the elementary grades. The need for other community facilities, such as playgrounds and other developed recreational space, will show a corresponding increase. Water and sewer facilities will have to be expanded into areas presently considered rural, and transportation facilities will have to be modernized in order to provide a circulation system capable of handling the expanding demands of a growing and increasingly mobile population.

The median age level in the sample population is 23 years, while the arithmetic mean is slightly lower at approximately 20 years. The apparent youth of this population is a further indication of its mobility.

EDUCATION LEVEL

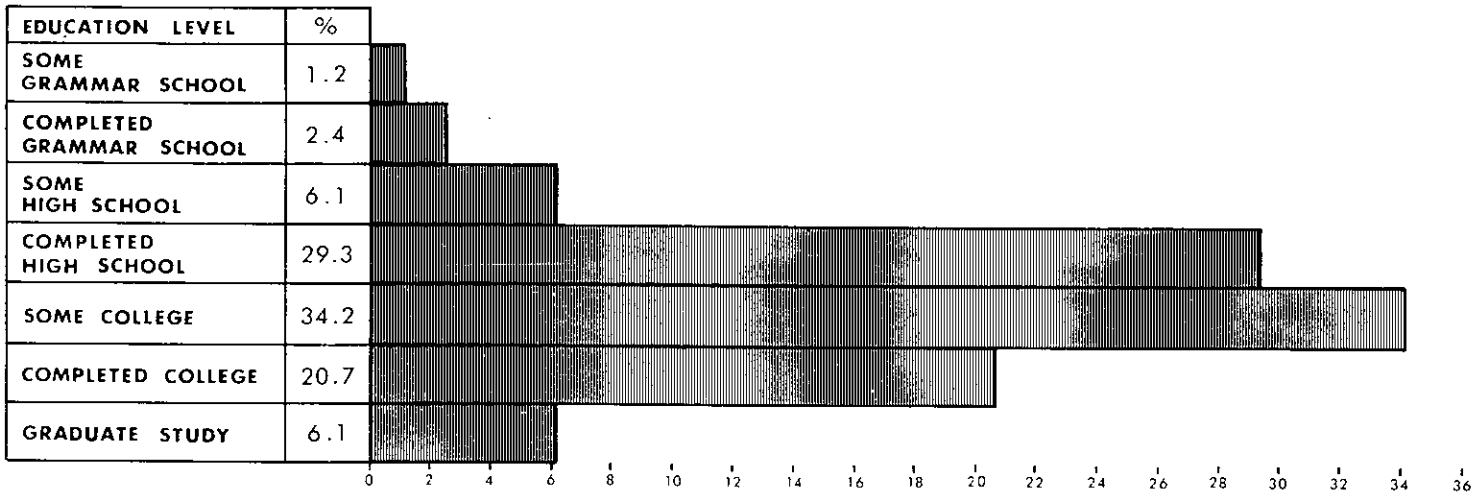
Graph 8 records the educational levels of the head of the household for the sample population. As pointed out here, slightly more than 90% have completed high school and 20.7%

GRAPH 7 .....POPULATION DISTRIBUTION BY AGE.... New Residents.....



Source: Eastern States Mortgage Company

GRAPH 8 ..... EDUCATION LEVEL of HEAD of HOUSEHOLD ---- New Residents .....



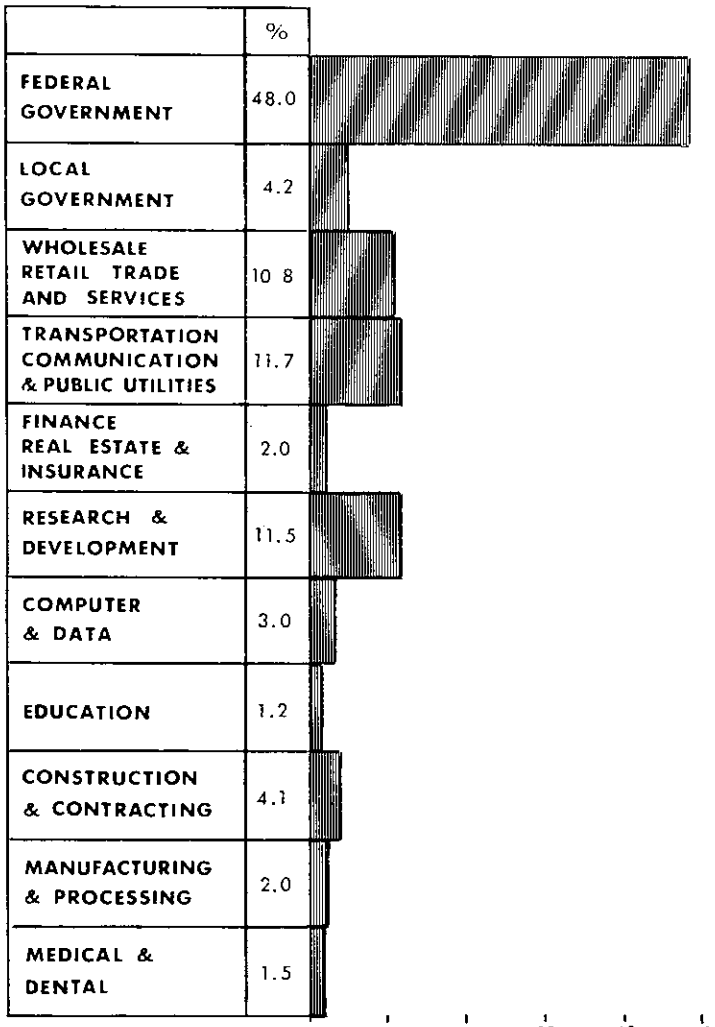
Source: Metropolitan Washington Council of Governments

have completed college. This is considerably above the median level of 9.9 years reported in the 1960 census of the State of Virginia and 10.6 years for the United States. These figures can not be directly compared, however, because the census figures include all residents over 25 no longer attending school, while the sample data refers only to the head of the household. However, even taking the sample bias into consideration, it is obvious that the education level for this population must exceed the state and national averages.

EMPLOYMENT AND OCCUPATION

The Federal Government is by far the largest single employer in the sample population. Graph 9 reports the percentage of the sample employed in each of the various categories. The fact that almost 50% of the sample is employed at some level

GRAPH 9...EMPLOYMENT--New Residents



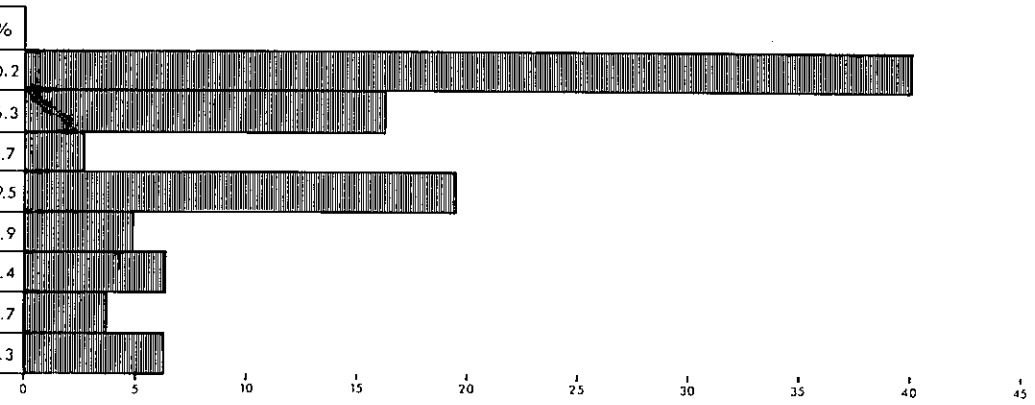
Source: Eastern States Mortgage Company

of the Federal government points out the social and economic dependence of this segment of Loudoun's population on the greater Washington area. This dependence is reinforced by Graph 10 which reveals that 40% of the labor force commutes to Washington to work, and that slightly more than 95% of the sample works outside Loudoun County.

Graph 11 represents the occupational groups drawn from the sample population. The administrative category, accounting for almost 30%, is the largest. The two technical classifications are next with Tech II (skilled junior technician) accounting for 16.3% and Tech I (highly skilled senior technician) making up almost 15%.

GRAPH 10..... PLACE OF EMPLOYMENT.... New Residents .....

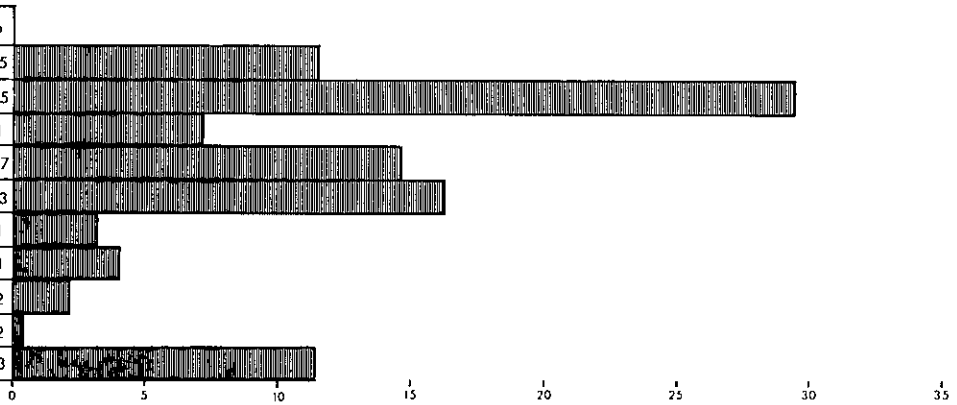
LOCATION	%
WASHINGTON D.C.	40.2
ARLINGTON	16.3
ALEXANDRIA	2.7
FAIRFAX	19.5
LOUDOUN	4.9
MONTGOMERY	6.4
PRINCE GEORGES	3.7
OTHER	6.3



Source: Eastern States Mortgage Company

GRAPH 11..... OCCUPATION .... New Residents .....

OCCUPATION	%
SKILLED	11.5
ADMINISTRATIVE	29.5
PROFESSIONAL	7.1
TECH I	14.7
TECH II	16.3
EDUCATIONAL & INSTUCTIONAL	3.1
SALES	4.1
CLERICAL	2.2
RETIRED	0.2
OTHER & UNDETERMINED	11.3



Source: Eastern States Mortgage Company

This page left blank intentionally.

DEVELOPMENT PROPOSAL

EBINEZER CHURCHES

The old Ebinezer churches are located on Route 718, 7 miles from the town of Round Hill. The old fieldstone church dates back to before the Civil War, and is reportedly the site where Colonel Mosby distributed a captured Union payroll to his men. The white frame church was built in the late nineteenth century. Regular services were held there until the 1920's.

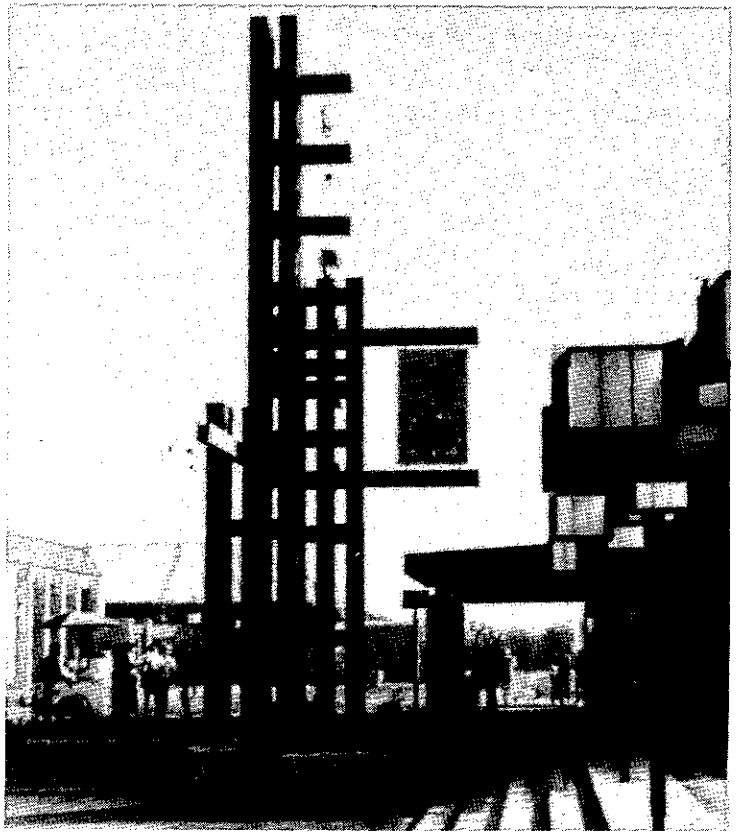
DEVELOPMENT CONCEPT

Loudoun County is entering the first phase of intensive development. In the absence of coordination and guidance, this rapid growth could easily result in an incompatible relationship between man and nature as well as the disintegration of the community's visual and environmental continuity. Growth will tend to be guided by the availability of public water and sewer, and the improvement of the major transportation corridors. Rational planning based on a careful investigation and analysis of current and projected conditions must be employed to maintain a balance with nature and to create a pleasing and healthful living environment. The tendency for development to occur along the primary transportation routes must be controlled if the county's highways are to function efficiently as a means of movement and access. Guided and controlled extension of development throughout the county may prevent needless destruction of nature as well as avoid serious problems of erosion, siltation, and flooding.

This section attempts to provide a concept through which a desirable and functional development program may be established. If this program can provide the framework for the daily decision making process of both the public and private sectors, the plan can contribute heavily to an orderly pattern of growth and development.

Although intensive development must be allowed to occur adjacent to primary highways, it should be restricted to certain strategic locations. These points should reflect areas of existing activity or future arterial intersections of county-wide importance. Wherever this development is allowed to occur, it must be designed so as not to hinder the functioning of the highway system.

General development east of Route 15 may occur in conjunction with the primary road system, but should not be completely highway oriented. Strip activity of all types, i.e., residential, commercial, industrial, must be prevented; development should be concentrated at various nodes rather than forming a linear concept. This prevents disruption of the visual image and respects the basic function of the road system.



Development west of Route 15 should occur surrounding the existing communities. These communities provide vital urban services as well as identity and a pleasant environment. Intensive development should be avoided in the rural sections of the county west of Route 15 in order to prevent the proliferation of the problems presently plaguing many of the existing towns.

RESIDENTIAL DEVELOPMENT

Residential development of varying densities will occur with increasing frequency throughout the county. It is necessary that the governing body impose certain policy restrictions and limitations on this type of development in order to perpetuate a desirable density level.

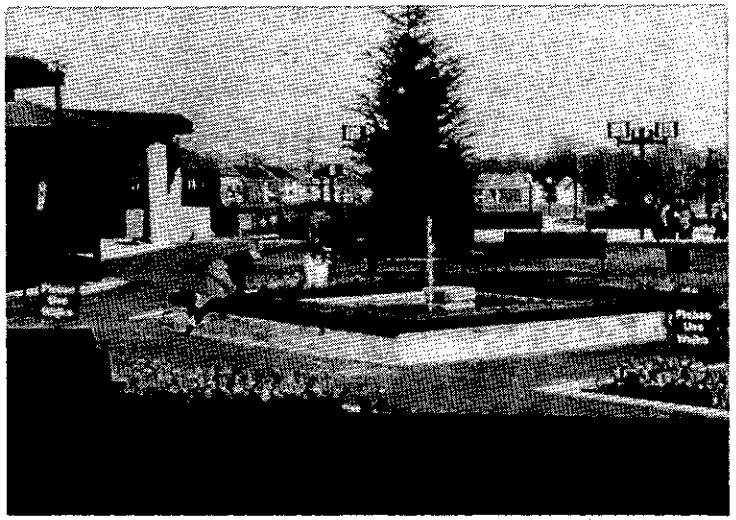
Large tract residential development, such as the planned community concept, should be encouraged in the eastern section of the county until such time as the scarcity of land makes it infeasible. This policy has several advantages over the development of scattered subdivisions along the major transportation routes; it allows a higher degree of coordination in community development, more economical extension of public services, more advantageous location of school sites, a more coordinated road system, etc.

Residential development in the western section should for the most part be confined to existing community areas. The resulting increase in town populations will place the provision of adequate public services on a sound economic base.

RESIDENTIAL DENSITY

It is recommended that the density in residential planned community developments be limited to three dwelling units per gross acre. The density levels in other planned unit developments, such as townhouses and apartments, will be investigated during the revision of the Zoning Ordinance. Because these densities will be considerably higher than those recommended above, this type of development should be limited to strategic points along Routes 7 and 50 and adjacent to the town of Leesburg. Suggested locations are shown on PLATE 10, Proposed Residential Development.

Residential development in conjunction with existing communities, while subject to the goals of the community, may be somewhat higher than that recommended for residential planned community developments. A density as high as four units per acre at specific locations may be advisable, thus allowing the communities to develop in a more concentrated manner; this concentration of activity makes the provision of such public facilities as water and sewer more economical and avoids excessive spreading of the community.



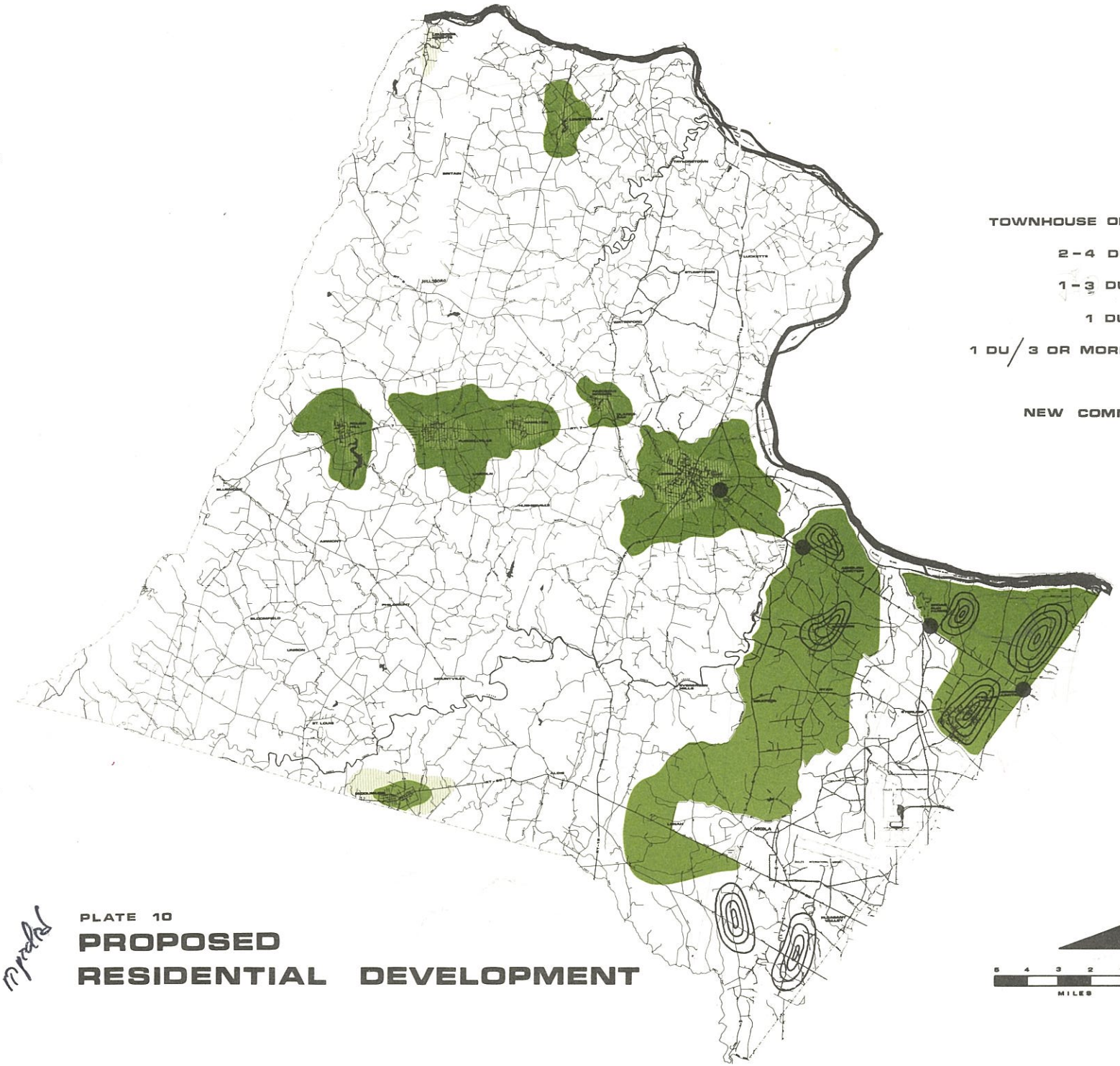


PLATE 10

PROPOSED RESIDENTIAL DEVELOPMENT

Certain points along the major transportation corridors are well suited for concentrated residential activity. The location and staging of these points will be determined by the availability of public water and sewer, and the general relationship to the county's development pattern. Suggested locations are shown on PLATE 10.

ORIENTATION

New communities should be self-contained units providing a sense of identity and relative economic independence. The development should have distinct boundaries, with areas generating a high level of activity forming visible nodes within these boundaries. These activity centers should not be located on primary county roads, but should be a point of focus and identity within the limits of the community. Sterling Park is an example of a community with its primary orientation turned inward rather than focused on Route 7. Development surrounding existing towns should contribute to and complement the towns' identity and functional structure.

RURAL DEVELOPMENT

Rural residential development should be limited to a maximum density of one dwelling unit per three acres. Areas of critical slope, flood plain, and conservation should be limited to whatever density is required to protect the beauty and functions of nature. Cluster development is an important concept because it allows the land to be used without destruction of or conflict with nature.

It should be understood that PLATE 10, Proposed Residential Development, is not a zoning proposal; rather, it is a map presenting generalized patterns of suggested development densities within the county.

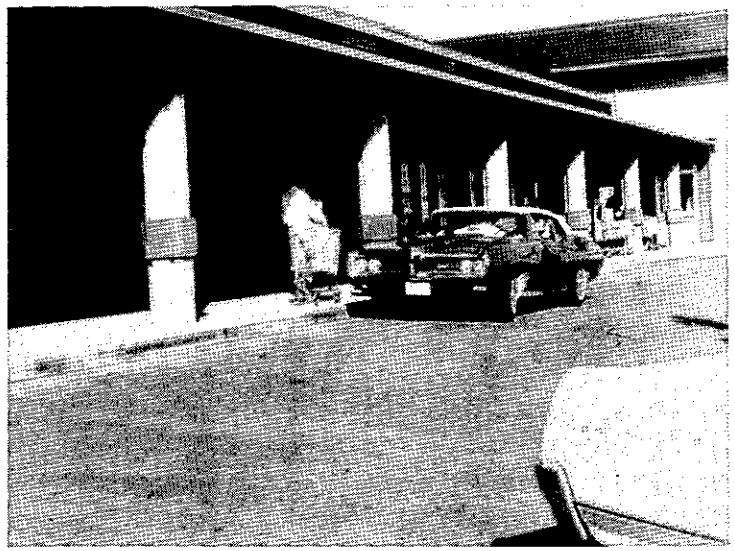
COMMERCIAL DEVELOPMENT

As the population of Loudoun County increases, the demand for diversified commercial facilities will experience a corresponding rise. These facilities will include regional centers, community centers, neighborhood centers, and highway oriented commercial activity.

At Loudoun's present stage of development, community centers and neighborhood centers cannot logically be tied to specific locations. Therefore, PLATE 11 deals only with the suggested locations for highway oriented commercial and regional commercial centers.

REGIONAL CENTERS

Commercial centers of varying regional importance and with differing types of trade areas and clientele must develop to



LEGEND

REGIONAL

HIGHWAY

COMMUNITY

NEIGHBORHOOD

NORTH

5 4 3 2 1 0 FEET IN THOUSANDS

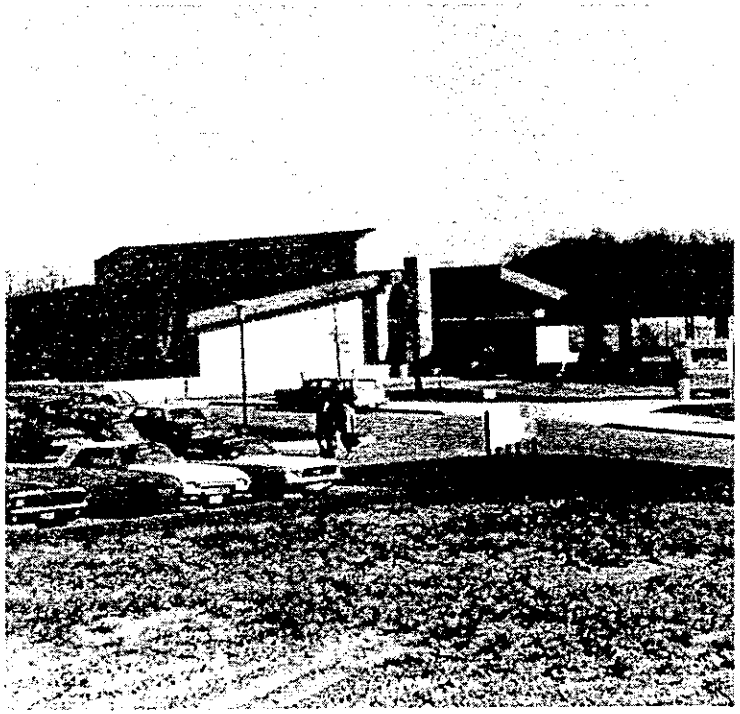
MILES 1 2 3 4 5 10 15

PLATE 11

PROPOSED COMMERCIAL DEVELOPMENT

serve the residents of Loudoun County. These centers are located on PLATE 11, Proposed Commercial Development. Purcellville, Middleburg, and Lovettsville represent growing commercial centers attracting consumers from a growing rural and town oriented trade area. The development of commercial activity in these areas as the demand increases should be encouraged, but controls should be exercised to prevent strip commercial activity along Routes 50 and 7 which would interfere with the functioning of these primary arteries.

With its expanding consumer oriented, financial, and professional activities, Leesburg is a regional center which serves many areas of the county. In the future, its trade area may extend beyond the county's boundaries.



A regional shopping center providing a variety of shopping activity and offering a wide selection of consumer goods will become necessary on Route 7 east of Leesburg as the population in that area rises. At the present time, much of the economic demand generated by the residents of eastern Loudoun is being satisfied outside the county's boundaries. In order to meet the vigorous competition from out of county shopping centers, a large and attractive shopping facility must be developed within the county. The most logical location for this facility is in the vicinity of the intersection of Routes 7 and 28. This location provides good access with respect to major transportation corridors and the location of anticipated community growth.

HIGHWAY COMMERCIAL

Highway oriented commercial activity will take on increasing importance as the traffic volumes on the primary highway system increase. Although the need for this type of facility must be met, it is important that design criteria be developed which will protect the function of the road as well as its visual character. The recommended locations for these activities are shown on PLATE 11; the areas should be spaced approximately four miles apart on primary roads as the demand requires. The points depicted on PLATE 11 represent only general locations and are not intended to indicate actual acreage. It is recommended that such development not occupy all quadrants of an intersection.

COMMERCIAL STANDARDS

The following standards are suggested as guidelines for new commercial development.

TABLE 20 – COMMERCIAL FACILITIES

	NEIGHBORHOOD CENTER	COMMUNITY CENTER	REGIONAL CENTER	HIGHWAY COMMERCIAL CENTER
MAJOR FUNCTION	Sale of convenience goods and personal services.	Some functions of the neighborhood center plus sale of shopping goods (wearing apparel, appliances, etc.)	Some functions of community center plus sale of general merchandise, apparel, furniture, etc.	Sale of automobile products, provision of sleeping and eating accommodations, tourist sales and services.
LEADING TENANTS	Food store and/or drugstore	Variety store and/or small department store	One or more large, major department stores	Motel and/or restaurant and service stations
LOCATION	Within neighborhood at intersection of collector streets and/or local streets. Should be accessable to pedestrian system close proximity to clientele	Within community at intersection of urban feeder roads and/or collectors	At major intersection of primary roads which serve the region	Along primary road system at important intercounty intersections
RADIUS OF SERVICE	1/2 mile	2 miles	5 to 15 miles	Spaced approximately 4 miles apart along primary roads
MINIMUM POPULATION TO SUPPORT	4,000 to 10,000	25,000 to 50,000	100,000 to 200,000	6,000 to 8,000 A D T/ Highway facility
SITE AREA	4-8 acres	10-30 acres	40-100 acres and over	5-10 acres
RANGES OF FLOOR AREA	30,000 to 75,000 sq. ft.	100,000 to 250,000 sq. ft.	400,000 to 1,000,000 sq. ft.	n. a.
NUMBER OF STORES, SHOPS, OR FACILITIES	5-20	15-40	40-80	2-10
PARKING REQUIREMENTS*	200-600 spaces	1,000-3,000 spaces	4,000 spaces and over	As required

*Parking ratio Average: 4 to 1 (parking area is four times gross floor area of building; 400 sq. ft. per parking space)

INDUSTRIAL DEVELOPMENT

Industrial development is important to the growing economic base of Loudoun County. In the long run, Dulles International Airport will attract a wide variety of industrial concerns, but in the absence of a sufficient available labor force and vital industrial services, the growth of the industrial base may be retarded. It is necessary that high quality industry be located in Loudoun County, however, and the Dulles facility in conjunction with the availability of a labor force from neighboring counties may somewhat augment Loudoun's attractiveness in the initial stages of Loudoun's industrial development. Because Loudoun County has a high percentage of people in low income groups who need employment, it is also desirable to acquire industry that will make jobs available to this section of the labor force.

LOCATION OF INDUSTRY

The county should concentrate as much of its industry as possible around the perimeter and under the flight paths of Dulles Airport and adjacent to existing communities. The Dulles Airport area includes a significant percentage of Loudoun's land which, because of the noise and vibration caused by the air traffic, has been rendered undesirable for many other types of uses. In general, heavy industry should abut the airport, and phase into lighter industrial use moving out into the county. All industry along primary roads should be of high environmental quality with good landscaping and design, to promote a pleasing industrial image. Any industry located in an area of other community uses should take extra precautions to blend with and complement the existing and future environment.

The general location of industrial development is shown on PLATE 12, Proposed Industrial Development. The bulk of the proposed activity is located around the airport facility, at the intersection of basic arteries, or associated with the existing towns. Industrial development may occur at other points in the county, but such cases should be somewhat limited and dependent upon individual merit.

INDUSTRIAL RELATIONSHIPS

Although no standards for industrial development are presented in this text, the following information attempts to explain some of the basic relationships affecting industrial growth in the county.

Loudoun County cannot expect to balance the local labor force with available local jobs in the foreseeable future. The importance of the federal employment base in the Washington area will result in 50 – 90% of the labor force being employed outside the county.

The labor force should equal about 30 – 40% of the total population. Using a ratio of 35% of the projected population, the county will have a labor force of 36,000 by 1980, and 51,000 by 1985. Presently, the county has a labor force of approximately 14,000 workers.

TRANSPORTATION

In an increasingly mobile society, the importance of the automobile has grown to hugh proportions. Although it provides a unique degree of flexibility in transportation and communication, the excessive use of automobiles has posed serious environmental problems. The air pollution rates in most of America's large cities have become intolerable, and this pol-

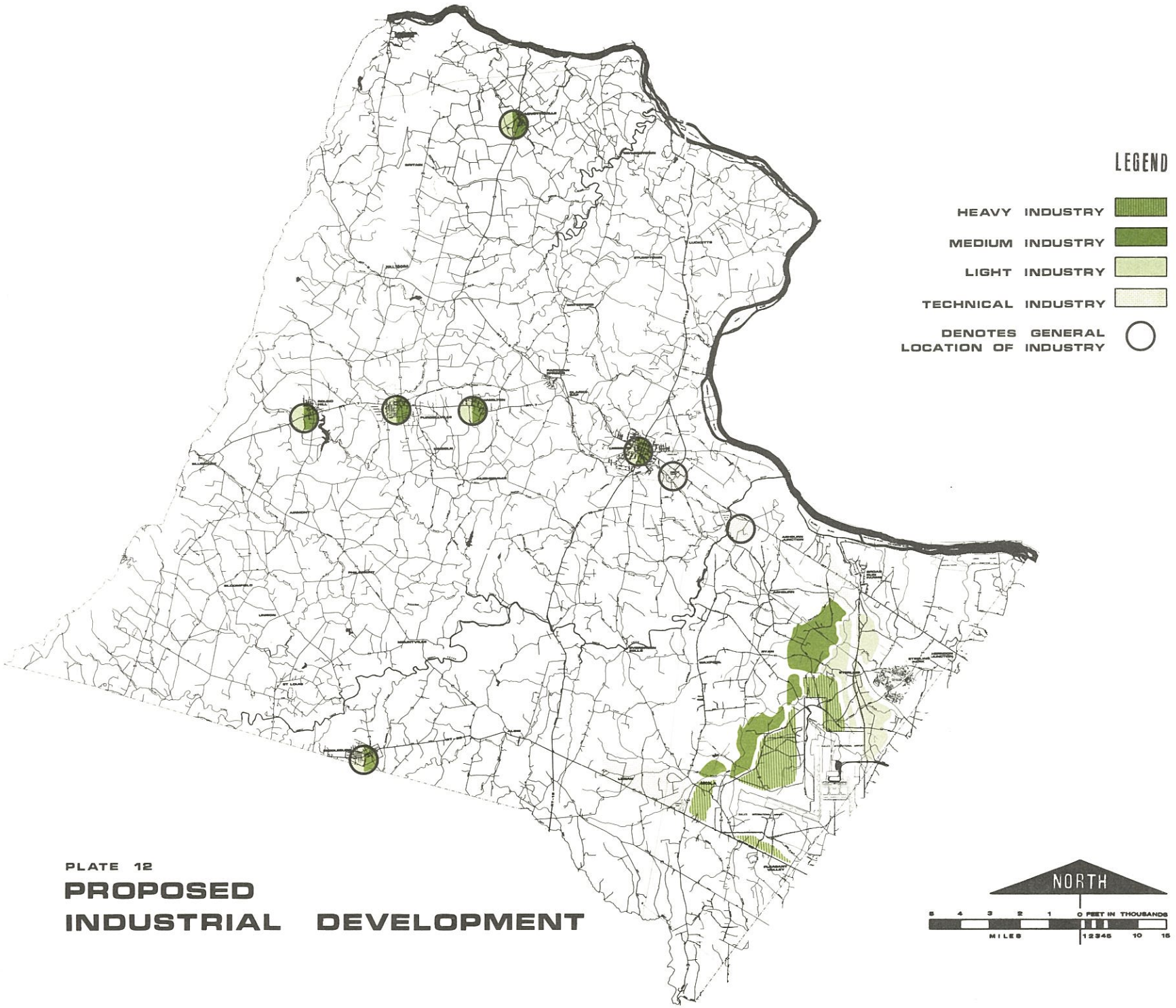


PLATE 12

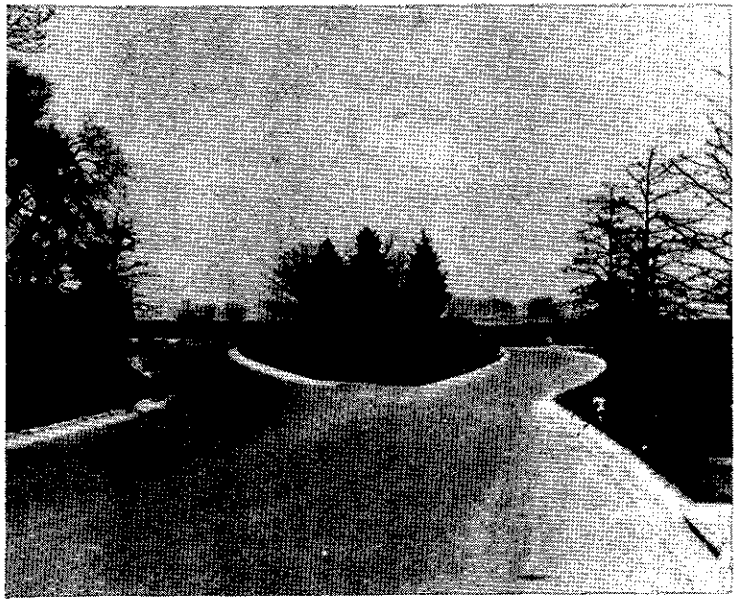
PROPOSED INDUSTRIAL DEVELOPMENT

lution is spreading into the suburban areas. In addition, the amount of pavement required always seems to be functionally inadequate and environmentally excessive.

Steps are being taken at the national level to correct the air pollution and safety aspects of the automobile. However, it is a local responsibility to control the extent and character of the road system so that it best serves its functions of movement and access while causing the least disruption to the environment.

HIGHWAYS

The county must make sure that state funds allocated for local use are used to the best advantage within the limits of their authority. County officials must ensure that the roads proposed by developers are related to and integrated with the overall county network, and are constructed to a standard which will require a minimum of maintenance. Until a road is accepted into the state system, it is basically the responsibility of the county.

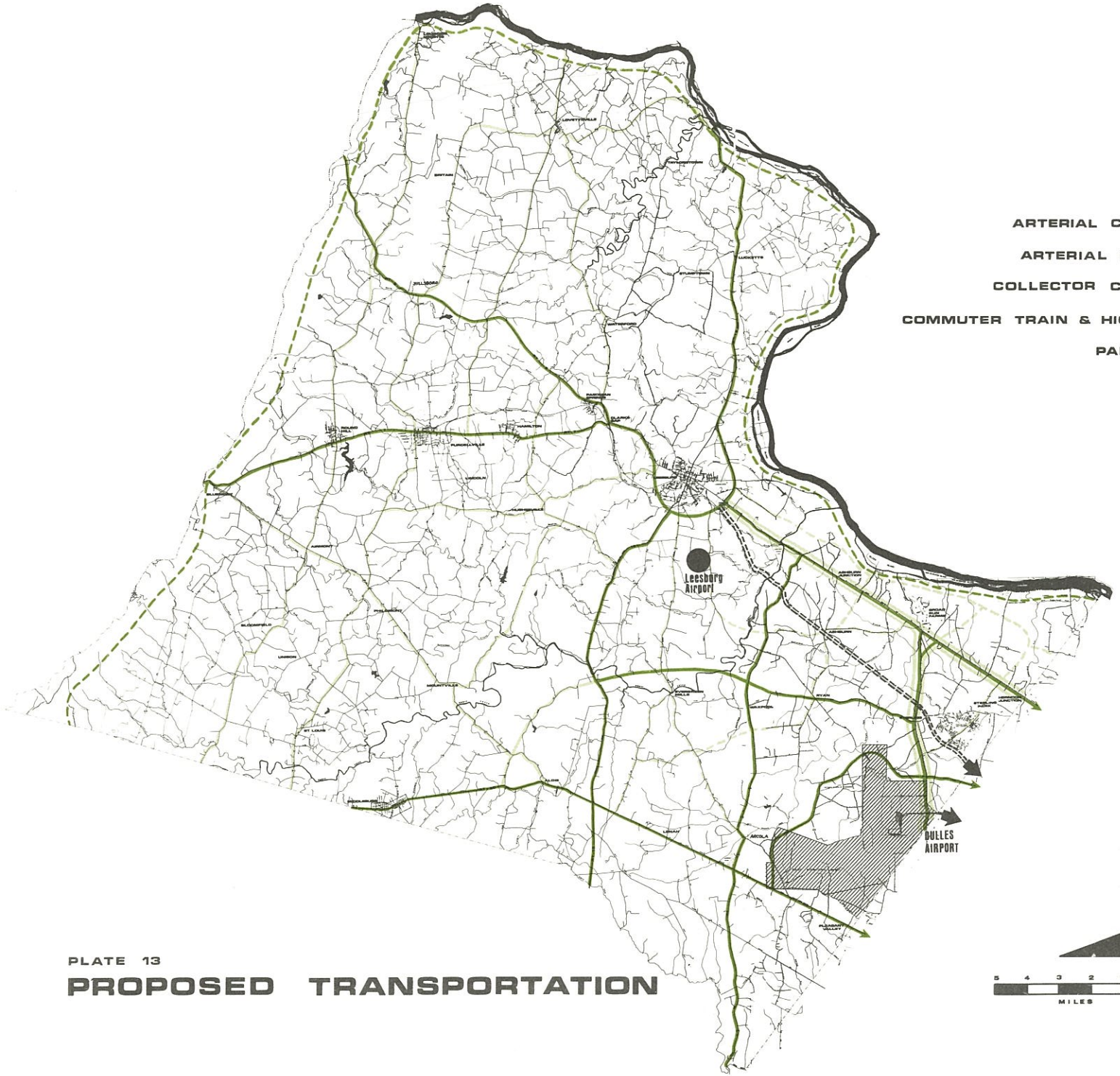


Two different but coordinated systems of highways are developing in the county. The old primary and secondary system is being improved to carry increased traffic, and an entirely new urban-oriented system is being developed, such as the roads in Sterling Park. Careful development of the new system is of prime importance to the county if problems similar to those plaguing the existing secondary system are to be avoided in the future. An intimate functional relationship exists between the existing and new systems; each road in the existing county system has the potential of becoming a major urban road. One addition to the road system proposed on PLATE 13 is the George Washington Country Parkway. The parkway is a part of an 800 mile scenic and historic loop through Virginia and West Virginia. The primary purpose of this road will be to provide access to the proposed park land along the Potomac River; the use of this highway as a commuter facility will be discouraged by providing limited points of access.

Although the urban road system is not indicated on PLATE 13, much of it is predetermined since it must be coordinated with proposed centers of activity. The existing roads shown for improvement must be upgraded regardless of the location of new urban development.

RAIL

At some point, no matter how well planned and designed the automobile system becomes, it will create an undesirable situation. Regardless of the number of travel lanes constructed



LEGEND

ARTERIAL COUNTY

ARTERIAL URBAN

COLLECTOR COUNTY

COMMUTER TRAIN & HIGHWAY

PARKWAY

NORTH

5 4 3 2 1 0 FEET IN THOUSANDS

MILES 1 2 3 4 5 10 15

PLATE 13

PROPOSED TRANSPORTATION

This page left blank intentionally.

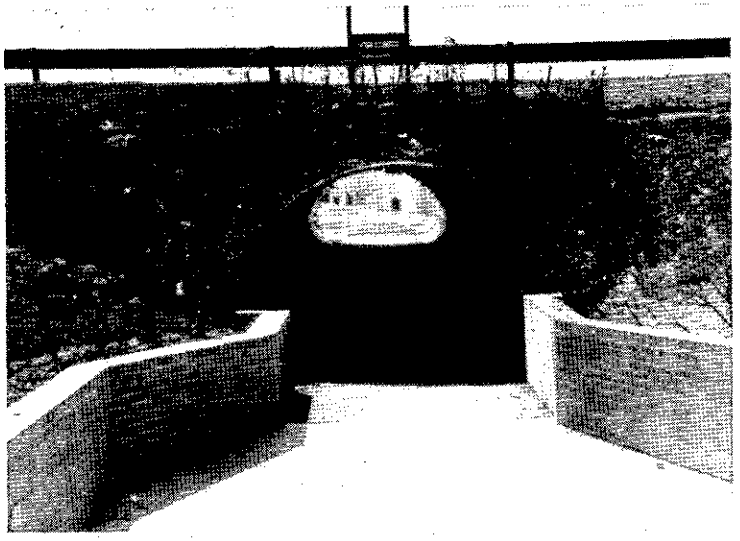
on Route 7, if alternate modes of transportation are not provided, the road will be grossly inadequate to handle the increased traffic volumes. Therefore, rapid transit must eventually be extended into Loudoun County.

It is difficult to say whether it will be possible to have rapid transit by 1985, but it will be possible and very necessary to have commuter train service to provide connections to the Washington Metropolitan Area Transit System. The W. & O. D. Railroad offered a suitable path for such service; while the right-of-way still exists today, foresight and planning will be required for it to be of use in 1985. Right-of-way widths sufficient to fill both passenger and freight needs should be recognized and protected in rezoning, setbacks, and screening as the adjacent area develops (See PLATE 13).

AIR

Loudoun County is fortunate to have two air facilities. The Leesburg Airport is a local business and pleasure facility. If it is properly controlled and managed, it can take on increasing local importance as the population increases. Dulles International Airport is important to federal, state, and county interests. It provides an advanced air transportation facility for the nation's capital and the entire east coast, and is an economic asset to the state and the county.

Dulles Airport also creates certain liabilities for the county; large land masses are rendered useless for human habitation because of the excessive noise and vibration from the air traffic. Because residential, commercial, and many industrial uses are incompatible with the airport use, an effective plan must be developed to protect both the county and the airport. It is important that no uses be allowed to develop in the present and future flight paths which may cause serious environmental problems and may eventually challenge the existence of the airport as well as endanger the health and welfare of county citizens.



COMMUNITY FACILITIES

The community facilities discussed in this section do not necessarily reflect present public responsibility. As the population density rises, however, an increasing number of public services will become the responsibility of local government. The following discussion deals with each of the facilities that the public sector will be required to provide, with two exceptions. The courthouse complex has been omitted because a study of the need for county office space is currently being undertaken by the Executive Secretary's Office. Consideration of public water and sewer facilities has also been omitted be-

cause consulting engineers retained by the county are presently conducting the study. When the water and sewer plan has been completed, the development plan must be reviewed; and necessary modifications must be made to each to ensure their compatibility.

EDUCATION

The school system is among the most important services provided by public agencies. School planning is the statutory responsibility of the School Board; however, because rational school planning is not possible in the absence of coordination with other governmental aspects, it is necessary for the School Board and the Planning Commission to work very closely in both the planning and implementation of new facilities.

The quality of public education in the State of Virginia is not impressive. Both the state and the county will have to effect many improvements to provide the versatility and quality in the educational system necessary to satisfy the growing needs of the residents. By approving the latest school bond referendum, the citizens of Loudoun County demonstrated their recognition of the need for upgrading and expanding the educational system; free textbooks, vocational education, and the middle school concept all represent significant improvements to our local system.

It is not the intent of this plan to investigate the functioning of Loudoun's schools; however, it is necessary that the plan project school enrollment as determined by the population projections. Based on this projection, school age population will increase at the rate shown on Table 21.

The figures for 1968 represent actual enrollment plus estimated kindergarten enrollment; these figures include only those students attending public school. Each year following 1968, the numbers represent a total including the students added to the age group through natural population growth and in-migration.

The impact of this school age population is shown on Table 22, School Facilities Projection, which correlates additional school facilities needed with children added; in this table, private school attendance was assumed to be insignificant. The facilities are projected at the capacity level presently recommended by the School Board. The results of this study are astounding; within ten years, Loudoun County will need 128 kindergarten classrooms at a capacity of 20 students per room, 13 new elementary schools at 600 students per school 6 new middle schools at 1,000 students per school, and 5 new high schools each with a capacity of 1,000 students. These figures can be modified slightly by increasing the capacity of

TABLE 21 – SCHOOL AGE POPULATION GROWTH

YEAR	KINDER-GARTEN	ELE-MENTARY	MIDDLE	HIGH SCHOOL	TOTAL
1968	929	4,370	2,333	2,082	9,714
1969	1,033	4,768	2,468	2,553	10,822
1970	1,175	5,229	2,692	2,978	12,074
1971	1,320	5,835	2,986	3,305	13,446
1972	1,440	6,514	3,259	3,656	14,869
1973	1,598	7,453	3,660	4,007	16,718
1974	1,643	8,421	4,127	4,409	18,600
1975	1,847	9,302	4,630	4,931	20,710
1976	2,075	10,259	5,238	5,509	23,081
1977	2,297	11,232	5,923	6,117	25,569
1978	2,581	12,495	6,748	6,887	28,711

the urban high schools to 2,500 pupils; this reduces the need to 3 new high schools.

The specific location of these facilities cannot be determined in the absence of total community planning which has not been attempted in this report. It can be assumed, however, that approximately 85% of the proposed facilities will be needed in the Broad Run and Leesburg districts along the Route 7 corridor.

TABLE 22 – SCHOOL FACILITIES PROJECTION

YEAR	KINDERGARTEN CLASSROOMS @ 20/ROOM	ELEMENTARY @ 1,000/SCHOOL	MIDDLE @ 1,000/SCHOOL	HIGH SCHOOL @ 1,000/SCHOOL
1968	0	19	0	2
1969	52	0	2	1*
1970	7	1	0	0
1971	7	1	1	0
1972	6	1	0	0
1973	8	2	0	1
1974	2	1	1	0
1975	10	2	0	1
1976	11	1	1	1
1977	11	2	0	0
1978	14	2	1	1
Total	128	32	6	7

*Under Construction.

In the past, the population growth has been so dispersed that very few students walked to school. However, higher concentrations of pupils may make it possible for a well planned elementary facility to completely eliminate the need for busing. Poorly located elementary schools in areas of high pupil concentration can significantly increase the cost of education because of the unnecessary transportation expense. Statistics taken from the *Annual Report of Pupil Transportation at Public Expense* in 1966 demonstrate the cost involved. In one year the cost of busing 50% of a 600 pupil elementary school is approximately $6,500. In 40 years, this amounts to $260,000.

RECREATION AND OPEN SPACE

The demand for recreational facilities will experience a sharp increase as the population rises. To avoid a gap between supply and demand for recreation in the future, an active program of acquisition and development should begin as soon as possible. Some of the responsibility for the provision of land and facilities for local recreation such as tot lots and neighborhood and community parks should be placed on the developers of new communities. District and county facilities should be provided by the county at locations ensuring maximum use.

Major proposed recreational facilities are shown on PLATE 14. Duplications occur in recreation and conservation areas since conservation areas may serve recreational purposes. The most important area proposed for recreational development at the present time is the section of Goose Creek between Route 7 and the Potomac River. This location is good with respect to both natural assets and future population growth, and should be considered for development ranging from children's areas to active and passive adult recreation.

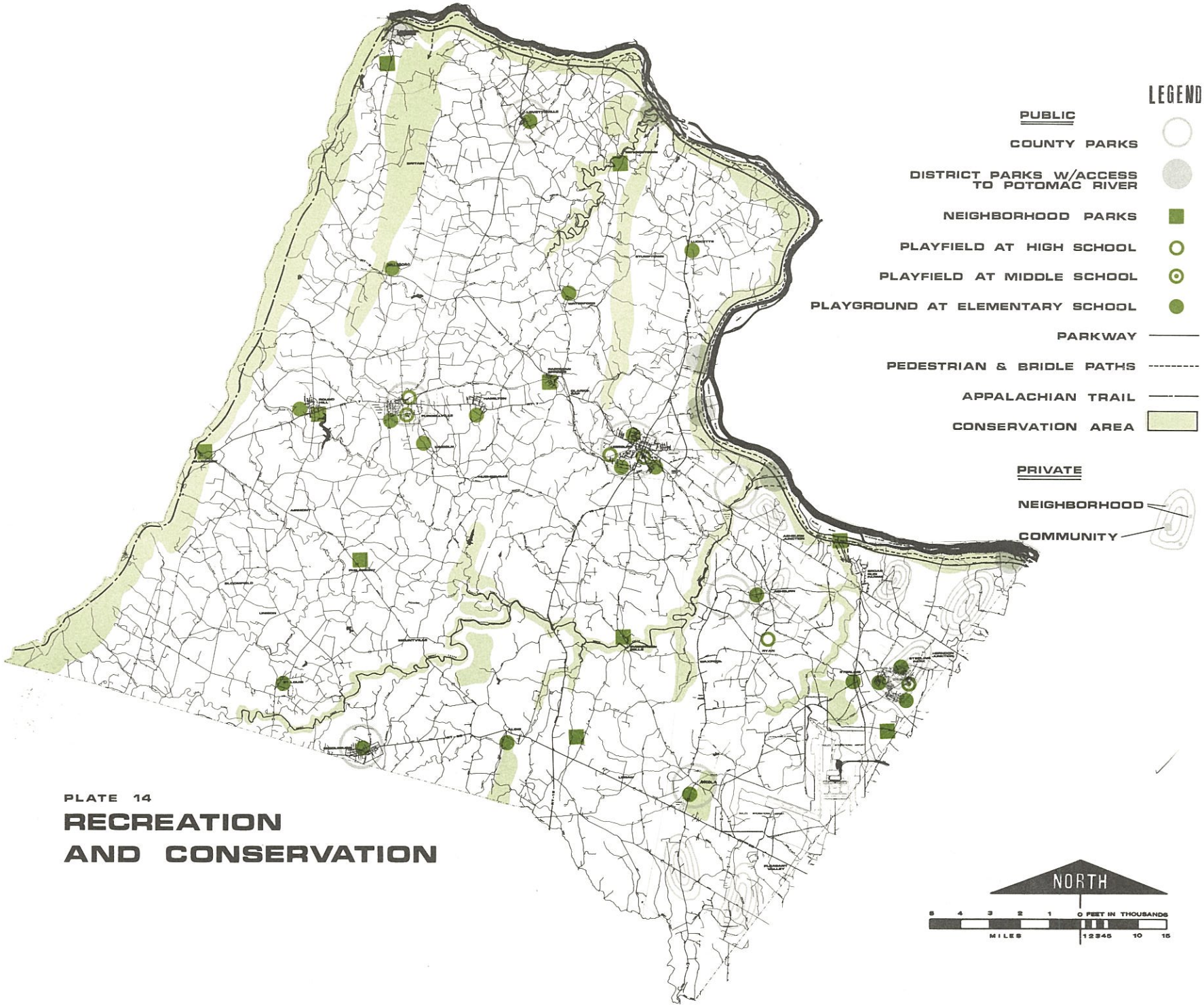
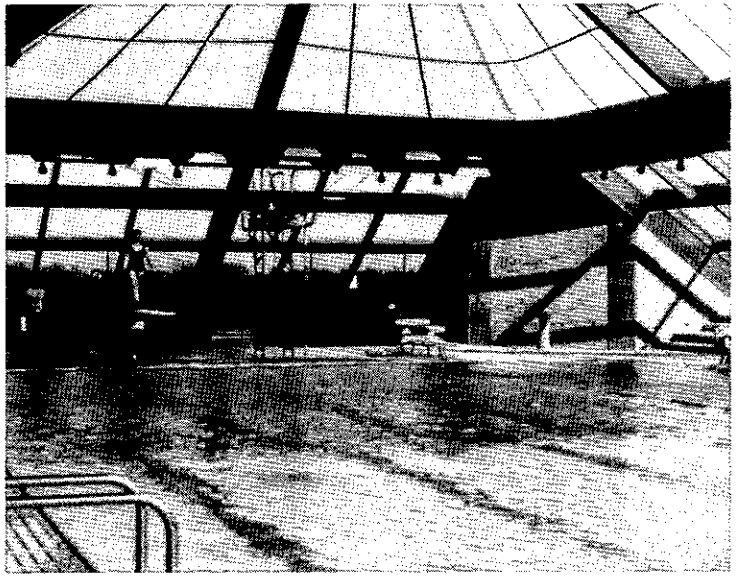


PLATE 14

RECREATION AND CONSERVATION



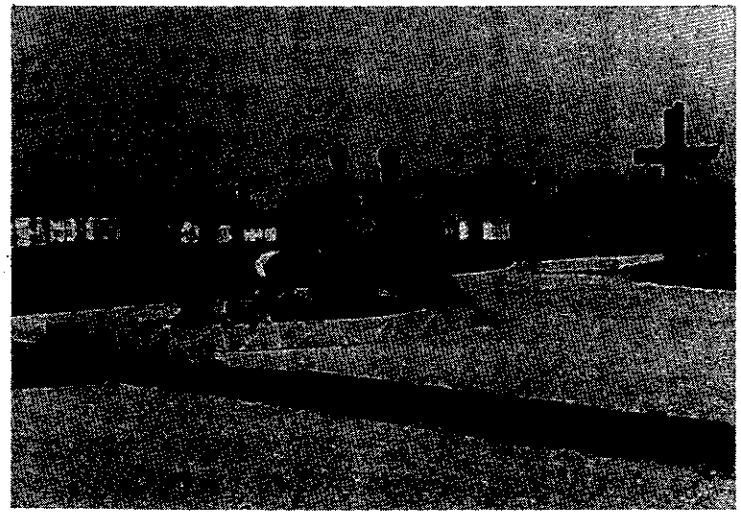
Physical education has not played an important part in the Loudoun County school program. As a result, most of the schools lack adequate recreational facilities. All elementary, middle, and high school sites should be developed to provide a wide variety of recreational programs appealing to a broad range of age groups. Development of community recreation areas in conjunction with school sites decreases the cost of providing such facilities separately. It is important, however, that the Parks and Recreation Department and the School Board have a clear understanding of the double function in order to avoid conflicts and administrative problems.

It is to the county's advantage to work with the federal government in the development of the Potomac plan. The plan centers around the preservation of the Potomac and its adjacent land. It is not totally a federal plan, but depends on cooperation and coordination with the state and local governments. The plan includes a parkway which will be part of an 800 mile historic and scenic route through Virginia. The river itself is of historic interest, recreational potential, and scenic beauty.

CONSERVATION

The continuance of farming will contribute to the preservation of the function of nature. If the stream valleys and mountainous areas can be devoted either to recreation or farming, the natural balance can be maintained.

Many of the problems currently faced in Fairfax and other developing urban areas can be expected to occur in Loudoun



County in the near future. Primary among these conservation problems are erosion, flooding, sedimentation, and drainage (See Appendix VI). These problems can be handled either through preventive or corrective measures. Certainly the most desirable and economical method of handling any potential problem is prevention. This is particularly true in the case of conservation and the protection of nature because corrective measures involve excessive expense and are rarely able to completely restore the natural beauty of a deteriorated area.

AGRICULTURE

Any orderly society requires the coordinated efforts of the public and private sectors in order to perpetuate its institutions. Although there is a tendency to simplify the complexities of the existing farm problem, it must be recognized that the actions of many institutions, both public and private, have contributed to the present situation. The result of these actions has been to limit the range of operations that the farmer can profitably undertake. As pointed out in the background section, dairy farming appears to be the only agricultural endeavor with a fair return on capital investment in Loudoun County. The future outlook for farming in the county is not encouraging. Taxes will continue to increase; the supply of competent farm labor will continue to decrease; farm wages will continue to rise; and the investment capital necessary for economic farm operations will rise. These problems, coupled with increasing land values, have resulted in the sale of many farms for land development.

If agriculture is to maintain a significant position in Loudoun's economy, several changes in the existing situation must occur. First, the county's farmers must unite. In the

coming decades the growing urban-oriented population will gain almost complete voter control. The absence of a strong and united agricultural interest will place the future of the industry at the mercy of a somewhat disinterested public.

Second, it will be necessary that farmers abandon uneconomical pursuits in favor of those rendering a high return on investment. This means that the farm itself must be large enough to be economical, and that the branch of farming must be profitable and well suited to Loudoun County's environment.

Third, the county must find a way to keep the tax situation in line with equitable farm profits; this may require a change in state law. The following are four methods for easing the tax burden on farm operations:

1.) Preferential Assessment
2.) Tax Deferral
3.) Easement
4.) Zoning

Preferential assessment and tax deferral both grant preferential tax treatment to land used for farming; both methods require a change in state law. Preferential assessment bases the tax appraisal of farm property on its use rather than on its market value. The tax deferral method defers the payment of a portion of the taxes on farm property for a period of three to seven years. If the land use changes within the allotted time period, the full amount of the accumulated back taxes must be paid.

The easement and zoning methods probably will not require additional state enabling legislation. In the easement method, the owner gives or sells at a nominal fee the development rights of his property to the county. This lowers the assessment on the land because of the limitations placed on the property's potential for development. Stringent zoning restrictions on the use to which agricultural land may be put can accomplish the same end.

It is recognized that the protection and maintenance of agriculture for its own sake is a desirable part of our economy. By the year 2000, however, agriculture will be vitally important to the county, not for its own sake alone, but as a means of preserving open space and especially of protecting the watersheds of our major streams. Therefore it is essential to keep our farmer here and actively employed in agriculture. To this end, it should be made economically possible to justify farms and farming in Loudoun through the year 2000.

The value of the rich historical and cultural heritage of Loudoun County will increase with the passage of time. Interest in these historic and scenic landmarks has increased significantly in recent years. The systematic preservation of these vestiges of our nation's past has a direct relationship to the growing interest of people in leisure-time and recreational activities. For years local historic societies, private associations and interested individuals have worked hard to preserve antiquities of the region's early culture. While significant accomplishments have been achieved much remains to be done in the near future. In the development of sound future growth plans for Loudoun County special attention should be given to preventing any jeopardy to, or the destruction of those historic assets which have been properly certified and authenticated. Among various types of assistance available for the preservation of historic area and sites is the program of the Federal Government to provide matching funds for such projects. Aside from financial aid, greater efforts must come in the form of coordinated action between County agencies and associations concerned with historic preservation.

SPECIAL STUDIES

OAKDALE SCHOOL

This school was built in 1815 by the members of the Goose Creek Friends Meeting for the education of their children. The school observed no holidays except Sundays, and the students got no vacation. It is reported that one teacher taught for ten consecutive years without ever taking a holiday, except to get married.

SPECIAL STUDIES

Several aspects of Loudoun County merit a more detailed investigation than can be attempted in this report. These have been designated as special study areas; the following paragraphs present a brief description of each potential problem area.

WATERSHED STUDY

A complete study of the Broad Run watershed should be conducted in the near future. Items of importance include the affect of development on erosion, siltation, and flooding. Recommendations should include methods to control these problems and to save the stream valley for conservation purposes. Studies of other major or minor watersheds should occur regularly prior to intensive development.

LEESBURG

The Loudoun County Planning Commission and the Leesburg Planning Commission should work closely together to develop a detailed plan concerning the growth of the Town of Leesburg and its surrounding areas. As the community of interest of Leesburg spreads beyond town boundaries into the county, it should be regarded as a logical expansion of the town and should conform to the goals of both the town and the county.

AGRICULTURE

The future of agriculture in Loudoun County should be investigated in detail to determine what public and private efforts are necessary to achieve the goals of this industry. This includes close coordination with the State of Virginia in a revision of the tax structure necessary to protect the true agricultural operation. The county should also determine if any public effort would be of value to the farmer in the solution of his labor problem.

POVERTY

A comprehensive study of poverty in the county should be developed. This would include not only a definition of the problem, but also define the federal, state, and local efforts necessary to eliminate or lessen the hardship of the individuals involved.

TOWNS

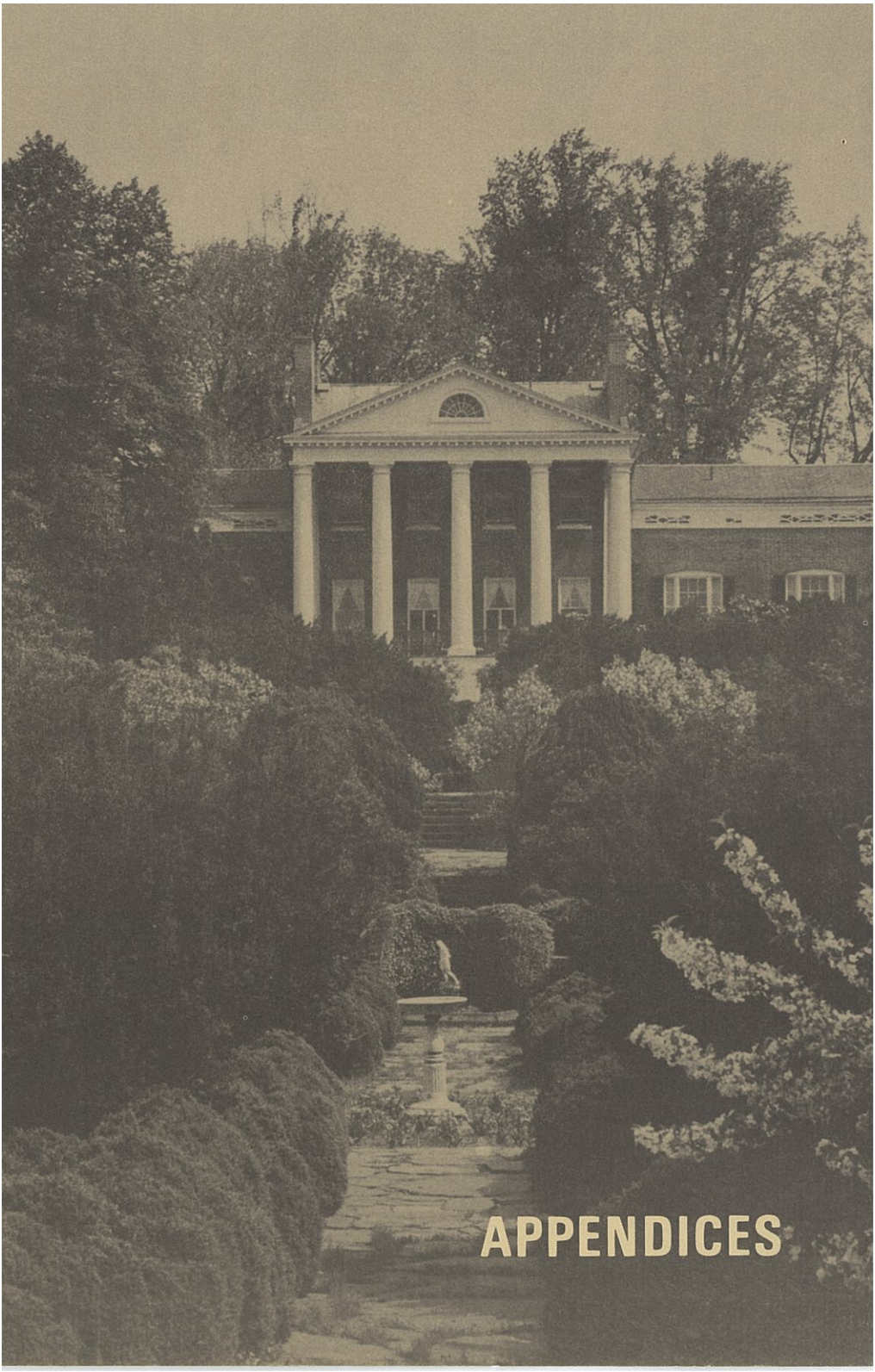
The County Planning Commission should accept the responsibility for providing technical assistance to the towns and communities in the county which are unable to economically support the planning function. This would not only help prepare the communities for the future, but help coordinate the efforts of the towns and the county.

DULLES AIRPORT

The land mass affected by Dulles Airport should be studied to determine the most compatible uses. The area involved is significant. Poor utilization can be detrimental to the environmental character of the county and destroy the potential of the industrial nucleus.

HISTORIC PRESERVATION

Extensive study and research will be required to identify and authenticate the historic sites and areas of Loudoun County and to develop effective controls facilitating the preservation objectives. Techniques such as: tax advantages, easements, zoning acquisition and leaseback should be explored.



APPENDICES

OAK HILL

Oak Hill is located on Route 15, 12 miles south of Leesburg. The former home of President James Monroe, it was reportedly designed in part by Thomas Jefferson and was built in 1818. In appreciation of President Monroe's hospitality, General Lafayette sent two marble mantle pieces which are still in use in the house. The famous Monroe Doctrine is said to have been written at Oak Hill.

APPENDIX I

HOUSING UNITS – JULY 1968

	SINGLE FAMILY	MULTI-FAMILY	DUPLEX UNITS	TOWNHOUSE	TRAILERS	TOTAL
LOVETTSVILLE	680	0	0	0	23	703
Lovettsville Town	202	3	3	2	2	217
Subtotal	882	3	3	2	25	920
JEFFERSON	512	0	0	0	2	514
Waterford	73	0	0	11	0	84
Paeonian Springs	120	0	2	0	1	123
Hillsboro	43	0	2	0	0	45
Round Hill	224	7	0	0	1	232
Subtotal	972	7	4	11	4	998
MT. GILEAD	709	0	0	0	4	713
Purcellville	522	5	14	0	1	542
Hamilton	292	6	2	0	11	311
Bluemont	64	0	0	0	1	65
Subtotal	1,587	11	16	0	17	1,631
MERCER	791	0	0	0	15	806
Aldie	34	0	2	0	0	36
Middleburg	247	17	16	0	0	280
Unison	16	0	0	0	0	16
Subtotal	1,088	17	18	0	15	1,138
LEESBURG	568	0	0	0	12	580
Leesburg	932	351	72	108	57	1,520
Lucketts	19	0	2	0	31	52
Subtotal	1,519	351	74	108	100	2,152
BROAD RUN	1,071	0	0	0	37	1,108
Arcola	56	0	0	2	1	59
Ashburn	66	0	0	0	1	67
Broad Run Farms	211	0	0	0	3	214
Potomac Farms	26	0	0	0	0	26
Richland Acres	37	0	0	0	0	37
Ryan	17	0	0	0	0	17
Sterling	85	4	0	0	10	99
Sterling Park	1,482	292	0	8	0	1,782
Subtotal	3,051	296	0	10	52	3,409
TOTAL	9,099	685	120	131	213	10,248

APPENDIX II

RESIDENTIAL LOCATION PERMITS 1960 – 1968

	1960	1961	1962	1963	1964	1965	1966	1967	1968	TOTAL
LOVETTSVILLE	9	7	13	27	19	15	13	19	5	127
Lovettsville Town	0	1	1	1	1	1	2	2	2	11
Subtotal	9	8	14	28	20	16	15	21	7	138
JEFFERSON	8	13	19	16	25	43	24	17	12	177
Hillsboro Town	0	0	0	1	1	1	1	1	1	6
Round Hill Town	1	1	2	2	3	4	4	5	6	28
Subtotal	9	14	21	19	29	48	29	23	19	211
MT. GILEAD	26	19	21	34	37	21	26	17	14	215
Hamilton Town	1	1	2	2	3	3	4	5	5	26
Purcellville Town	3	5	7	9	11	13	15	16	19	98
Subtotal	30	25	30	45	51	37	45	38	38	339
MERCER	12	8	18	10	16	9	20	10	11	114
Middleburg Town	1	2	3	4	5	6	7	8	9	45
Subtotal	13	10	21	14	21	15	27	18	20	159
LEESBURG	18	14	17	18	12	11	18	20	11	139
Leesburg Town	21	36	50	64	78	93	107	121	142	712
Subtotal	39	50	67	82	90	104	125	141	153	851
BROAD RUN	59	37	40	30	21	43	35	41	17	323
Sterling Park				322	210	431	302	252	265	1,782
Subtotal	59	37	40	352	231	474	337	293	282	2,105
GRAND TOTAL	159	144	193	540	442	694	578	534	519	3,803*

* Issued 3,803
Permits existing in 1960..... 6,445
Total permits existing – 1968 10,248

APPENDIX III

EXHIBIT A

A MANUFACTURING CORPORATION

TOTAL MAJOR STATE AND COUNTY TAXES ON VALUES AS STATED AS OF JULY 1, 1968

	TOTAL TAXES (ROUNDED TO $100) CORPORATION WITH $7,500,000 ASSETS (SCHEDULE A-1)	RANK LOWEST TOTAL TAXES TO HIGHEST TOTAL TAXES	TAX CATEGORY			
			REAL PROPERTY TAXES	INVENTORY INTANGIBLE PROPERTY, & GROSS RECEIPTS TAXES	PERSONAL, PROPERTY TAXES ON EQUIPMENT	INCOME, UNEMPLOYMENT AND USE TAXES
MARYLAND						
Anne Arundel County	$ 65,100	1	$36,700	$ 2,500	$ 2,500	$22,500
Baltimore City	88,800	5	58,900	3,400	4,000	22,500
Baltimore County	100,500	11	40,400	34,600	3,000	22,500
Charles County	103,600	14	29,400	33,400	18,300	22,500
Howard County	80,900	3	36,500	19,600	2,300	22,500
Montgomery County	87,900	4	40,200	22,500	2,700	22,500
Prince George's County	96,500	8	42,700	28,400	2,900	22,500
WASHINGTON, D. C.	150,000	15	37,500	46,000	39,100	27,400
VIRGINIA						
Alexandria City	99,600	10	33,500	6,600	42,100	17,400
Arlington County	97,000	9	30,600	11,000	38,000	17,400
Fairfax City	102,400	12	33,200	10,800	41,000	17,400
Fairfax County	91,800	6	34,400	6,600	33,400	17,400
Falls Church City	103,000	13	32,700	11,900	41,000	17,400
Loudoun County	92,000	7	22,400	6,600	45,600	17,400
Prince William County	69,600	2	22,500	6,600	23,100	17,400

COMMENT: Details of the individual taxes are on Schedule A-1.

Anne Arundel County, Maryland, has the lowest tax total primarily because of its exemption from local manufacturing inventory taxes. A similar exemption in Baltimore City is substantially offset by a higher real property tax. With the exception of Charles County, such an exemption has been enacted in all of the Maryland localities phasing out the inventory tax so that by 1971 manufacturing inventories will be completely exempt from local taxation. Prince William County, Virginia, has the second lowest tax total because of the low ratio of assessment to value in relation to the other localities considered. Washington, D. C., has the highest tax total because it grants no property tax exemption for manufacturing inventories or manufacturing equipment. Effective January 1, 1969, Virginia localities are prohibited from taxing gross receipts of manufacturers. Therefore, the gross receipts tax in the Virginia localities has been computed on 50% of the annual gross receipts.

A WHOLESALE CORPORATION

TOTAL MAJOR STATE AND COUNTY TAXES ON VALUES AS STATED AS OF JULY 1, 1968

	TOTAL TAXES (ROUNDED TO $100) CORPORATION WITH $4,500,000 ASSETS (SCHEDULE B-1)	RANK LOWEST TOTAL TAXES TO HIGHEST TOTAL TAXES	TAX CATEGORY			
			REAL PROPERTY TAXES	INVENTORY GROSS RECEIPTS INTANGIBLE PROPERTY AND PURCHASES TAXES	PERSONAL PROPERTY TAXES ON EQUIPMENT	INCOME, UNEMPLOYMENT AND USE TAXES
MARYLAND						
Anne Arundel County	$ 75,600	11	$36,700	$16,200	$2,500	$20,200
Baltimore City	113,300	15	58,900	30,200	4,000	20,200
Baltimore County	86,100	14	40,400	22,500	3,000	20,200
Charles County	68,400	8	29,400	16,700	2,100	20,200
Howard County	68,800	9	36,500	9,800	2,300	20,200
Montgomery County	74,400	10	40,200	11,300	2,700	20,200
Prince George's County	80,000	12	42,700	14,200	2,900	20,200
WASHINGTON, D. C.	81,800	13	37,500	23,000	1,900	19,400
VIRGINIA						
Alexandria City	61,800	6	33,500	8,800	2,100	17,400
Arlington County	54,700	3	30,600	4,800	1,900	17,400
Fairfax City	57,600	5	33,200	5,000	2,000	17,400
Falls Church City	56,500	4	34,400	2,500	2,200	17,400
Loudoun County	62,600	7	32,700	10,400	2,100	17,400
Loudoun County	42,100	1	22,400		2,300	17,400
Prince William County	49,400	2	22,500	8,400	1,100	17,400

COMMENT: Details of the individual taxes are on Schedule B-1.

The values used for the Wholesale Corporation illustration are the same as for the Manufacturing Corporation except that the manufacturing equipment has been eliminated and the inventory reduced by 50% due to a higher inventory turnover for a wholesale business. Loudoun County, Virginia, has the lowest tax total, slightly less than Prince William County, Virginia, because of the local tax on merchants' capital in the latter county. The elimination of the Virginia State tax on purchases by a wholesale merchant, which accompanied the enactment of the State sales tax, and the absence of a property tax on inventories afford the Virginia localities a significantly lower total tax as compared to total taxes for the Washington, D. C., and Maryland localities. The inventory taxes in Howard County, Montgomery County, and Prince George's County, Maryland, are being phased out so that by 1971 wholesale inventories will be completely exempt from local taxation.

EXHIBIT C

A RESEARCH AND DEVELOPMENT CORPORATION (NON-MANUFACTURING)

TOTAL MAJOR STATE AND COUNTY TAXES ON VALUES AS STATED AS OF JULY 1, 1968

	TOTAL TAXES (ROUNDED TO $100) CORPORATION WITH $2,200,000 ASSETS (SCHEDULE C-1)	RANK LOWEST TOTAL TAXES TO HIGHEST TOTAL TAXES	TAX CATEGORY			
			REAL PROPERTY TAXES	GROSS RECEIPTS AND INTANGIBLE PROPERTY TAXES	UNEMPLOYMENT TAXES	INCOME, PERSONAL PROPERTY AND USE TAXES
MARYLAND						
Anne Arundel County	$58,100	8	$18,400		$23,200	$16,500
Baltimore City	70,700	15	29,500		23,200	18,000
Baltimore County	60,400	10	20,200		23,200	17,000
Charles County	54,100	4	14,700		23,200	16,200
Howard County	57,800	7	18,300		23,200	16,300
Montgomery County	60,100	9	20,100		23,200	16,800
Prince George's County	61,500	11	21,400		23,200	16,900
WASHINGTON, D. C.	56,000	5	18,700		21,000	16,300
VIRGINIA						
Alexandria City	70,600	14	16,700	20,600	21,000	12,300
Arlington County	69,000	12	15,300	20,600	21,000	12,100
Fairfax City	57,600	6	16,600	7,800	21,000	12,200
Fairfax County	50,700	3	17,200	600	21,000	11,900
Falls Church City	70,200	13	16,400	20,600	21,000	12,200
Loudoun County	45,300	2	11,200	600	21,000	12,500
Prince William County	44,200	1	11,300	600	21,000	11,300

COMMENT: Details of the individual taxes are on Schedule C-1.

The values used for the Research and Development Corporation illustration are substantially less than the values used for the Manufacturing and Wholesale illustrations since the investment in equipment has been reduced and the inventory eliminated. Therefore, real property, gross receipts, and payroll are the primary tax bases. Prince William County, Virginia, ranks lowest in total taxes because of its relatively low property taxes and because that County, together with Loudoun County and Fairfax County which rank next lowest, does not impose a tax on gross receipts.

APPENDIX IV

TRAFFIC FLOW

ROUTE NUMBER	FROM	TO	WIDTH OF PAVEMENT	TOTAL VEHICLES
7	Route 228	Route 28	22	7,660
	Route 28	Route 641	22	7,110
	Route 641	E. C. L. Leesburg	22	8,105
	W. C. L. Leesburg	Route 9	18	7,450
	Route 9	Purcellville	18	5,495
	Purcellville	Round Hill	18	5,070
	Round Hill	Route 760	18	3,250
	Route 760	L. C. L.	18	2,665
9	West Virginia State Line	Route 287	20	1,685
	Route 287	Route 7	20	3,320
15	Maryland State Line	Route 15 by-pass	20	1,990
	Route 15 by-pass	E. C. L. Leesburg	40	1,120
	E. C. L. Leesburg	Route 50	22	2,985
	Route 50	Route 234 (out of county)	22	1,955
28	Dulles Airport Road	Route 7	24	2,475
50	Fairfax County Line	Route 15	20	5,210
	Route 15	Middleburg	20	5,425
287	Maryland State Line	Lovettsville	20	1,610
	Lovettsville	Route 693	21	1,140
	Route 693	Route 9	22	1,430
	Route 9	Route 1 at Purcellville	18	1,140
340	Maryland State Line	West Virginia State Line	24	3,710

SOURCE: Virginia Department of Highways - 24 Hour Period.

APPENDIX V

FARM STATISTICS

VALUE FARM PRODUCTS SOLD

1954	1959	1964
$9,965,621	$10,760,558	$10,945,056

FARMS BY ECONOMIC CLASS

	1950	1954
Class I-value products sold $25,000 or more	118	131
Class II-value products sold 10,000-24,999	221	129
Class III-value farm products sold 5,000-9,999	171	222
Class IV-value farm products sold 2,500-4,999	194	210
Class V-value farm products sold 1,200-2,499	154	131
Class VI-value products sold 250-1,199	138	116

FARMS BY ECONOMIC CLASS

	1959	1964
Class I-$40,000 or more	60	69
Class II-$20,000 to $39,999	132	102
Class III-$10,000 to 19,999	130	104
Class IV-$5,000 to 9,999	116	95
Class V-$2,500 to 4,999	123	108
Class VI-$50 to 2,499	55	75
Other Farms	365	265

HOGS

YEAR	NUMBER	RANK
1880	18,563	9th
1900	20,223	6th
1910	23,084	6th
1930	14,546	8th
1940	12,778	4th
1945	18,550	6th
1950	20,213	6th
1955	12,500	
1959	11,761	15th
1961	9,800	17th
1964	7,600	15th
1965	6,800	14th
1966	6,300	13th

DAIRY COWS
(2 YEARS OLD AND OVER)

YEAR	NUMBER	RANK
1880	7,385	1st
1900	8,030	5th
1910	9,595	7th
1920	11,105	3rd
1930	16,288	3rd
1940	11,491	2nd
1944	13,403	1st
1949	14,654	1st
1954	16,150	1st
1957	17,200	1st
1958	16,500	2nd
1959	15,200	2nd
1960	15,100	2nd
1961	14,700	2nd
1962	14,200	3rd
1963	13,400	3rd
1964	12,800	3rd
1965	12,000	3rd
1966	11,600	3rd
1967	11,000	4th

CORN

YEAR	ACRES	RANK
1880	41,385	3rd
1900	46,248	3rd
1920	38,213	5th
1940	28,159	5th
1945	33,717	4th
1951	25,600	6th
1955	26,000	5th
1957	23,900	5th
1959	22,500	5th
1960	23,400	4th
1962	20,700	3rd
1963	23,500	2nd
1964	23,000	3rd
1965	24,800	3rd
1966	22,400	2nd
1967	22,700	2nd

WHEAT

YEAR	ACRES	YIELD BUSHEL ACRE	BUSHELS PRODUCED	RANK
1880	35,280			3rd
1900	42,149			3rd
1920	45,846			3rd
1930	26,609			4th
1940	21,644			3rd
1945	23,871			3rd
1954	9,700	28.8	279,400	4th
1955	8,400	30.5	256,600	5th
1957	5,900	20.5	121,000	10th
1958	7,200	28.7	207,000	6th
1959	6,591		128,332	7th
1960	6,600	31.3	206,600	7th
1961	6,400	29.0	185,600	7th
1962	4,900	24	117,700	6th
1963	5,200	25	129,900	5th
1964	6,100	26.4	161,300	4th
1965	5,800	31	179,800	2nd
1966	5,500	33	181,600	2nd
1967	7,300	38	277,400	2nd

ALL HAY

YEAR	ACRES	TONS PRODUCED	RANK
1960	35,700	65,000	5th
1961	36,200	38,200	5th
1962	36,100	65,500	5th
1963	31,200	31,900	4th
1964			
1965	34,790	51,500	5th
1966	34,900	54,000	3rd
1967	37,000	54,100	3rd

BARLEY

YEAR	ACRES	BUSHELS PRODUCED	RANK
1959	5,713	181,180	2nd
1964	5,604	227,911	2nd
1967	6,600	349,800	3rd

OATS

YEAR	ACRES	BUSHELS PRODUCED	RANK
1959	3,336	159,016	1st
1964	1,826	54,166	2nd

ALL CATTLE

YEAR	NUMBER	RANK
1953	61,000	
1954	60,000	
1955	56,700	
1958	56,500	3rd
1959	56,000	3rd
1960	57,600	4th
1961	58,100	4th
1962	57,000	4th
1963	56,900	4th
1964	51,800	4th
1965	52,300	4th
1966	52,300	3rd
1967	51,500	3rd

SHEEP

YEAR	NUMBER	RANK
1890	25,451	2nd
1910	16,073	7th
1930	18,266	7th
1945	9,459	8th
1955	7,900	
1960	5,700	18th
1961	5,500	16th
1963	4,000	17th
1964	3,900	17th
1966	3,500	15th
1967	4,000	15th

	1950	1954	1959	1964
Number Farms	1,609	1,438	947	818
Acres in Farms	290,293	277,211	252,681	234,185
Average size of Farms in Acres	180.4	192.8	266.8	286.3
Value of land and Buildings:				
Average per farm	26,377	34,743	73,191	122,764
Average per acre	147.02	191.53	280.78	437.61

APPENDIX VI

CONSERVATION PROBLEMS OF DEVELOPING URBAN AREAS IN FAIRFAX COUNTY

I EROSION INCLUDING:
- (1) sheet erosion
- (2) rill erosion
- (3) gully erosion
- (4) stream channel

II FLOODING OF:
- (1) residential and commercial areas
- (2) streets and highways
- (3) parks, playgrounds and other recreational areas
- (4) sewer systems

III SEDIMENTATION AFFECTING:
- (1) open stream channels
- (2) storm sewers and drains
- (3) ponds, reservoirs, lakes
- (4) streets and highways
- (5) public and private lands
- (6) residential and commercial structures
- (7) flood plains

IV DRAINAGE - Surface and subsurface caused by:
- (1) improper land grading and smoothing
- (2) improper planning of artificial drainage structures and systems
- (3) improper installations of artificial drainage structures and systems
- (4) destruction or alleviation of natural drainageways without adequate substitutions
- (5) failure to sufficiently anticipate increased and accelerated run off following urban development.
- (6) aggravation of instability of subsoils by inadequate drainage
- (7) blocking of stream channels, inadequate culverts, faulty bridge designs
- (8) excess moisture preventing desirable vegetative cover or cultivation

(9) excess moisture creating obstacle to planned or desirable structures
(10) excess moisture limiting use of park playground and other recreational areas
(11) springs, seepage
(12) perched water tables
(13) impervious layers or hardpan with soil profile
(14) undesirable compaction affecting soil permeability and run off
(15) inadequate compaction resulting in unstable fills

V AGRONOMIC PROBLEMS - Including stabilization of:
(1) residential and commercial developments
(2) public and private institutions
(3) park lands and recreational areas
(4) road banks
(5) stream banks
(6) idle and waste land
(7) sand and gravel pits
(8) preservation of native trees and vegetative cover

APPENDIX VII

SURVEY OF THE SCOPE OF THE 1957 HORSE INDUSTRY

	VIRGINIA	LOUDOUN COUNTY	COUNTY % OF STATE
NUMBER OF HEAD:			
Light Horses	54,761	2,500	4.56
Ponies	31,206	1,000	3.20
Draft Horses	9,246	80	.01
Mules	12,408	4	.00
RIDING HUNT CLUBS			
Number	29	3	10.34
Number of Members	1,888	150	7.94
Total Number of Acres Open to Hunting Rights	498,970	128,000	25.65
RIDING SCHOOLS			
Number	120	3	2.50
Number of Students (Per Year)	6,258	150	2.39
Number of Instructors	240	20	8.33
INTERNATIONAL PONY CLUBS			
Number	10	2	20.00
Number of Members	435	110	25.28
4-H CLUB HORSE PROJECT GROUPS:			
Number of Groups	92	5	5.43
Number of Members	2,425	78	3.21
Number of Leaders	308	4	1.29
TRAINING ESTABLISHMENTS			
Number Training Five or More Animals Per Year	295	50	16.94
BREEDING ESTABLISHMENTS			
Number of Farms Owning Five or More Brood Mares	648	53	8.17
Number of Farms Standing One or More Light Horse Stallions	584	20	3.42
Number of Farms Standing One or More Draft Horse Stallions	73	3	4.10
Number of Farms Standing One or More Pony Stallions	691	2	.00
FARRIERS			
Number of Part-Time Farriers	210	5	2.38
Number of Full-Time Farriers	55	2	3.63
VETERINARIANS			
Number of Vets Spending 75% or More of Time with Equine Practice	21	1	4.76
Number of Vets Spending between 25% to 75% of Time with Equine Practice	78	4	5.12

	VIRGINIA	LOUDOUN COUNTY	COUNTY % OF STATE
HORSES ON TRACKS OUTSIDE OF VIRGINIA BUT VIRGINIA OWNED			
Number of Head Per Year	2,015	200	9.92
HORSE SALES			
Number of Organized Sales Selling Ten or More Head Per Year	60	1	1.66
Total Number of Head Sold in County in Organized Sales Per Year	12,767	50	.39
Total Number of Head Sold Out of State in Organized Sales Per Year	1,665	150	9.00
ESTABLISHMENTS BOARDING AND RENTING OUT HORSES			
Number of Established Boarding Five or More Head Per Year	375	50	13.33
Number of Established Renting Out for Riding Five or More Head Per Year	122	3	2.45
STABLES AND RINGS			
Number of Stables Housing Five or More Head	1,415	110	7.77
Number of Standard Size Rings:			
Indoor	50	3	6.00
Outdoor	492	50	10.16
PARTICIPATION AND SPECTATOR EVENTS (Shows, Gymkhanas, Rodeos, Races, Etc.)			
Number of Events	661	50	7.56
Number of Participants	32,569	2,500	7.67
Number of Spectators	377,330	80,000	21.20
TRANSPORTATION			
Number of Full-Time Horse Transportation Firms	12	1	8.33
Number of Firms Selling Trailers and Vans	32	2	6.25
INSURANCE			
Number of Companies Selling Substantial Horse Association Insurance	38	2	5.26
FEED			
Number of Businesses Selling Horse Feed	412	10	2.42
Volume in Tons of Horse Feed Sold by these Businesses:			
Hay	12,865	2,924	22.74
Concentrate	24,290	3,101	12.76

SOURCE: Loudoun County Extension Service

STAFF CREDITS

Report Preparation

GAIL C. BOLCAR, Planner

RICHARD J. CROW, Planning Technician

Clerical Assistance

PATRICE CHAMBLIN, Secretary

Final Preparation

JOSEPH R. TROCINO, Acting Director

CAROLYN D. PRICE, Planning Technician

Report available at a cost of $5.00 from:
Department of Planning and Zoning
18 East Market Street
Leesburg, Virginia 22075
Department of Planning and Zoning
18 East Market Street
Leesburg, Virginia 22075

SUMMARY OF
PROPOSALS
OF THE
COMPREHENSIVE
DEVELOPMENT
PLAN
OF
LOUDOUN COUNTY, VIRGINIA

NORTH

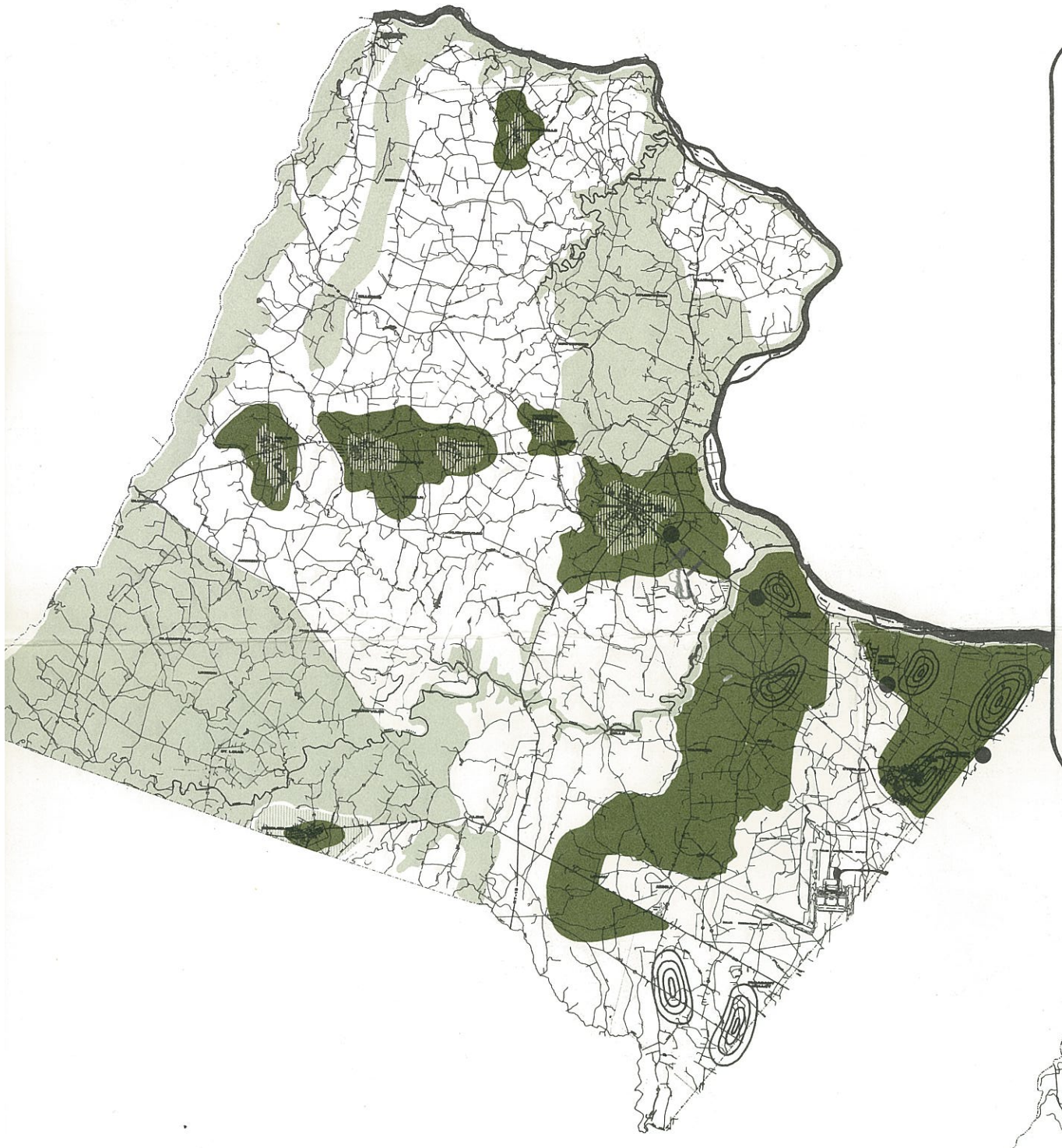
5 4 3 2 1 0 FEET IN THOUSANDS

MILES 1 2 3 4 5 10 15

Although the planning process is a familiar function in the daily conduct of business and p al life, advanced planning to achieve coordination in the public and private sectors of develo in accordance with a predetermined community pattern is a relatively recent concept. The for this type of community planning is making itself increasingly obvious. The dynamic r the population, the growth of technology, and the expansion of the national economy all p the fact that change must occur, particularly in those areas located on the perimeter of a urban center. Because the impact of the accelerated growth of the Washington area is just ning to exert an influence in Loudoun, the county is in an excellent position to prevent m the problems that so often accompany the transition from rural to suburban orientation.

Contained and presented on this sheet is a summary of the planning staff proposals presen a part of the Comprehensive Plan. The proposals cover land use, transportation, recreati conservation, and are intended as a guide for both public and private development with jurisdiction of Loudoun County.

As a member community of the Washington Metropolitan area, Loudoun County must acc share of the responsibility for the inevitable growth resulting from the expansion of the r However, it is equally important that this growth be required to conform to the high enviro al standards presently enjoyed by the county residents. The maintenance of a well ba community atmosphere will require the concern and cooperation of both the rural and oriented segments of the population. It must be the responsibility of all residents to w gether to accommodate change without causing disruption and chaos to the physical, s and economic functions of the county.



RESIDENTIAL

TOWNHOUSE OR APARTMENT
2 - 4 DU/Acre
1 - 3 DU/Acre
1 DU/Acre
1 DU/ 3 - 5 Acres
1 DU/ 5 Acres
NEW COMMUNITY

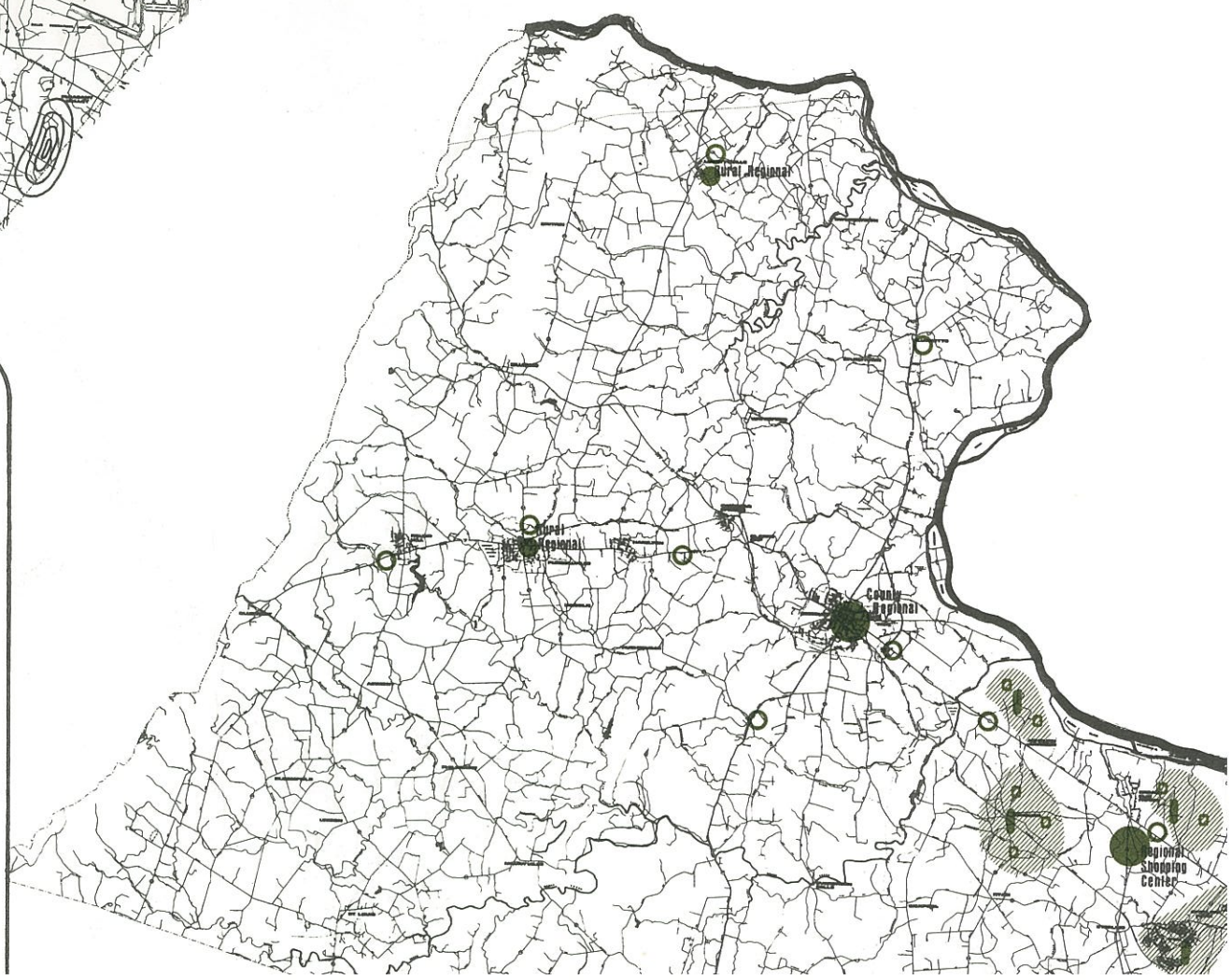
The eastern sector of Loudoun County will absorb the bulk of the proj population growth. The proposed gross density of this high impact a proximately 3 dwelling units per acre. It is recommended that the pla munity type of large tract development be encouraged wherever possi commodate this growth because of the advantages of this system over opment of smaller scattered subdivisions.

Development in and around the existing towns although subject to th of the respective governing bodies, may be somewhat higher (4 dwelling acre) in order to economize on the provision of public services and t concentrated town nucleus.

Four points along the Rt. 7 corridor have been recommended for high de dential use such as townhouses and/or apartments. These points are major intersections, and spaced approximately four miles apart.

The areas designated for 1 dwelling unit per 5 gross acres are primaril to large farms, or contain flood plain or critical slope on which de should be severely restricted.

The remainder of the land is recommended to develop at a density not t dwelling unit per 3 - 5 acres.



OMMERCIAL

REGIONAL
HIGHWAY
COMMUNITY
NEIGHBORHOOD

growing population of Loudoun County will create a demand for increased ercial facilities. These commercial areas must be designed to accommodate arious necessary functions while blending with the community environment.

eburg, Purcellville, and Lovettsville have been proposed to serve as rural nal centers, drawing their clientele from the surrounding countryside. Lees- because of its expanded consumer commercial activity combined with the ssional and governmental activities, serves the larger function of the county nal center.

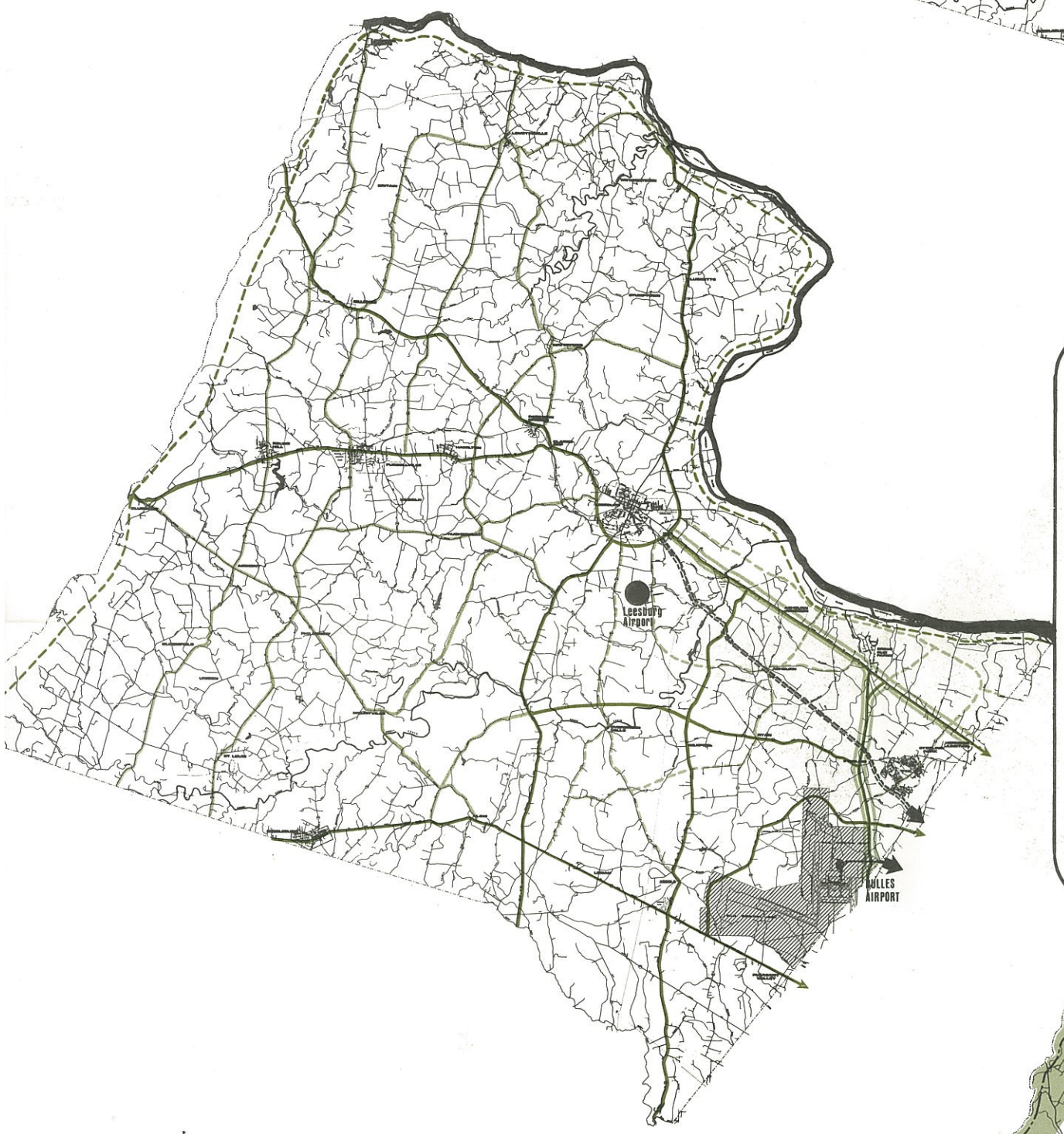
gional shopping center offering a wide variety of consumer oriented goods ervices is proposed in the vicinity of the intersection of Rt. 7 and Rt. 28. location offers good access with respect to the major traffic arteries and the ry population concentrations.

need for highway oriented commercial activity, consisting of gas stations

HEAVY INDUSTRY
MEDIUM INDUSTRY
LIGHT INDUSTRY
TECHNICAL INDUSTRY
DENOTES GENERAL LOCATION OF INDUSTRY

rimary impact of the industrial growth of Loudoun County will be felt on the ieter of Dulles Airport. This facility will attract a wide variety of industrial ity, ranging from heavy to light technical concerns. The heaviest activity is sed to be located closest to the airport and in the high decibel areas under light paths, phasing into medium and light industry out into the county. Rt. ie primary industrial road serving the county, is to be flanked with light industrial development. The Rt. 7 corridor is proposed to contain only tech- development of the highest environmental standards.

towns of Leesburg, Hamilton, Purcellville, Round Hill, Lovettsville and eburg are proposed to house a mix of light and medium industry as their po- al labor forces expand with the growing population.



TRANSPORTATION

ARTERIAL COUNTY
ARTERIAL URBAN
COLLECTOR COUNTY
COMMUTER TRAIN AND HIGHWAY
PARKWAY

The growth of the county's population will necessitate the improvem of the primary roads. To be most efficient, the circulation patterns m movement through land areas and access to individual parcels. In o serve these functions, the existing road system has been broken int gories. The arterial county roads are primarily to facilitate movement county; these will be four lane divided highways. The arterial urba designed for the movement of local urban-oriented traffic. Roads allel to Rt. 28 and Rt. 7 from Fairfax to Leesburg have been propos tion as collector roads and to allow parallel circulation without the r entering the arterial system. The county collector system is a group roads promoting circulation in the interior areas between the arteria A commuter train providing access to the Washington Metropolitan Tra rapid rail is proposed to follow the existing W. & O.D. right-of-way. sary steps should be taken to protect this easement from encroachme opment to ensure its availability at such time as sufficient need arise

ECREATION AND ONSERVATION

PUBLIC

COUNTY PARKS
DISTRICT PARKS W/ ACCESS TO POTOMAC RIVER
NEIGHBORHOOD PARKS
PLAYFIELD AT HIGH SCHOOL
PLAYFIELD AT MIDDLE SCHOOL
PLAYFIELD AT ELEMENTARY SCHOOL
PARKWAY
PEDESTRIAN AND BRIDLE PATH
APPALACHIAN TRAIL
CONSERVATION

PRIVATE

COMMUNITY
NEIGHBORHOOD

he process of urbanization advances, the need for conservation areas and loped recreation space will experience a sharp increase. These areas may overlap, because areas reserved for conservation can often be used for rec- on purposes.

proposed conservation areas represent either critical slope (15 - 20+%) and ing or potential flood plains; these areas should be protected from intensive lopment in order to prevent flooding, erosion, and siltation. The entire Poto-

COMMONWEALTH OF VIRGINIA

COUNTY OF LOUDOUN

OFFICE OF COUNTY ADMINISTRATOR

18 EAST MARKET STREET
LEESBURG, VIRGINIA 22075

PHILIP A. BOLEN
County Administrator

TELEPHONE: 777-2600
Extension 20

At a regular meeting of the Loudoun County Board of Supervisors held in the Meeting Room of the School Board Annex, 30 West North Street, Leesburg, Virginia, on Tuesday, August 19, 1975 at 10:00 a.m.

PRESENT: William C. Crossman, Jr., Chairman
Henry C. Stowers, Vice Chairman
James E. Arnold
James F. Brownell - Absent for Afternoon Session
James F. Cave
John A. Costello
Frank Raflo

IN RE: AMENDMENT TO THE LOUDOUN COUNTY COMPREHENSIVE DEVELOPMENT PLAN, ADOPTED 1969

Mr. Cave moved that the Loudoun County Comprehensive Development Plan, adopted September, 1969, be amended as follows:

> On Plate 10, "Proposed Residential Development (p. 51)" delete all symbolizations for "New Community" and "townhouse or Apts."

This amendment is made with the understanding that these symbolized recommendations may, or may not, be replaced in the Comprehensive Development Plan during the Area Planning process now underway.

* * * * * *

Voting on the motion: Messrs. Cave, Crossman, Arnold, Raflo and Costello - Yes; Mr. Stowers - No; Mr. Brownell - Absent.

A COPY TESTE:

Philip A. Bolen
County Administrator
Loudoun County Board of Supervisors

8/20/75:ljk