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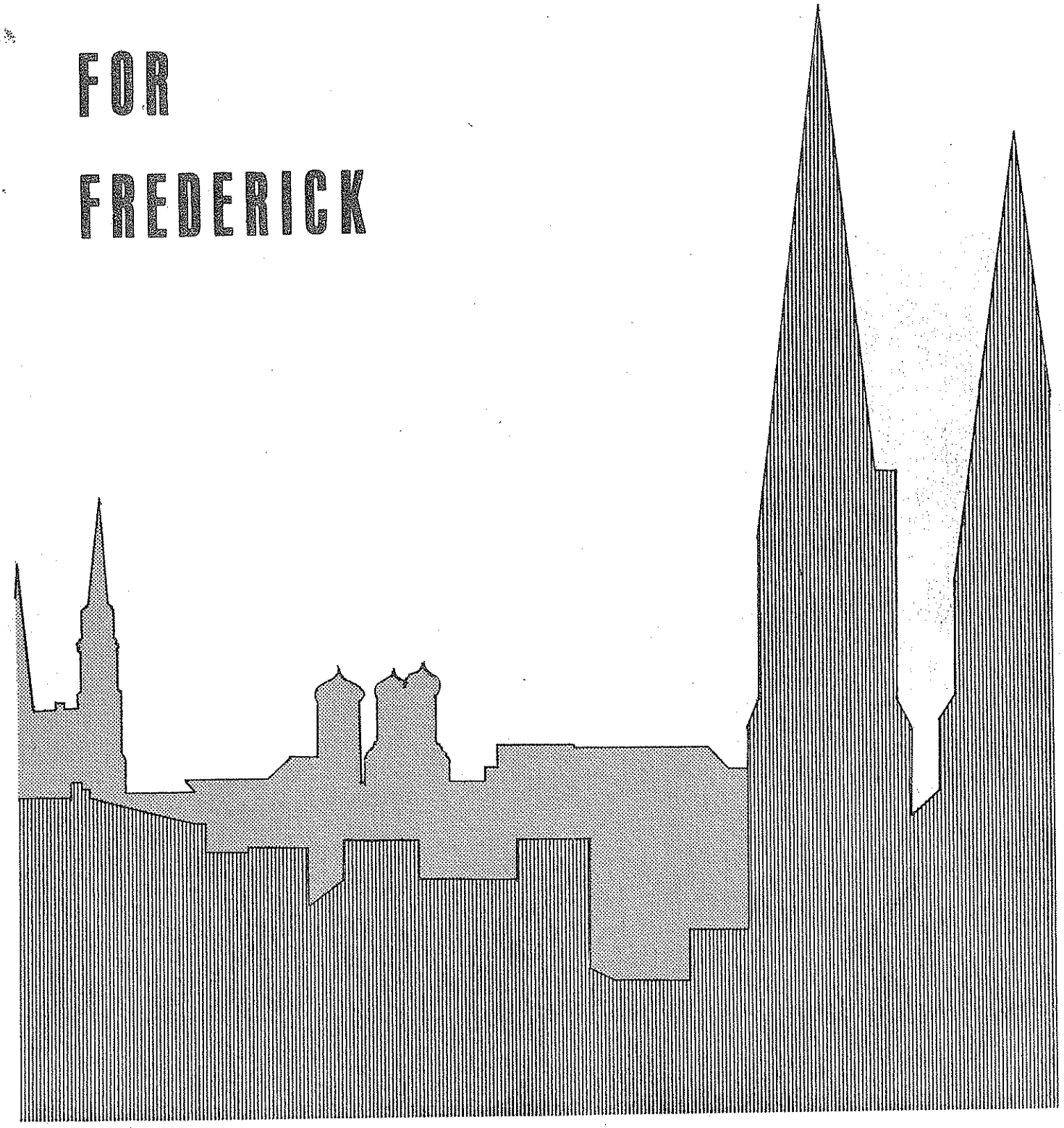
COMPREHENSIVE PLAN FOR FREDERICK



COMPREHENSIVE MASTER PLAN

for

CITY OF FREDERICK, MARYLAND

1964

The preparation of this document was financially aided through a Federal grant from the Urban Renewal Administration of the Housing and Home Finance Agency, under the Urban Planning Assistance Program authorized by Section 701 of the Housing Act of 1954, as amended.

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LADISLAS SEGOE & ASSOCIATES CITY PLANNERS
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November 10, 1964

City Planning and Zoning Commission
Frederick, Maryland
and
Maryland State Planning Department
Baltimore, Maryland

Gentlemen:

We are pleased to submit herewith our final report on the Comprehensive Master Plan for the City of Frederick and environs, prepared in accordance with our Contract of May 12, 1960. Previously submitted were a new Zoning Ordinance and maps, already adopted, and a revised set of Subdivision Regulations. Transmitted also are the various supporting studies, survey data, maps, records, plans, and other reference material prepared or acquired in connection therewith.

In the course of our work we submitted many preliminary and revised drafts of the various parts of this Plan, some of which have been adopted and are in effect. The Land Use Plan was adopted by the Board of Aldermen on July 5, 1962, and the Zoning Ordinance on January 29, 1964, while the Planning Commission has adopted or tentatively approved the Major Street Plan (January 7, 1963), the new Subdivision Regulations (August 10, 1964), the Parking Facilities Plan (November 9, 1964), and the Recreation and Annexation plans. The new Zoning Ordinance and Map has been published separately but is described and explained in the present report and the Zoning Map is reproduced here also.

So much genuine interest and real assistance have been contributed by so many people, in connection with these studies and the preparation of the plans and recommendations, that it is impossible to recognize tham all. We wish to express our appreciation to all of them. Particularly do we want to thank the members of the Planning Commission and the Board of Aldermen, Mayor Magaha and his predecessor Mayor Ramsburg, City Engineer Robert Whiteford, and all the other officials listed on one of the following pages, for their helpful cooperation and constructive suggestions.

Cities, like individuals, must continually strive to look ahead and plan intelligently for their growth and betterment. They must keep abreast of modern requirements, tests, and standards, and must augment or replace various parts of their physical plants whenever rendered inadequate or obsolete by age or technological advances. To have assisted Frederick and its people in their search for answers to the never-ending problems of urban growth and complexity has been a privilege.

Sincerely yours,

LADISLAS SEGOE & ASSOCIATES

Julian Tarrant

Julian Tarrant, Senior Associate

JT:ccb

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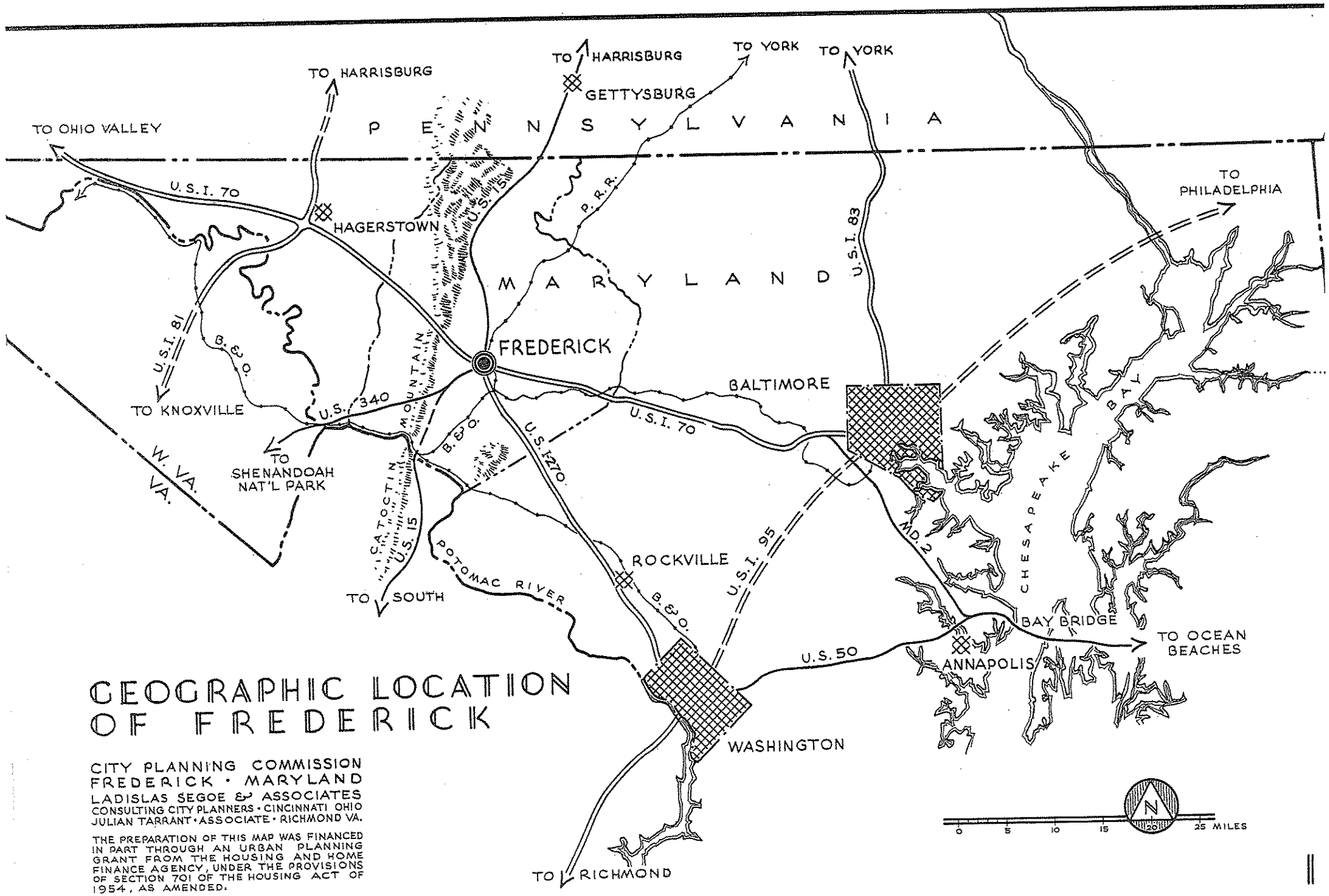


GEOGRAPHIC LOCATION OF FREDERICK

CITY PLANNING COMMISSION
FREDERICK · MARYLAND
LADISLAS SEGOE & ASSOCIATES
CONSULTING CITY PLANNERS · CINCINNATI OHIO
JULIAN TARRANT · ASSOCIATE · RICHMOND VA.

THE PREPARATION OF THIS MAP WAS FINANCED IN PART THROUGH AN URBAN PLANNING GRANT FROM THE HOUSING AND HOME FINANCE AGENCY, UNDER THE PROVISIONS OF SECTION 701 OF THE HOUSING ACT OF 1954, AS AMENDED.

THE SETTING

Location

The city of Frederick is the economic and administrative center of Frederick County, which is the Number One dairy county in Maryland and 17th in rank in the entire United States. Located at a junction point on the Federal Interstate Highway System, 48 miles west of Baltimore and 45 miles from Washington, this city is the western gateway to both these important metropolitan areas. Through this point also runs U. S. Highway 15, a major north-south artery that is growing in favor as a tourist route between the northern population centers and the vacation areas in Virginia, the Carolinas, and farther south.

Plate 1. "Geographic Location of Frederick", shows the city's position with respect to the metropolitan areas of Baltimore and Washington as well as lesser centers. U. S. Route 15 extends northward to Gettysburg (34 miles), Harrisburg, and other cities farther north with connections to Philadelphia and New York; southward this route leads to various destinations. U. S. Route 340 extends southwestward to the Blue Ridge Mountains, Shenandoah National Park, and the Shenandoah Valley. U. S. Route 40 and the future Interstate Route 70 run westward from Frederick to Hagerstown (25 miles) and on to the Ohio River Valley and the Great Lakes. Other state highways radiate in various directions. From the standpoint of highway transportation, Frederick is strategically located for many types of manufacturing and distribution, as well as service to the traveling public.

Railroad freight service to Frederick is provided by the B & O Railroad over a short spur from its old main line from Baltimore to the west, and by the Pennsylvania Railroad over a branch line reaching southward from its main line at York, Pennsylvania.

Frederick lies in the broad fertile valley of the Monocacy River, about 12 miles north of the Potomac River and 5 miles east of the Catoctin Mountain which is the easternmost ridge in the Allegany System. The valley is fairly level but adequately drained and well suited to urban development. Across the Monocacy to the east the country is gently rolling to hilly. Farms and scattered suburban homes surround the city.

History

The town of Frederick was laid out in 1745 and incorporated in 1817, by which time it had a population of about 3,600. The early settlers consisted of Germans from the "Pennsylvania Dutch" region to the north, and of English people from eastern Maryland. The German culture has left its stamp on the city in the form of interesting architecture, names, and otherwise.

Following the Indian Wars of the mid-eighteenth century, the town grew and became an important trading center. It was at the cross-roads of two early highways, the road from Pennsylvania into the Shenandoah Valley and the old National Pike, the first public road to the western frontier built by the

Federal Government. In 1756 the first County Court House was built, to be replaced in 1861 by the present building.

The original Town Plat of 1745 (Plate 2) provided for lots 60 to 63 feet wide and 300 to 393 feet deep. Many of these lots were subsequently divided in half, and then divided again, producing a pattern of very deep but narrow lots which now creates a problem in land utilization. The principal streets were 60 feet wide, reasonably adequate by today's standards, but most of the cross streets were little more than alleys. Present circulation difficulties in the center of town are directly traceable to this short-sightedness in early planning.

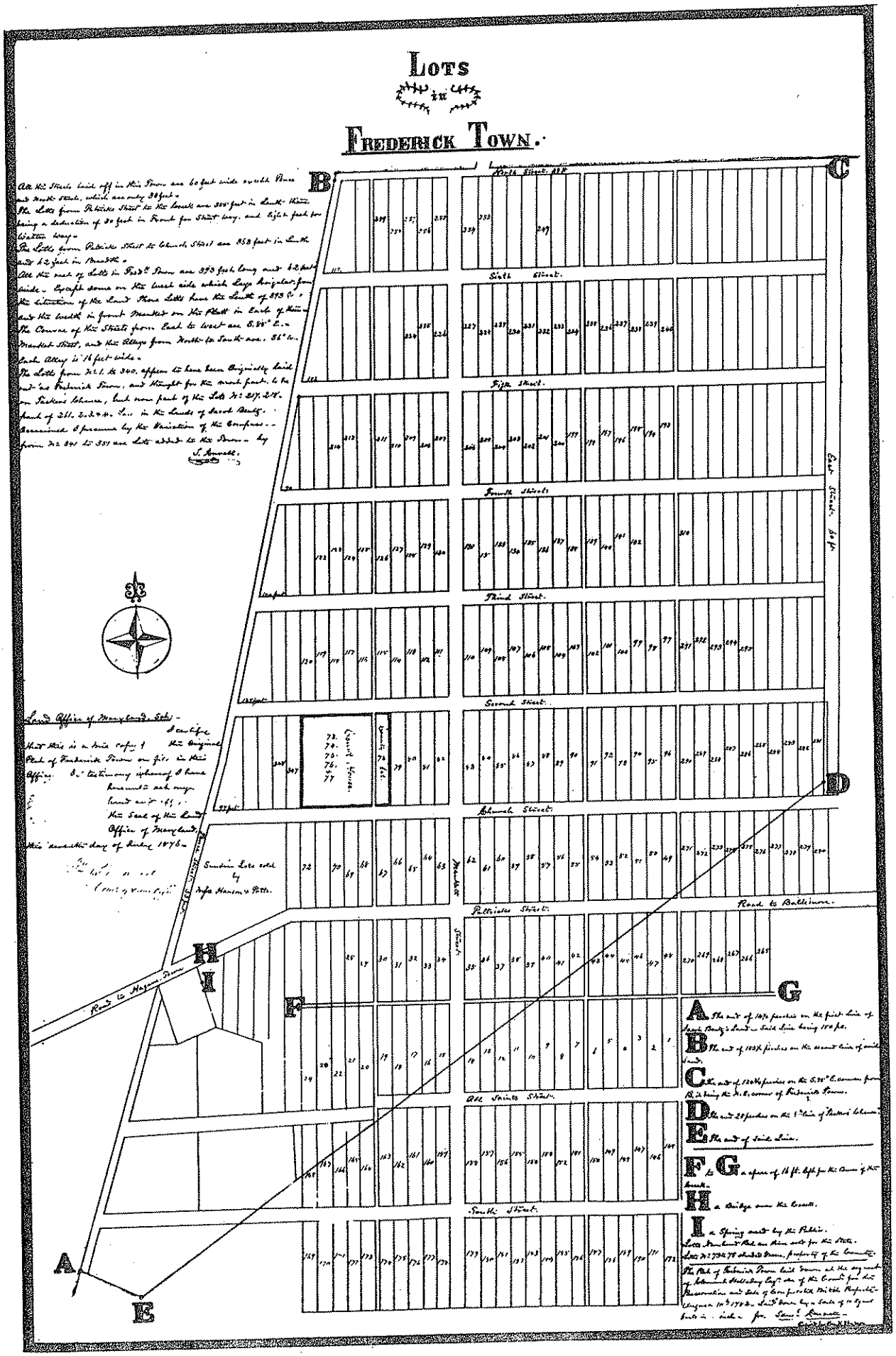
Many interesting historical events have taken place in Frederick, leaving their marks in the form of old buildings or otherwise. During the French and Indian Wars this town was a center of activity. In 1765, in the original Frederick County Court House, the first official rebellion took place against the British Stamp Act which contributed to its ultimate repeal. During the Revolutionary War the city served as a military center for the British; some of the original barracks may still be seen on the present grounds of the State School for the Deaf. Francis Scott Key, author of The Star Spangled Banner, was born nearby and is buried here in Mt. Olivet Cemetery. Frederick was the home of Thomas Johnson, first governor of Maryland and a Revolutionary patriot, whose estate "Rose Hill Manor" is located on the north edge of town. It was also the home of U. S. Chief Justice Roger Brooke Taney, author of the Dred Scott decision, whose house is now a museum on South Bentz Street.

In 1831 Frederick became the western terminal of the B & O Railroad, operated at first with horse or mule power. The old B & O Freight Depot here is said to be the oldest in the world.

Frederick played a key role in the Civil War. It was occupied at one time or another by Robert E. Lee, Jeb Stuart, and Stonewall Jackson, which gave rise to the story about Barbara Fritchie as immortalized in the poem by John Greenleaf Whittier. The "Barbara Fritchie House", actually a reproduction, continues to be a tourist attraction on West Patrick Street. Another interesting Civil War story concerns the raid on the city by General Jubal A. Early in which he imposed a ransom on the city of $200,000. The money was raised by loans from the local banks and the city was spared. It took many years for the city to repay these loans but the debt has been settled and the city is justly proud of its record.

Numerous battles and skirmishes were fought during the Civil War in and about Frederick. One of these occurred on the banks of the Monocacy River just outside of town, while others took place at Catocin Creek, South Mountain, Antietam, Sharpsburg, Gettysburg, and various other places.

Among the historic assets of Frederick are its old churches, the spires of which form a distinctive landmark. One of the oldest and most beautiful is Trinity Chapel, of which the tower and spire are 140 years old. Still older are the original parts of this structure, erected by German settlers in 1763. Many other public and private buildings dating from the early days have been preserved as a part of Historic Frederick. These older sections of the city


LOTS
in
FREDERICK TOWN.
All the Streets laid off in this Town are 60 feet wide except Pence and North Streets, which are only 30 feet.
The Lots from Patricks Street to the Creek are 355 feet in Length thus being a deduction of 30 feet in Front for Street way, and Eight feet for Water way.
The Lots from Patricks Street to Church Street are 358 feet in Length and 62 feet in Breadth.
All the rest of Lots in Fred^k Town are 393 feet long and 62 feet wide. Except some on the West side which Lays Irregular from the situation of the Land. Those Lots have the Length of 393 ft. and the Width in front Marked on the Plat in Each of them.
The Course of the Streets from East to West are E. 88° E. Market Street, and the Alleys from North to South are 86° W.
Each Alley is 16 feet wide.
The Lots from No. 1. to 340, appear to have been Originally laid out as Frederick Town, and thought for the most part to be on Tackers Chance, but now part of the Lots No. 217. 218. part of 261. 2. 3. & 4. Lies in the Lands of Jacob Bentz. Occasioned I presume by the Variation of the Compass. from No. 341 to 351 are Lots added to the Town by
S. Amvell.
Land Office of Maryland, Sch.
I certify that this is a true copy of the Original Plat of Frederick Town on file in this Office. In testimony whereof I have hereunto set my hand and affix the Seal of the Land Office of Maryland this seventh day of July 1876.
North Street. 80 ft.
Sixth Street.
Fifth Street.
Fourth Street.
Third Street.
Second Street.
Church Street.
Patricks Street.
All Saints Street.
South Street.
East Street. 60 ft.
Market Street.
Road to Baltimore.
Road to Hagans Town
Sundain Lots sold by Mrs. Hanson & Potts.
A The end of 14½ perches on the first line of Jacob Bentz's Land — Said Line being 150 pe.
B The end of 183½ perches on the second line of said Land.
C The end of 124¾ perches on the S. 88° E. corners from B. it being the N. E. corner of Frederick Town.
D The end 28 perches on the 5th line of Tackers Chance.
E The end of said Line.
F to G a space of 16 ft. left for the Bones of the Creek.
H a Bridge over the Creek.
I a Spring used by the Public.
Lots Number Red are those sold for the State.
Lots No. 73 & 78 shaded Green, property of the County.
The Plat of Frederick Town laid down at the request of Edmund Holladay Esq. Clk. of the Court for the Reservation and Sale of Corporation British Property. August 11th 1784. Laid down by a Scale of 10 Sq. Feet to the inch for Saml. Amvell.

form today a priceless heritage that must be recognized and preserved for the future through sympathetic planning, zoning and conservation or restoration measures.

Although Frederick was incorporated in 1817, no record has been located of its original size or boundaries. Plate 3 shows the earliest known city boundary of 1870, at which time the municipality embraced about 2.5 square miles. The city then extended about one mile to the east and west of Market Street, one mile to the north of Patrick Street, and one-half mile to the south of the Patrick and Market intersection. At subsequent intervals it appears that the city was reorganized under a succession of new charters with a slightly different boundary each time. In 1892 the boundary was contracted to enclose an area of only 1.6 square miles, but in 1908 it was expanded again to almost the same as in 1870. Further enlargements took place in 1924 and 1929. The present boundary was established for the most part in 1947 when a sizeable enlargement took place. One small addition since then eliminated a narrow strip between the city and Fort Detrick. The present city covers some 3,200 acres or 5.0 square miles.

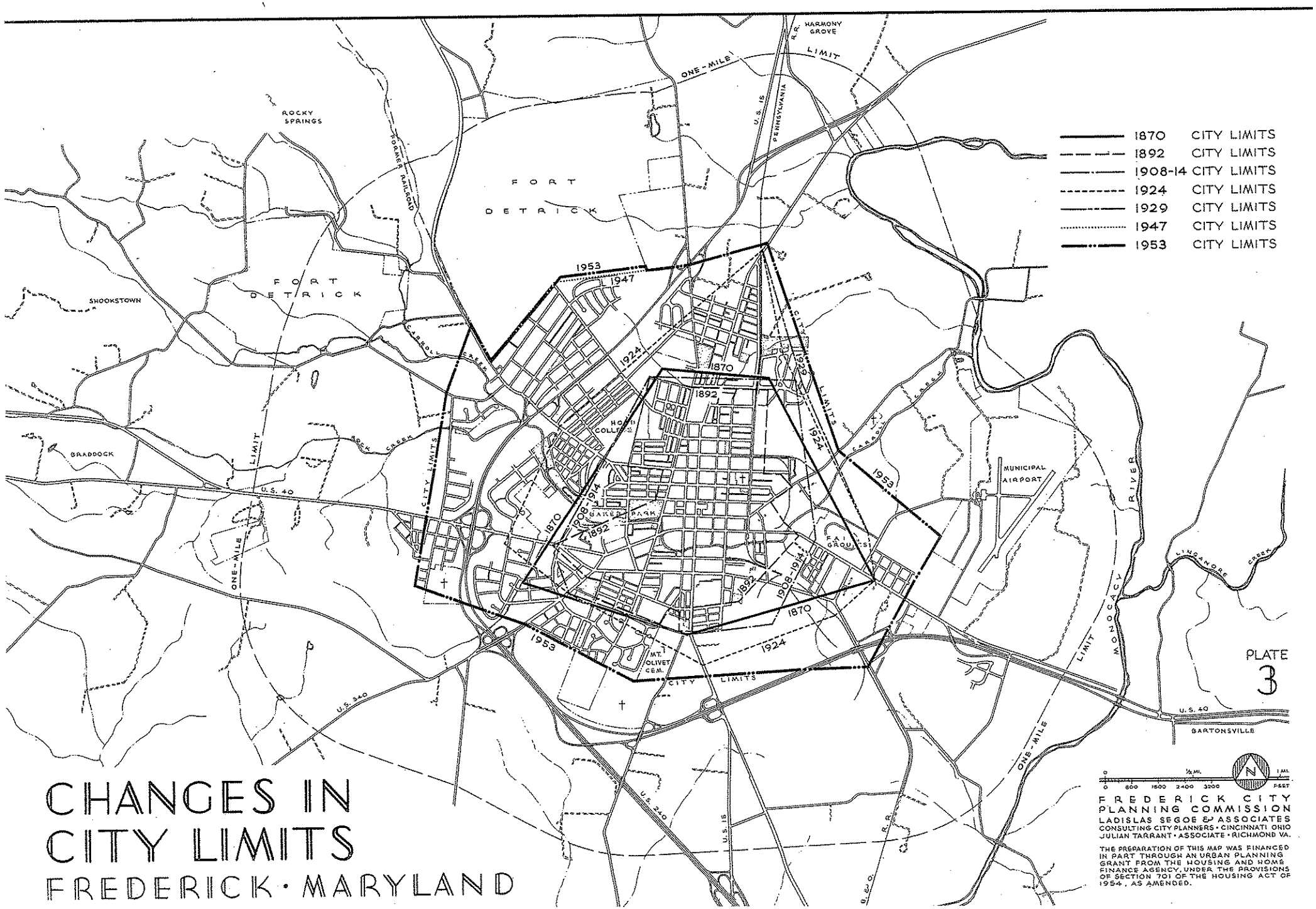
General Characteristics

Frederick is a self-contained city with a population in 1960 of 21,744 persons. In number of persons it is the fifth largest city in Maryland, outside of the Baltimore and Washington metropolitan areas. Its incorporated area extends about three miles east and west and about 2-1/3 miles north and south. Beyond the corporate limits the city has zoning and subdivision control authority for one additional mile, making the total planning area some 15 or 16 square miles in size.

The city lies almost entirely within the gently sloping basin of Carroll Creek, a minor tributary of the Monocacy River. Its elevation ranges from about 280 to 350 feet above sea level, except for a higher ridge in the southwest corner that reaches 440 feet or more. The climate is warm, temperate and rainy, with hot summers, mild winters, and no regular dry season. Average annual precipitation is about 40 inches or more. Winds from October through June are apt to be from the northwest and cold; in the summer they are more likely to be from the southwest and to be warm and moist.

The eastern edge of the city lies over a bed of commercially important limestone extending in a north-south belt along the axis of the valley. One major limestone mining company is located just southeast of the city while another is at Limekiln, about five miles south.

In addition to its highways and railroad connections, Frederick has a municipal airport just east of the city which is reported by the Federal Aviation Agency to be adequate for any type of plane that is likely to use it during the next five years. There are two paved runways up to 3,800 feet in length, with administration and service buildings, and there is provision for a third runway if needed and for extensions to those existing. The city does not have any scheduled air service. The only common-carrier passenger service is provided by the Greyhound Bus Lines, but there is ample through truck service direct to more than 25 states.



CHANGES IN CITY LIMITS

FREDERICK · MARYLAND

Public water and sewer facilities are provided by the city of Frederick within its corporate limits. Fort Detrick has its own water supply and sewage disposal systems. Electric power is furnished by the Potomac Electric Company over three transmission lines having capacities of 138,000 volts each. These lines extend from generating plants in the Hagerstown area and in West Virginia, and by interconnection through them with the national power grid. Natural gas from the West Virginia and Kentucky fields is fed into the city through a branch pipe line from the Atlantic Seaboard Corporation's mains that lead to Baltimore.

Frederick has two daily newspapers, morning and evening, and a local radio station. It is within good reception distance of several television stations in the Baltimore and Washington areas.

Frederick is the home of Hood College, a liberal arts school for women. It is also the site of the Maryland School for the Deaf. The economy of Frederick is well diversified. It has a variety of manufacturing establishments and is important as a wholesale and retail distribution center, as well as being a focal point for tourists and small conventions. The biggest local industry, however, is the United States Army with its biological research laboratory and production center, and an important communications center, both located at Fort Detrick adjoining the city. County and State government employment in Frederick helps to round out its economic base.

Frederick has a total of 33 manufacturing establishments of which 9 are major plants employing 50 or more persons each. Topping the list is a manufacturer of men's suits with an employment of about 650. Other major products include brushes, electronic and electrical equipment, optical goods, forge and foundry products, household wares, leather goods, cement, limestone products, building materials, canned goods, and prefabricated homes. During the past ten years the city gained ten new plants while only two have been lost.

In retail trade, Frederick serves all of Frederick County plus some parts of adjoining counties, especially to the north in Pennsylvania and to the south and southwest in Virginia and West Virginia. Some 18% of its labor force is engaged in retail trade, a figure somewhat higher than average for Maryland cities in general. Higher proportions are employed also in the fields of business repair and personal service, professional and related services, and public administration (see Table 1).

The governing body of Frederick consists of a Mayor and a Board of five Aldermen, elected at large and for terms of four years each. The only other elective office is that of the City Registrar and Collector of Taxes. The various city department heads and employees are responsible to the Mayor who is the chief executive officer and head of the administrative branch of city government, and the Mayor in turn is responsible to the Board of Aldermen.

In the decade between 1950 and 1960 the city had a healthy population increase of approximately 20%, without benefit of any significant annexation. Part of this was due to natural increase but there was some in-migration as well. Almost 90% of the population is native white stock and there is a good balance between older and younger people. Median family incomes averaged about 16% lower in 1959 than the average for Maryland urban centers in general.

Frederick is a city of homes, but only a little more than half of them are owner-occupied. Apartments, row houses, and other forms of multi-family dwellings make up a substantial 30% of the total. Almost four-fifths of all dwellings were built prior to 1950, some of them going back 150 years or more. In spite of such age, only 2.4% of all dwelling units in 1960 were reported to be dilapidated. The vacancy rate is exceptionally low.

Additional details as to the general characteristics of the city, with comparisons for Hagerstown, Rockville, and the Maryland urban communities as a whole, will be found in Table 1.

Table 1

GENERAL CHARACTERISTICS

Frederick and Comparative Areas
1960

	Frederick	Hagerstown	Rockville	Maryland Urban
Population				
Total	21,744	36,660	26,090	2,253,832
% Increase 1950-60	19.9	1.1	276.3	39.5
% White	89.2	98.9	93.8	82.3
Median Age (yrs.)	30.6	33.3	21.6	29.4
Civilian Labor Force				
Total	9,169	15,383	9,133	898,987
% Employed	94.27	91.38	98.83	95.3
% Employed in:				
Manufacturing	17.3	30.4	9.3	25.1
Retail Trade	18.0	17.8	15.7	15.1
Wholesale Trade	3.2	3.4	2.8	3.2
Business Repair and Personal Service 1/	9.0	8.8	9.1	7.5
Professional & Related Services	15.8	10.6	17.7	12.8
Public Administration	12.9	4.2	20.6	11.6
Construction	7.6	4.4	8.6	5.6
Other	16.2	20.4	16.2	19.1
Incomes				
Median Family Income, 1959	$ 5,548	$ 5,207	$ 7,602	$ 6,657
% Less than $2,000	11.6	12.1	3.7	7.2
% More than $5,000	57.4	52.7	81.6	69.8
Housing				
Total Dwelling Units	6,911	12,911	6,536	677,839
% Detailed 1-family	70.2	69.7	85.2	75.7
% Built 1950 or later	21.1	12.7	72.2	32.5
% Dilapidated	2.4	5.1	1.3	2.4
% Vacant, suitable & Available	1.6	3.8	2.5	3.3
Occupied Dwelling Units	6,675	12,145	6,315	645,108
Persons per Occupied Unit	3.1	3.0	4.0	3.4
% Owner-occupied	51.8	43.5	75.1	62.6
Median Value Owner-occupied Units	$ 13,300	$ 10,300	$ 14,700	$ 12,100

1/ Excluding private households.

Source: U. S. Census reports

THE PEOPLE OF FREDERICK

Present Population

At the time of the 1960 Census, the city of Frederick had 21,744 residents while the Frederick Election District as a whole had 24,010. If the Lewistown, Tuscarora and Braddock election districts were to be counted also, this combined area, comprising the "Frederick Geographic Region" as defined in the Frederick County population study, would have had a total of 30,182 people or 42% of the entire county population.

By the end of 1962, the population of Frederick will undoubtedly have gone well past the 22,000 mark.

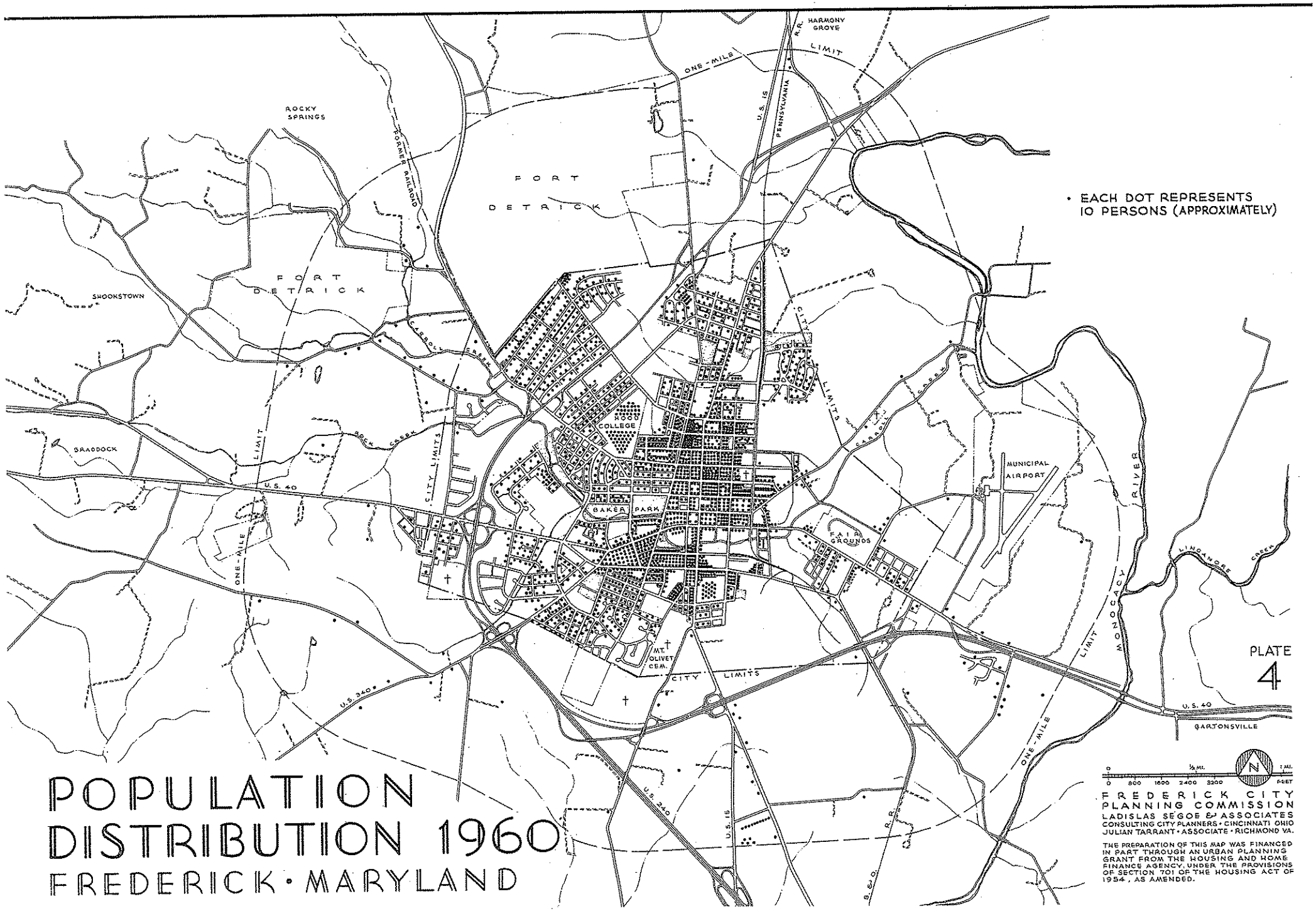
Distribution and Density

By reference to Plate 4, Population Distribution 1960, it will be seen that the population within the city is by no means evenly distributed. Most of the people live in the central area or in the northern, northwestern,or southwestern sections, while two or three small clusters are located in the eastern portions. Beyond the city limits the population is quite sparse by comparison, although in several places the urban development is now pushing over the city line. Plate 4 was developed from information gathered in the Land Use Survey of 1960 and from detailed census information by enumeration districts.

Especially noticeable on the population distribution map are certain heavy concentrations as well as many voids. In the old central portion of the city, characterized by narrow lots, row houses, apartment buildings and the like, population densities of 50 to 75 persons per net acre are typical. This density is equivalent to about 25,000 per square mile. In the newer residential areas to the northwest, for example, the density ranges from 15 to 20 persons per acre or about 7,000 per square mile. Small concentrations of dots represent multiple housing developments such as along Bentz Street between Fifth and Seventh where the population density exceeds 100 persons per acre. Other groups of dots represent certain institutions such as Hood College where 575 residents were enumerated, and the State School for the Deaf with 195 persons.

White spaces on the map represent farms or other unsubdivided areas as well as industrial areas, institutions, commercial developments, parks, schools, cemeteries and the like. A full accounting of these areas will be found in the chapter on Land Uses.

Within the city limits as a whole, the population density in 1960 was 4,349 persons per square mile. This is somewhat greater than in Annapolis or Cumberland, cities of comparable size, but not as dense as in Hagerstown, which averaged almost 5,100 per square mile. It is considerably greater than in Rockville (3,727 per square mile) where a recent annexation has eased the pressure on the older city. The ideally-planned city of Greenbelt, having approximately the same land area as Frederick, has a population density of only 1,500 per square mile, while the average density of all the 213 "urbanized areas" in the United States is only 3,752 per square mile.



POPULATION DISTRIBUTION 1960

FREDERICK · MARYLAND

PLATE 4

FREDERICK CITY PLANNING COMMISSION
LADISLAS SEGOE & ASSOCIATES
CONSULTING CITY PLANNERS · CINCINNATI OHIO
JULIAN TARRANT · ASSOCIATE · RICHMOND VA.

THE PREPARATION OF THIS MAP WAS FINANCED IN PART THROUGH AN URBAN PLANNING GRANT FROM THE HOUSING AND HOME FINANCE AGENCY, UNDER THE PROVISIONS OF SECTION 701 OF THE HOUSING ACT OF 1954, AS AMENDED.

Through these comparisons it may be seen that Frederick has reached a fairly high density for its size. Additional space should be provided for growth within the city through annexation. A program of annexations that will keep the average density within reasonable limits is recommended later in this report.

Growth Trends and Projections

One of the major objectives in city planning is to anticipate the probable future growth and requirements of the city and to provide for normal expansion in an adequate, orderly and efficient way. The allocation of land for future development, the determination of the nature, appropriate locations and extent of municipal facilities that will be needed, and the projection of a favorable pattern of urban expansion in general, must obviously be attuned to the number of people that may be expected over a period of years ahead and their various needs. Toward this end it is necessary, therefore, to chart the trends of growth and make certain forecasts concerning probable future population of the community. These forecasts set the geographic scale for the probable size of the future city and the prospective need and timing of facilities and services to accommodate such growth.

Since 1900 the city of Frederick has enjoyed a healthy and consistent rate of growth. Plate 5 reveals graphically how the city has increased in population each decade, in relation to other comparable cities in Maryland, as well as the state as a whole and the United States. By the use of a logarithmic scale for the vertical coordinate of this chart it is easy to make direct comparisons between the rates of growth of the different cities, state and nation, regardless of size. For any part of a curve the angle of inclination is proportional to the rate of growth; therefore, any two parallel curves or portions thereof will have the same rate of growth.

Frederick's growth has been commensurate in general with that of the state and United States. It has been faster than that of Hagerstown or Cumberland, but slower than the Maryland urban population as a whole which is dominated of course by the metropolitan centers of Baltimore and Washington. Nor has Frederick experienced the rapid expansion of Rockville into which the overflow from Washington has recently been crowding. The upturn of the Frederick curve since 1950 does give a hint, however, of the approaching tide.

Detailed figures on the past growth of Frederick and related areas will be found in Table 2. Frederick had substantial gains of 30% and 14% respectively in 1930 and 1950, due in part to annexations. In the decade ending with 1960 the city experienced a 20% increase without benefit of annexation - an indication of acceleration in the rate of growth. Further analysis shows that this growth in the last decade consisted of about 14% by natural increase (births less deaths) and 6% by in-migration. This 20% increase constituted a higher rate of growth than for the nation as a whole (18.5%) but considerably less than that for Maryland. Due primarily to its two metropolitan centers, Maryland in the last decade was the fastest growing state on the Atlantic Coast with the exception of Florida and Delaware, and was the ninth fastest growing in the whole United States.

Table 2

POPULATION TRENDS - CITY AND RELATED AREAS

Frederick, Maryland

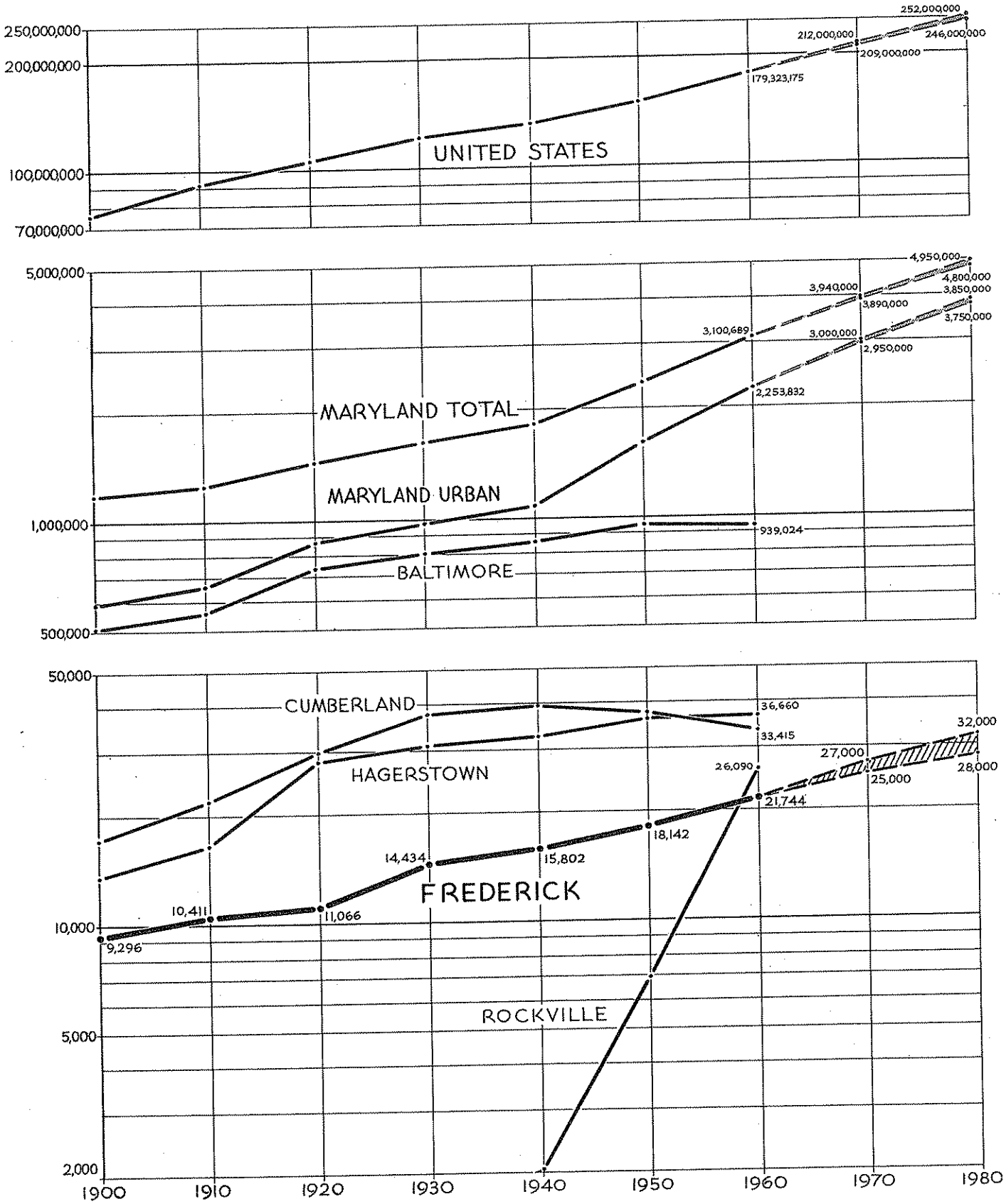
Year	Frederick			Hagerstown			Cumberland			Md. Total % Inc.	Md. Urban % Inc.	U.S. Total % Inc.
	Population	Increase No.	Increase %	Population	Increase No.	Increase %	Population	Increase No.	Increase %			
1850	6,028	846	16.3	3,879	254	6.9	6,073			24	65.1	35.9
1860	8,143	2,115	35.1	4,132	253	6.5	4,078	-1,995	-32.9	17.8	24.1	35.6
1870	8,526	383	4.7	5,779	1,647	39.9	8,056	3,978	97.5	13.7	26.6	22.6
1880	8,659	133	1.6	6,627	848	14.7	10,693	2,637	32.7	19.7	27.2	30.2
1890	8,193	-466	-5.4	10,118	3,491	52.7	12,729	2,036	19.0	11.5	31.9	25.5
1900	9,296	1,103	13.5	13,591	3,473	34.3	17,128	4,399	34.6	14.0	19.3	21.0
1910	10,411	1,115	12.0	16,507	2,916	21.5	21,839	4,711	27.5	9.0	11.3	21.0
1920	11,066	665	6.3	28,064	11,557	70.0	29,837	7,998	36.6	11.9	32.1	15.0
1930	14,434	3,368 1/	30.4	30,861	2,797	10.0	37,747	7,910	26.5	12.5	12.1	16.2
1940	15,802	1,368	9.5	32,491	1,630	5.3	39,483	1,736	4.6	11.6	10.8	7.3
1950	18,142	2,340 2/	14.8	36,260	3,769	11.6	37,679	-1,804	-4.6	28.6	49.7*	14.5
1960	21,744	3,602	~~20.1~~ 19.9	36,660	400	1.1	33,415	-4,264	-11.4	32.3	39.5	18.5

* Due partly to change in definition of "Urban"

1/ Increase due partly to annexations in 1924 and 1929

2/ Increase due partly to annexation in 1947

Source: U. S. Census of Population 1950 - 1960



POPULATION TRENDS & PROJECTIONS

FREDERICK • MARYLAND
CITY PLANNING COMMISSION

LADISLAS SEGOE & ASSOCIATES
CONSULTING CITY PLANNERS
CINCINNATI • OHIO
JULIAN TARRANT • ASSOCIATE
RICHMOND • VIRGINIA

FINANCED IN PART THROUGH AN URBAN PLANNING GRANT FROM THE HOUSING AND HOME FINANCE AGENCY UNDER SECTION 701 OF THE HOUSING ACT OF 1954 AS AMENDED

The city of Frederick has been growing at a faster rate than Frederick County as a whole - in keeping with the national trend toward urbanization. For this reason it may be expected to become more and more the dominant population center of the county.

Attempts to estimate the future population of an area are fraught with pitfalls because of the many unpredictable variables involved. Among these are the accelerating pace of technological changes, the rising social standards with respect to the mode of living, doing business, industrial production, land use and building practices, etc., and of course the uncertain birth rates of the future. The U. S. Bureau of the Census has made intricate projections as to births, deaths and migration, but these are corrected periodically in accordance with changing conditions. It is now generally recognized that population projections, in order to be meaningful for any given locality, ought not to exceed a period of twenty or twenty-five years. Experience has shown that certainly within such a period any city master plan needs to be revised anyway, in the light of the rapid technological and social changes just mentioned as well as the constant advances in community planning standards and techniques.

Accordingly, it should be understood from the outset that the population projections contained herein are to be regarded simply as approximations - to serve as general guides in the dimensioning of the various component elements of the Master Plan for Frederick. In brief, the Master Plan is designed to accommodate and provide the needed facilities for the projected population. It will make little difference in the value of the Plan as a guide whether a specific population figure is reached on the exact date listed or at some earlier or later date. Sometime before 1980 there will undoubtedly need to be another re-examination and extension of the Master Plan in the list of actual developments.

In order to minimize the chances of error in estimating the future population of Frederick, a number of approaches were employed from which a range of probabilities was determined based on different assumptions and methods. First it was assumed that the total population of the United States by 1980 will be in the neighborhood of 246,000,000 to 252,000,000, in accordance with studies published by the U. S. Bureau of the Census on July 6, 1962. The lower figure of 246,000,000 assumes that the fertility rate by 1965 or 1970 will have declined to the level of 1949-51, from its 1955-57 high, after which it will remain stable until 1980. The higher figure of 252,000,000 is an average between the low figure (Series III) and another set of assumptions (Series II) under which the fertility rate would remain constant at the 1955-57 level until 1980. Actually, the birth rates have been declining gradually since the post-war highs of 1957, more in accordance with the Series III assumptions. The resulting projections of United States population for 1970 and 1980 are indicated on Plate 5.

Estimates of the probable future population of Frederick were based on its past growth trends, already described, and studies of the various relationships between the growth of the city and that of the county, state and United States, both urban and total. Table 3 shows the trends of these ratios in six different series, from 1920 to 1960. By plotting these ratios on graphs and

their projections relative to the prospective national growth, several sets of projections were obtained for Frederick City. The most reasonable of these were selected for illustration on Plate 5 and in Table 4. Based on these assumptions, it appears that Frederick should expect to grow another 28% to 47% in the next twenty years or so, reaching a population in the neighborhood of 28,000 to 32,000 by about the year 1980.

Among the considerations entering into these population projections are the strategic geographical location of Frederick with respect to transportation, availability of certain raw materials, and access to major markets; its favorable climate; its diversified economy and record of past growth; and of course the continued rapid growth that is in prospect for Maryland as a whole which has been estimated at 24% to 25% between 1960 and 1970 alone. Outward growth from the Baltimore and Washington centers has been spreading in ever-widening circles, and Frederick is certain to be affected accordingly. For this reason it is very possible that the foregoing estimates for 1970 and 1980 will prove to be conservative. Provision should therefore be made by the Master Plan - in the allocation of land for residential and other uses, the reservation of desirable open spaces, anticipation of traffic increases and the like - of substantially more than the bare minimum that might otherwise be indicated by these estimates. A good margin of safety is always desirable in anticipating the future growth of a city, for this and other reasons.

Age Composition

As a basis for determining the city's future requirements for certain facilities and services, especially in the field of school and recreation planning where special consideration must be given to the particular requirements of different age groups, and also as an aid in understanding some of the economic and social trends and needs conditioned by the age composition of the present and prospective population, an analysis and projection of such age composition is of considerable importance. Comparisons drawn from Tables 5, 6 and 7 reveal a number of significant differences in the age composition of Frederick as against that of the state or the United States. Generally speaking, Frederick has an older population than Maryland or the nation, the median age for the city in 1960 being 30.6 years whereas that for the state was 28.7 and the nation was 29.5. The proportion of the population in the younger age groups was lower here than for either Maryland or the nation, whereas the opposite is true of the older group. In 1960 Frederick had only 28.3% of its population less than 15 years of age, whereas the Maryland average was 32.0% and the United States average was 31.3%. Persons 45 years and older comprised 30.6% of the local population as against 26.2% in Maryland and 29.3% in the entire United States. High percentages of elderly people (those over 60) are found in Frederick, especially among women.

The young adult group in Frederick, aged 20 to 44 years, comprising the major work force and principal reproductive ages, accounts for a somewhat smaller proportion in Frederick than in the state at large, although slightly higher than the United States average. This portends continuation of the relatively low birth rate here.

Table 3

POPULATION RATIOS - TRENDS AND PROJECTIONS

Frederick, Maryland

Ratio of -	Actual					Estimated	
	1920	1930	1940	1950	1960	1970	1980
A. Frederick City to Frederick County	21.0%	26.8%	27.6%	29.2%	30.2%	32.0%	34.0%
B. Frederick County to Maryland	3.62	3.34	3.15	2.66	2.32	2.05	1.80
C. Maryland to United States	1.37	1.33	1.39	1.55	1.73	1.86	1.96
D. Frederick City to Maryland	.76	.89	.87	.77	.71	0.67	0.64
E. Frederick City to Maryland Urban	1.28	1.48	1.46	1.12 1/	.96	0.85	0.75
F. Maryland Urban to Maryland Total	66.0	59.4	59.7	68.7 1/	72.8	76.	78.

1/ Using "new" urban definition, beginning with 1950

Based on U. S. Census data

Table 4

PROSPECTIVE POPULATION GROWTH

Frederick, Maryland

1960 - 1980

Approximate Year	Range	Population	Increase	% Increase	% Increase 10 years
1960	-	21,744	3,600	20%	20%
1965	High	24,500	2,800	13	
	Low	23,000	1,300	6	
1970	High	27,000	2,500	10	24
	Low	25,000	2,000	9	15
1975	High	30,000	3,000	11	
	Low	26,000	1,000	4	
1980	High	32,000	2,000	7	19
	Low	28,000	2,000	8	12
1960-80	High			47	
	Low			28	

An unusually high percentage of women in the 15 to 19 age group was reported locally. This is clearly attributable to Hood College where the student body, all women, were counted as Frederick residents.

Since 1940 the trends in respect to various age groups in Frederick have borne a fairly close relationship to those in the United States as a whole (See Table 7). Between 1940 and 1950 the proportion in the elementary school group (ages 5-14) declined materially, but after 1950 this trend turned sharply upward as a result of the post-war baby boom. In the high school bracket, ages 15-19, the same trends occurred but on a more moderate scale. In the 20-44 age group, most important economically, the local trend has followed the United States Trend which dropped off sharply after 1950 as a result of the low birth rates prior to World War II, while the older age groups have continued to increase steadily both locally and in the nation as a whole. These comparisons show that Frederick has been fairly normal as to age composition in the past and may reasonably be expected to follow the national trends in the future. The principal differences are that Frederick has consistently produced a proportionately somewhat smaller crop of children than the country as a whole, and that it appears to be an especially attractive place for retirement living, especially for women.

Estimates as to the probable number of persons in each age group by 1970 and 1980 will be found in Table 8. These are based on the estimates, already presented, as to the total population of the city in the years ahead, and the projections of age composition relationships shown in Table 7. The United States age composition projections in Table 7, which served as a guide in making the Frederick projections, were prepared by the U. S. Census Bureau and published as Series III on July 6, 1962. The assumptions of total population for the city in 1970 and 1980, 26,000 and 30,000 respectively, are averages of the "high" and "low" projections presented in Table 4.

By 1970 or thereabouts, assuming a total population increase of about 19% over 1960. Frederick can expect an above-average increase of 21% in its 5-14 group and major increases of 50% in the 15-19 group and 24% in the 65-and-over group. Below-average increases of 8% in the 0-4 group, 16% in the 20-44 group, and 17% in the 45-64 group would complete the picture. By 1980 the increases seem more likely to balance out. With a total population increase of 38% over 1960, the city can expect by that time 40% more children under 5, 33% more in the 5-14 group, 42% more in the 20-44 group, and 45% more in the group aged 65 and over, while the biggest increase (64%) will occur in the 15-19 group and the smallest (20%) among those 45-64.

If these estimates prove reasonably correct, the city can anticipate in the next twenty years or so an increase of about one-third in the elementary school population and about two-thirds in the high school group. There will be an increase of about 45% in the requirements for housing, recreation, health and welfare services for the elderly, while the work force (ages 20-64) will increase only about one-third (34%).

Table 5

AGE & SEX COMPOSITION - 1960

Frederick and the State of Maryland

Frederick

Age Group in Years	Total	%	Male	%	Female	%
Total population	21,744	100.0	9,924	100.0	11,820	100.0
0 - 4	2,241	10.3	1,114	11.2	1,127	9.5
5 - 14	3,920	18.0	1,991	12.1	1,929	16.3
15 - 19	1,752	8.1	639	6.4	1,113	9.4
(15 - 24)	(3,243)	(14.9)	(1,198)	(12.1)	(2,045)	(17.3)
20 - 44	7,195	33.0	3,302	33.3	3,893	32.9
45 - 64	4,527	20.9	2,058	20.7	2,469	21.0
65 & over	2,109	9.7	820	8.3	1,289	10.9
(60 & over)	(3,018	(13.9	(1,197)	(12.1)	(1,821)	(15.4)

Maryland

Age Group in Years	Total	%	Male	%	Female	%
Total population	3,100,689	100.0	1,533,200	100.0	1,567,489	100.0
0 - 4	366,520	11.8	185,530	12.2	180,990	11.5
5 - 14	626,053	20.2	317,288	20.6	308,765	19.7
15 - 19	225,810	7.3	113,324	7.4	112,486	7.1
(15 - 24)	(414,490)	(13.3)	(207,595)	(13.5)	(206,895)	(13.2)
20 - 44	1,068,438	34.5	527,369	34.4	541,069	34.6
45 - 64	587,329	18.9	292,344	19.1	294,985	18.3
65 & over	226,539	7.3	97,345	6.3	129,194	8.3
(60 & over)	(334,146)	(10.7)	(148,622)	(9.7)	(185,524)	(11.8)

Source: U. S. Census of Population, 1960

Table 6

AGE COMPOSITION TRENDS - THE CITY AND RELATED AREAS

Area	0-4 Years Number	0-4 Years %	5-14 Years Number	5-14 Years %	15-19 Years Number	15-19 Years %	20-44 Years Number	20-44 Years %	45-64 Years Number	45-64 Years %	65 & Older Number	65 & Older %	Total Population
Frederick													
1940	1,051	6.7	2,448	15.5	1,477	9.3	6,301	39.9	3,066	19.4	1,459	9.2	15,802
1950	1,812	9.9	2,325	12.9	1,398	7.6	7,206	39.8	3,764	20.7	1,637	9.1	18,142
1960	2,241	10.3	3,920	18.0	1,752	8.1	7,195	33.0	4,527	20.9	2,109	9.7	21,744
Hagerstown													
1940	2,230	6.8	5,184	15.8	2,986	9.1	13,083	40.4	6,805	20.9	2,303	7.0	32,491
1950	3,460	9.6	4,960	13.7	2,265	6.3	14,434	39.7	7,959	21.9	3,182	8.8	36,260
1960	3,593	9.8	6,308	17.3	2,526	6.9	11,884	32.4	8,356	22.8	3,993	10.8	36,660
Cumberland													
1940	2,875	7.2	5,994	15.1	3,830	9.7	16,292	41.4	7,956	20.1	2,536	6.5	39,483
1950	3,496	9.3	5,478	14.5	2,489	6.6	13,985	37.0	8,789	23.2	3,442	9.1	37,679
1960	2,898	8.8	5,674	16.9	2,342	7.1	9,798	29.2	8,490	25.4	4,213	12.6	33,415
Maryland Total													
1940	136,665	7.5	277,182	16.4	166,777	9.2	738,062	40.5	358,042	19.6	123,516	6.8	1,821,244
1950	258,252	11.1	367,600	15.7	155,620	6.6	948,125	40.5	449,890	19.1	163,514	7.0	2,343,001
1960	366,520	11.9	626,053	20.2	225,810	7.3	1,068,438	34.4	587,329	18.9	226,539	7.3	3,100,689
Maryland Urban													
1940	72,156	6.7	160,484	15.2	96,159	8.9	461,316	42.6	219,708	20.1	70,538	6.5	1,080,351
1950	175,439	10.8	236,070	14.6	98,506	6.1	678,233	42.0	319,649	19.8	108,005	6.7	1,615,902
1960	267,552	11.9	448,467	19.8	154,191	6.9	786,238	34.9	436,509	19.3	160,875	7.2	2,253,832

Source: U. S. Census of Population

Table 7

AGE COMPOSITION TRENDS AND PROJECTIONS

Frederick and the United States, 1940-1980

Years	Ages 0-4 (%)		Ages 5-14 (%)		Ages 15-19 (%)		Ages 20-44 (%)		Ages 45-64 (%)		Ages 65 & over (%)	
	U.S.	Fred.	U.S.	Fred.	U.S.	Fred.	U.S.	Fred.	U.S.	Fred.	U.S.	Fred.
Actual												
1940	7.8	6.7	16.6	15.5	9.3	9.3	38.8	39.9	20.4	19.4	7.1	9.2
1950	10.7	10.0	16.1	12.8	7.0	7.6	37.6	39.8	20.3	20.7	8.3	9.1
1960	11.3	10.3	19.8	18.0	7.4	8.1	32.2	33.0	20.1	20.9	9.2	9.7
Projections												
1970	10.3	9.3	19.6	18.2	9.1	10.1	31.2	32.0	20.2	20.4	9.6	10.0
1980	11.4	10.5	18.8	17.4	8.4	9.5	33.4	34.2	18.0	18.2	10.0	10.2

Sources: U. S. Census of Population, 1940-1960
U. S. projections from Series III, U. S. Census report P-25, No. 251

Table 8

POPULATION PROJECTIONS BY AGE GROUPS

1970 - 1980

Age Group	1960 (actual)	1970 (estimated)	1980 (estimated)
0 - 4	2,241	2,420	3,150
5 - 14	3,920	4,730	5,220
15 - 19	1,752	2,620	2,860
20 - 44	7,195	8,330	10,260
45 - 64	4,527	5,300	5,460
65 and over	2,109	2,600	3,050
Totals	21,744	26,000 (assumed)	30,000 (assumed)

Based on Age Composition Projections, Table 7, and Prospective Population Growth, Table 4.

Sex Composition

In 1960, according to the United States Census, there were 1,900 more females than males in Frederick. A slight excess of females is normal for Maryland and the nation as a whole, but not to the extent found in Frederick where 54.4% of the total population in 1960 was female and only 45.6% male. For the nation as a whole, the average was 50.8% female and 49.2% male.

Table 5 shows the sex distribution by selected age groups in Frederick, compared with Maryland totals. In Frederick, as in the state, the principal inbalances are found in the older age group, the Census figures show about 119 females for every 100 males, while in the group over 65 the females exceed the males by about 157 to every 100. This unbalanced situation in the adult group appears to be due to at least two causes: (1) a lack of full employment opportunities for men, and (2) a substantial retired population consisting largely of females whose life expectancy normally exceeds that of men.

Taking the younger generation as a whole (those under 20), and discounting the female student body at Hood College which was included in the Census figures, the 1960 ratio for this group was 104 males per 100 females. Nature seems to be making an effort to balance up the sex composition of the city. If these young men can be induced through improved educational and employment opportunities to stay in Frederick instead of migrating elsewhere in search of a better living, the tendency will be for the local population to become more nearly normal in respect to its sex composition. Many obvious benefits should ensue in the social, economic, and cultural life of the community.

Other Characteristics of the Population

Less than one per cent of the city's residents in 1960 were foreign-born, a very low figure. The non-white population amounted to 10.8% which was substantially less than the Maryland total of 17%. Approximately three-fourths of the total were native Marylanders, a relatively high figure.

The average family size in Frederick averages 3.11 persons per household, a figure considerably lower than the state average of 3.48 or the national figure of 3.29. It represents a substantial decrease from the 1950 figure of 3.25. Proportions of married persons have been consistently lower here than in the state at large, with only 65.5%married among all persons 14 years old and over in 1960 as against 68.5% for Maryland and 67.5% for the United States. This situation is due entirely to the high percentages of unmarried, widowed, or divorced women shown by Table 9, especially the unusually high proportions of widowed or divorced. The percentage of married men is higher than normal. These relationships have changed little since 1950 except for some increase in married percentages for both men and women, comparable to the general trend. The percentage of widowed or divorced women has remained practically constant since 1950, while that for men has declined.

The high percentage of unmarried, widowed, or divorced women in Frederick reflects both the retired group previously referred to (consisting largely of women) and the low proportion of men in the young adult group. In the population group over 18 years of age, only 43.5% are men. This situation has

resulted rather naturally in a relatively low reproduction rate. For every thousand women of ages 15-49 in 1960, there were only 392 children under five years of age. This was about 20% under the state and national figures of 491 and 488 respectively, and 43% under the fast-growing Rockville figure of 683. Frederick County as a whole had a fertility rate 15% higher than that of the city. With an increasing rate of in-migration, consisting largely of young families, it is likely that the fertility ratio will improve with time.

By Maryland standards, the people of Frederick are about as well educated as the average person in the state. The median number of school years completed is only fractionally under the state average, the number of male high school graduates is slightly higher proportionately, and the number of female college graduates is substantially higher. Also the percentage of youths 14 to 17 who were in school in 1960 was slightly greater in Frederick than in the state as a whole. Table 10 shows various comparisons in educational achievements between the city and state, for 1960 and 1950.

Educational gains by the citizens of Frederick have been made since 1950 in practically all respects, in keeping with the general trends across the country. Most significant perhaps has been the sharp increase in number of high school graduates which in 1950 was well below the state average but is presently almost caught up. Also notable is the increase in ratio of college graduates among men, which jumped from 8.9% in 1950 to 12.1% in 1960. In this same period there appears to have been a drop in the percentage of women college graduates, contrary to the general trend, but this may be an inaccuracy due to the sampling process used in obtaining the Census data.

Table 11 shows the various occupations of the resident population, by major groupings as of 1960, together with comparative figures for the state. The Frederick figures are also depicted graphically on Plate 6. These show a well-balanced pattern in which no one occupation predominates. The four most numerous occupations are the professional and technical (15.1%), clerical (14.8%), operatives (14.2%), and craftsmen or foremen (13.6%), corresponding rather closely to the state figures except that the professional and technical group ranks first in Frederick but only fourth in Maryland. This obviously reflects the presence of Fort Detrick which employs large numbers of professional and technical people, and also of the educational and medical centers located in this city. Frederick has high percentages also of managers, officials, and proprietors, and of sales and service workers. Among the men, there are more craftsmen and foremen than in any other group, with the professional and technical workers ranking second. Among the women, the chief occupations are clerical, service workers, professional and technical workers, and operatives, in that order.

Frederick's average family incomes are somewhat lower here than in the state in general. By reference to Table 1 it will be seen that for the year 1959 the median family income in Frederick was $5,548. This was about 16% below the average for all "urban" areas in Maryland, and about 12% below the entire

Table 9

MARITAL STATUS

(Persons 14 Years Old and Over)

Frederick, The State, and The Nation

	City of Frederick				Maryland		United States	
	1950		1960		1950	1960	1950	1960
	No.	%	No.	%	%	%	%	%
Male Residents	6,265	100.0	6,985	100.0	100.0	100.0	100.0	100.0
- Single	1,336	21.4	1,454	20.8	26.3	25.3	26.5	25.2
- Married	4,497	71.7	5,148	73.7	68.0	69.5	67.4	69.1
- Widowed or divorced	432	6.9	383	5.5	5.7	5.2	6.1	5.7
Female Residents	7,951	100.0	8,910	100.0	100.0	100.0	100.0	100.0
- Single	2,122	26.8	2,194	24.6	20.1	19.2	20.0	19.1
- Married	4,542	56.9	5,265	59.1	66.4	67.2	65.9	65.9
- Widowed or divorced	1,287	16.3	1,451	16.3	13.5	13.6	14.1	15.0
Totals, 14 years and over	14,216	100.0	15,895	100.0	100.0	100.0	100.0	100.0
- Single	3,458	24.3	3,648	23.0	23.1	22.1	23.0	21.9
- Married	9,039	63.6	10,413	65.5	67.3	68.5	66.5	67.5
- Widowed or divorced	1,719	12.1	1,834	11.5	9.6	9.4	10.5	10.6

Source: U. S. Census of Population, 1950 and 1960

Table 10

EDUCATIONAL ACHIEVEMENTS

	Frederick City		Maryland State	
	1960	1950	1960	1950
Number of School Years Completed (By persons 25 years old or over)				
Men, median	10.1	8.8	10.2	8.8
Women, median	10.4	9.0	10.6	9.0
Total, Median	10.3	8.9	10.4	8.9
High School Graduates				
(Persons 25 years old or over, with 4 years high school but no college degree)				
Men, % of all 25 & over	26.6%	14.6%	26.4%	21.9%
Women, % of all 25 & over	33.6	19.6	34.8	27.4
Total, % of all 25 & over	30.4	17.3	30.7	24.8
College Graduates				
(Persons 25 years old or over, with 4 years or more of college)				
Men, % of all 25 & over	12.1%	8.9%	12.4%	8.8%
Women, % of all 25 & over	7.6	9.5	6.4	5.3
Total, % of all 24 & over	9.7	9.2	9.3	7.0
Per Cent In School, of persons				
14 to 17 years old	83.9%	78.7%	85.3%	79.9%

Source: U. S. Census reports.

Table 11

MAJOR OCCUPATIONS OF EMPLOYED CIVILIANS

Frederick City & State Total

1960

Occupations	Frederick City Total No.	Frederick City Total %	Frederick City Male No.	Frederick City Male %	Frederick City Female No.	Frederick City Female %	State Total %
Professional, Technical and Kindred Workers	1,301	15.1	807	15.2	494	14.8	13.5
Farmers & Farm Managers	12	0.1	8	0.1	4	0.1	1.6
Managers, Officials & Proprietors	817	9.5	710	13.4	107	3.2	8.3
Clerical & Kindred Workers	1,274	14.8	382	7.2	892	26.8	16.8
Sales Workers	693	8.0	432	8.1	261	7.9	7.3
Craftsmen, Foremen & Kindred Workers	1,176	13.6	1,140	21.4	36	1.1	14.3
Operatives & Kindred Workers	1,227	14.2	766	14.4	461	13.8	15.8
Private Household Workers	267	3.1	8	0.1	259	7.8	2.7
Service Workers (except Private Household)	941	10.9	340	6.4	601	18.1	7.8
Farm Laborers	29	0.3	24	0.5	5	0.2	1.3
Laborers (except Farm & Mine *)	436	5.0	407	7.7	29	0.9	5.0
Occupation Not Reported	466	5.4	290	5.5	176	5.3	5.6
Total Employed Residents (Civilians 14 years & over)	8,639	100.0%	5,314	100.0%	3,325	100.0%	100.0%

* Mine Laborers included with Operatives & Kindred Workers

Source: U. S. Census of Population, 1960

state average of $6,309. There are considerably more families having incomes of less than $2,000 (11.6%) than for the total "urban" population of the state, and fewer families in the over - $5,000 bracket (57.4%). Frederick is in better shape than Hagerstown but not nearly so well off as Rockville which had a median income of $7,602, or Bethesda with its $12,357. Frederick in fact ranks fifth from the bottom among Maryland's 32 urban places of 10,000 population and over, counting both incorporated and unincorporated places.

ECONOMY OF THE CITY

General Characteristics

Frederick's economy finds its base primarily in manufacturing and retail trade, with a substantial assist from the military establishments at Fort Detrick adjoining the city. Table 12 shows the comparative economic importance of each of the four major types of private industry for which U. S. Census data are collected - manufacturing, retail trade, wholesale trade, and the service trades. Frederick is also something of a tourist and convention center and includes important governmental, educational, and medical facilities.

In recent years, the city has made substantial gains in each of its major economic categories, in terms of payrolls and output if not always in number of employees. The retail and wholesale trades are becoming relatively more important, and manufacturing less so, as Frederick grows as a trade center. The city should continue to attract additional manufacturing and trade in the years ahead. The tendency of population and industries to move out from the metropolitan centers along the evolving interstate highway system, the strategic position of Frederick in relation to this system and to the metropolitan centers of Washington and Baltimore, and the growth momentum in Central Maryland as a whole, should assure Frederick of an accelerated economic growth.

The Labor Force

About 42% of the city's population in 1960 comprised its civilian labor force. According to the Census definition, the labor force consists of that part of the population 14 years old and over which is gainfully employed or is seeking employment. Table 13 shows the size and composition of Frederick's labor force for each decade since 1940.

As the city has grown in population, so has its labor force - especially as more and more women have sought employment. Whereas in 1940 only 32.6% of the labor force consisted of women, by 1960 this figure had increased to 38.5%. In that year nearly 40% of all women aged 14 and over were working or seeking work, a proportion considerably higher than the state average of 36.0%. There have been substantial increases also in the male labor force: in 1960 more than 80% of all men aged 14 and over were listed as workers, a figure that is higher than the state average of 75.2%. These figures indicate a healthy economic situation with a steadily increasing work force and a high percentage of income-producers in the total population.

In the years ahead, the size of the Frederick labor force will be governed very largely by the increases in total population and the number of jobs available. From an analysis of current and prospective trends in the city's age and sex composition, and the labor force components of the male and female populations 14 years of age and over, it appears that the total labor force in the city during the next twenty years or so is likely to increase about 48%. Some 54% of this increase will be due to additional women workers, and 46% to men. Details of these estimates are presented in Table 13, all of which are based on an average of the "high" and "low" population estimates for 1970 and 1980 shown in Table 4.

Table 12

PRINCIPAL ECONOMIC ACTIVITIES AND TRENDS

Frederick Maryland, 1948 - 1958

Industry	1948	1954	1958	Change 1954-1958
Number of Persons Engaged				
Manufacture	2,816 ('47)	2,861	2,464	- 13.8%
Retail Trade	1,759	1,679	1,949	+ 16.1
Wholesale Trade	344	450	543	+ 20.7
Service Trades	245	464	455	- 1.9
Totals	5,164	5,454	5,522	+ 1.2%
Payrolls				
Manufacture	$5,653,000 ('47)	$7,836,000	$8,215,000	+ 4.8%
Retail Trade	3,002,000	4,035,000	5,020,000	+ 24.4
Wholesale Trade	828,000	1,727,000	2,059,000	+ 19.2
Service Trades	352,000	713,000	864,000	+ 21.2
Totals	$9,835,000	$14,311,000	$16,158,000	+ 12.7%
Value of Products or Sales				
Manufacture (1)	$ 8,596,000 ('47)	$ 11,967,000	$ 16,531,000	+ 38.1%
Retail Trade (2)	31,644,000	38,996,000	44,137,000	+ 13.2
Wholesale Trade (2)	15,280,000	23,328,000	28,527,000	+ 22.2
Service Trades (3)	1,252,000	2,905,000	3,484,000	+ 19.8
Totals	$56,772,000	$ 77,196,000	$106,870,000	+ 38.3%

(1) Value added by manufacture.

(2) Gross sales for year.

(3) Receipts for year.

Source: U. S. Census

Table 13

THE LABOR FORCE

City of Frederick, 1940-1980

	1940 (Census)	1950 (Census)	1960 (Census)	1970 (Estimated)	1980 (Estimated)
Total City Population	15,802	18,142	21,744	26,000	30,000
Population 14 years and over	12,556	14,216	15,895	19,200	22,000
% Male	46.5%	44.2%	44.0%	44.0%	44.2%
% Female	53.5%	55.8%	56.0%	56.0%	55.8%
Civilian Labor Force	6,889	7,938	9,169	11,500	13,600
% Male	67.4%	65.1%	61.5%	58.4%	56.4%
% Female	32.6%	34.9%	38.5%	41.6%	43.6%
Male Labor Force					
No. of males 14 years and over	5,848	6,265	6,985	8,450	9,700
% in Labor Force	79.5%	82.4%	80.6%	79.5%	79.0%
No. in Labor Force	4,644	5,162	5,634	6,720	7,660
Female Labor Force					
No. of females 14 years and over	6,708	7,951	8,910	10,750	12,300
% in Labor Force	33.5%	34.9%	39.7%	44.5%	48.0%
No. in Labor Force	2,245	2,776	3,535	4,780	5,940

Source: U. S. Census 1940 - 1960

Frederick must give special attention over the next several years to the creation of new job opportunities for this rapidly increasing work force, especially for women, if it is to hold its potential workers here and maintain a healthy economy. To meet the challenge, Frederick will have to provide an average of only 100 additional jobs per year for men, and 120 for women. This would seem to be no great problem for the city in view of its distinctive locational advantages as well as its many other favorable characteristics.

Employment

Unemployment in Frederick was relatively high in 1960, compared with the state average. At that time the local unemployment rate was 5.7% of the civilian labor force while the state figure was 4.8%. Hagerstown at the same time had 8.6%. During 1959 only 60.2% of the employed in Frederick worked a full year, the state average being 61.1%, and 12.3% did not work more than three months in the year.

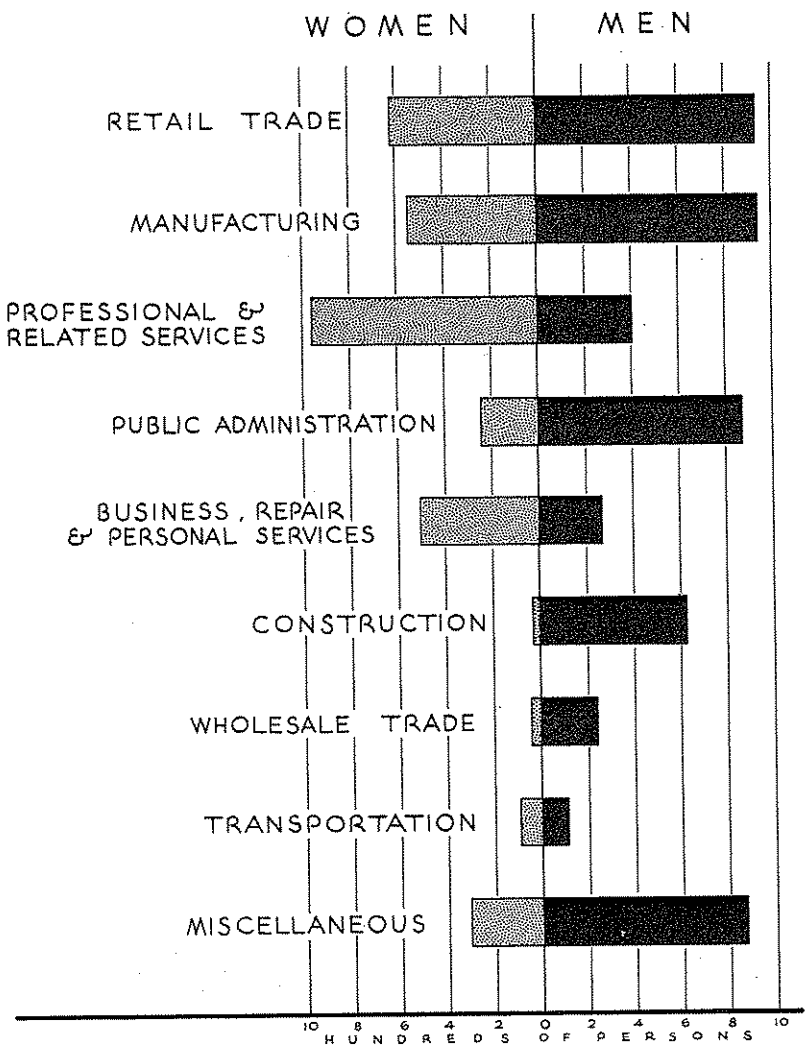
Most workers who reside in Frederick find their employment reasonably close to home. Only 8.7% worked outside of Frederick County in 1960, a very low figure, while some 29% either walked to work or worked at home.

Earnings by persons in various occupations average about 10 to 20% lower here than in the state generally. For the year 1959, the median earnings of professional and managerial personnel in the Frederick area were $6,465 compared with the state figure of $7,346. The median for craftsmen and foremen was $4,595, operatives $3,471, and other occupations were in proportion. For all men in general, the median here was $4,290 compared with the state median of $4,867, and for women it was $1,902 locally and $2,363 for the state. Women clerks and kindred workers in Frederick earned only $2,779 while the state figure was $3,233. Other occupations were in corresponding proportions. When compared on a type-of-industry basis, similar relationships will be noted for all classes except retail trade in which the average wages paid in Frederick for the year 1958 exceed the state figure by a small amount. The average wage paid in manufacturing in Frederick was about 30% under the state figure, that in wholesale trade was about 29% less, and in the service trades it was about 21% lower. Following are the actual figures:

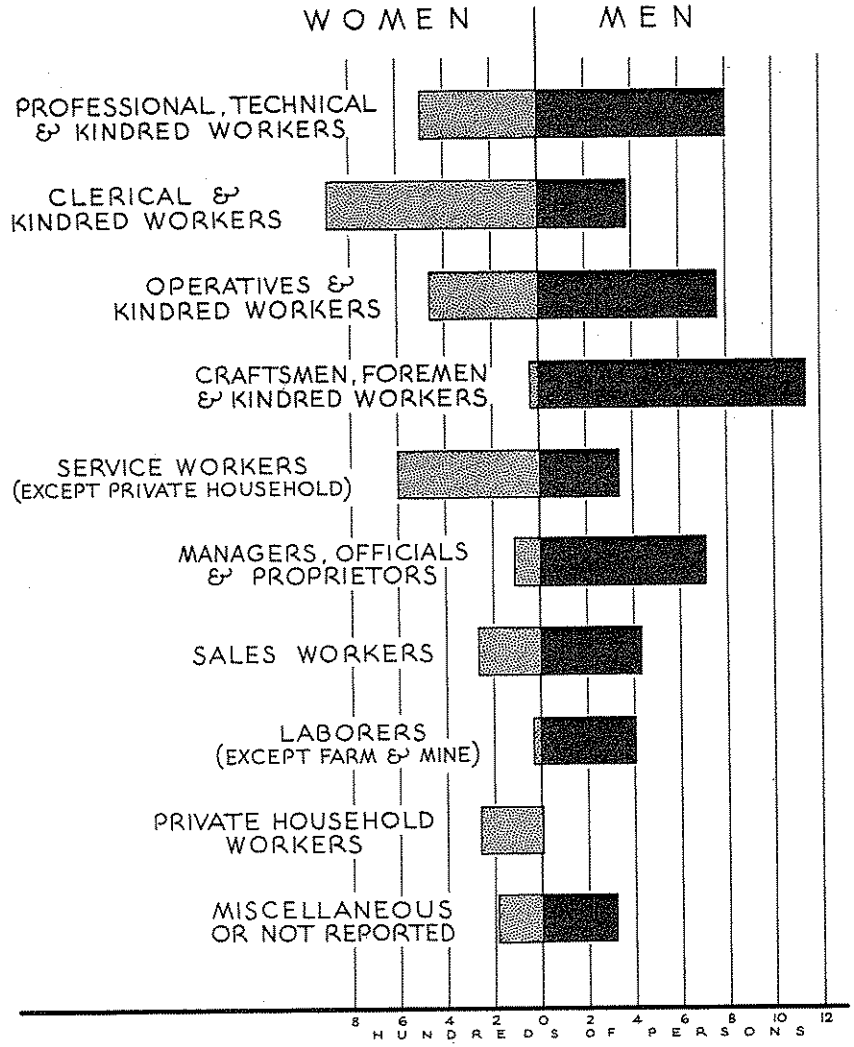
	Frederick	State of Maryland
Manufacturing	$3,330	$4,840
Retail Trade	2,580	2,560
Wholesale Trade	3,150	4,440
Service Trades	1,900	2,420

Sources of Employment by Type of Industry

Table 14 shows the types of industry in which the residents of Frederick find employment. These figures relate to the people who live in Frederick, without regard to place of employment - in Frederick or elsewhere. Plate 6 illustrates



TYPES OF INDUSTRY
IN WHICH RESIDENTS ARE EMPLOYED



OCCUPATIONS
OF EMPLOYED RESIDENTS

EMPLOYMENT CHARACTERISTICS OF THE PEOPLE - 1960

FREDERICK • MARYLAND
CITY PLANNING COMMISSION

LADISLAS SEGOE & ASSOCIATES
CONSULTING CITY PLANNERS
CINCINNATI • OHIO
JULIAN TARRANT • ASSOCIATE
RICHMOND • VIRGINIA

FINANCED IN PART THROUGH AN URBAN PLANNING GRANT FROM THE HOUSING AND HOME FINANCE AGENCY UNDER SECTION 701 OF THE HOUSING ACT OF 1954 AS AMENDED

the relationships graphically. Here again the diversification of Frederick's employment opportunities is evident, with no one type of industry predominating. Retail trade is in the lead with 18.0% of the total, but manufacturing is close behind with 17.3%. These two groups provide only a little more than one-third of the total number of jobs available. Men find employment more in manufacturing than in retail trade, but the margin is narrow. For women, the leading type of employment is surprisingly in the professional and related fields. In several respects, the employment pattern for Frederick is quite different from that of the state as a whole, in which manufacturing is by far the leading source of employment, with retail trade well behind.

In recent years the number of Frederick people who have found employment in public administration and the professions has increased sharply, while the number employed in manufacturing, transportation, and in business, repair, and personal services, has declined.

Retail Trade

Frederick is the retail trading center of Frederick County, accounting in 1958 for nearly 60% of total sales. In this respect, however, it has been slipping gradually for at least the last ten years. In 1948 it did over 63% of the total business. Even so, there are only five other non-metropolitan cities that rank higher in this regard in Maryland -- Hagerstown, Cumberland, Salisbury, Annapolis, and Rockville, in that order. In 1958 Frederick had 332 retail stores with over $44,000,000 in gross sales, employing an average of 1,949 people to whom over $5,000,000 were paid in total wages (see Table 15). There were substantial increases in each of these items since 1954, except in the number of retail outlets -- this indicating fewer but larger stores doing more business each. The local growth kept pace with state-wide increases in number of employees and total payrolls but slipped a little in its proportion to total sales. The latest available Sales Management figures, found in Table 16, show that retail sales in Frederick apparently increased to $45,297,000 in 1961, another 2-1/2% advance since 1958.

From Table 16 it will be seen that the "effective buying income" in Frederick, according to the latest estimate, is $2,009 per capita or $6,522 per household. Effective buying income means the net income after taxes. Incomes for Frederick County as a whole are somewhat lower than in the city. Per capita incomes in the city, as a matter of fact, are almost equal to the state average, and the city's retail sales in 1961 ran 62% higher, proportionately, than the state average. Both in its "quality of market index" and its "index of sales activity", Frederick is well above par. Such would be expected, of course, in a regional distribution center having a retail trade territory extending into other counties and in this case into adjoining states.

Further reference to Table 16 will show that the largest percentage of gross sales in the city is made by food stores (25.7%), which is typical. Next comes the automotive group (15.9%), followed by the general merchandise and variety group (11.6%) and others. As compared with state-wide figures, above-average sales in Frederick were reported by the apparel stores group (2.02% of state totals), the lumber-building materials-hardware-farm-equipment group (1.97%), the furniture-household-applicance group (1.82%), and the

Table 14

TYPES OF INDUSTRY IN WHICH THE PEOPLE ARE EMPLOYED

Frederick City & State Totals

1960

Type of Industry	Frederick City						State Totals
	Total		Male		Female		
	No.	%	No.	%	No.	%	%
Agriculture, Forestry & Fishery	57	0.7	48	0.9	9	0.3	3.5
Mining	41	0.5	41	0.8	*	*	0.2
Construction	660	7.6	632	11.9	28	0.8	6.5
Manufacturing	1,491	17.3	947	17.8	544	16.3	24.4
Transportation	208	2.4	115	2.2	93	2.8	4.6
Wholesale Trade	285	3.2	246	4.6	39	1.2	3.0
Retail Trade	1,557	18.0	938	17.6	619	18.6	14.5
Business, Repair & Personal Service	775	9.0	275	5.2	500	15.0	7.6
Professional & Related Services	1,366	15.8	409	7.7	957	28.8	12.4
Public Administration	1,115	12.9	875	16.5	240	7.2	10.8
Miscellaneous	1.084	12.6	788	14.8	296	9.0	12.5
Total Employed Residents (Civilians 14 years & Over)	8,639	100.0%	5,314	100.0%	3,325	100.0%	100.0%

* Combined with Construction

Source: U. S. Census of Population, 1960

Table 15

TRENDS IN RETAIL TRADE

Frederick City, Related Cities & State Total

1948 - 1958

Subject	Year	Frederick No.	Frederick % of State	Hagerstown No.	Cumberland No.	Maryland Total No.
Number of Establishments	1958	332	1.3	563	516	26,150
	1954	359	1.4	626	585	24,857
	1948	331	1.3	546	564	25,052
Sales	1958	$44,137,000	1.3	$76,923,000	$63,670,000	$3,326,057,000
	1954	38,996,000	1.5	68,113,000	58,813,000	2,675,464,000
	1948	31,644,000	1.7	48,936,000	54,808,000	1,914,689,000
Active Proprietors (unincorporated business)	1958	302	1.2	481	486	25,478
	1954	357	1.4	577	562	25,142
	1948	306	1.2	481	512	25,240
Number of Paid Employees (Full & Part-Time)	1958	1,949	1.3	3,649	2,955	146,098
	1954	1,679	1.3	3,413	2,836	124,699
	1948	1,759	1.6	3,210	3,274	111,298
Total Payrolls	1958	$5,020,000	1.3	$9,695,000	$7,360,000	$374,495,000
	1954	4,035,000	1.3	7,979,000	6,519,000	298,471,000
	1948	3,002,000	1.4	5,546,000	6,057,000	208,438,000

Source: U. S. Census of Business

Table 16

RETAIL TRADE & BUYING POWER
1961

	Frederick City	Frederick County	The State	City's% of State
Population (est. 12/31/61)	22,400	74,000	3,248,200	.69
Households (est. 12/31/61)	6,900	20,700	902,000	.77
Effective Buying Income				
Net Dollars	$44,999,000	$124,698,000	$6,756,358,000	.67
% of U. S. A.	.0124	.0344	1.8621	.67
(Population % of U. S. A.)	(.0121)	(.0401)	(1.7605)	.69
Per Capita	$ 2,009	$ 1,685	$ 2,080	.97
Per Household	$ 6,522	$ 6,024	$ 7,490	.87
Retail Sales Estimates				
Total Retail Sales	$45,297,000	$75,223,000	$3,653,975,000	1.24
% of U. S. A.	.0207	.0343	1.6661	1.24
Per Household	$ 6,570	$ 3,634	$ 4,051	1.62
Buying Power Index	.0148	.0355	1.7830	.83
Quality of Market Index*	122	89	101	121.00
Index of Sales Activity*	171	86	95	180.00

Sales by Type of Store

	Frederick City		The State		City's % of State
	$ (1000)	%	$ (1000)	%	
Food Stores	11,640	25.7	997,886	27.3	1.17
Eating & Drinking Places	1,720	3.8	313,068	8.6	.55
Gen'l. Mdse. & Variety Stores	5,246	11.6	566,929	15.5	.92
Apparel Stores	3,974	8.8	196,823	5.4	2.02
Furn.-House.-Appliance Stores	2,613	5.8	143,213	3.9	1.82
Automotive Group	7,194	15.9	536,232	14.7	1.34
Gas Stations	2,715	6.0	260,330	7.1	1.04
Lumber-Bldg. Mat. -Hdwre. & farm equip. Dealers	3,688	8.1	187,340	5.1	1.97
Drug Stores	1,664	3.7	160,039	4.4	1.04
All Others	4,843	10.6	295,115	8.0	1.64
Totals	45,297	100.0	3,653,975	100.0	1.24

* 100 = Par

Source: Sales Management Magazine

automotive group (1.34%). Below-average sales were recorded by the food stores (1.17%), the gas stations (1.04%), the drug stores (1.04%), the general merchandise and variety stores (0.92%), and the eating and drinking places (0.55%). Some improvement in these latter figures has shown up in the last few years but further efforts would seem desirable toward bringing the deficient elements of the city's retail structure up to a level commensurate with the others.

Manufacturing

Frederick, as previously noted, has a diversified manufacturing economy. Within the city proper, according to the 1958 Census of Manufactures, there are 33 different establishments employing a total of 2,464 people for an average of 75 per establishment. Within or near the city there are 9 major plants having 50 or more employees each, and 9 others with more than 20 each. No one plant employs more than about a fourth of the total. Various other figures on manufacturing in Frederick and certain other localities will be found in Table 17. Major products are of such variety as to include men's clothing, brushes, leather goods, household wares, electronic and electrical equipment, optical goods, instruments, forge and foundry products, meat products, canned goods, cement, building materials, other limestone products, prefabricated houses, and others.

During the last ten years, according to the Chamber of Commerce, the city has secured ten new manufacturing plants while losing only two. Several of these new establishments are located outside the city limits, however, and are not included in the Census figures for Frederick City. The Census figures show that between 1947 and 1958, manufacturing production in Frederick as measured by "value added by manufacture" increased 93%, and payrolls gained 45%, although the number of employees decreased 13%, after 1954. During this same period, the total state employment figures in manufacturing went up 12%, payrolls were up 102%, and value added by manufacture went up 109%. Looking at the situation another way, Frederick accounted in 1947 for 1.23% of the total state employment in manufacturing, but in 1958 for only 0.96%. Obviously this city is lagging behind the rest of the state in manufacturing development. It appears also to have come up against one of today's most perplexing economic problems -- more production and payrolls with fewer employees, a result of automation. New investments in manufacturing plants in the Frederick area will have to be accelerated substantially in the years ahead in order to offset the gradual decline in number of employees per establishment.

Wholesale Trade

Wholesale trade is becoming an increasingly significant segment in Frederick's economy. Between 1948 and 1958 these business establishments showed an increase of 86% in gross sales, so that by 1958 their total business came to almost two-thirds as much as all retail business. In that year there were in Frederick 52 wholesale establishments employing 543 persons with a total payroll of $2,059,000 and total sales of $28,527,000. These figures represented increases of 57% in the number of employees, 150% in total payrolls, and 86% in total sales, since 1948. Comparisons between Frederick and certain other cities as well as the state totals will be found in Table 18.

Table 17

MANUFACTURING

Frederick City, Related Cities & State Totals

1947 - 1958

Subject	Year	Frederick No.	Frederick % of State	Hagerstown No.	Cumberland No.	Maryland Total No.
Number of Establishments	1958	33	0.96	76	41	3,436
	1954	36	1.11	83	47	3,253
	1947	34	1.20	77	36	2,825
Value Added by Manufacture	1958	$16,531,000	0.69	$34,813,000	$40,164,000	$2,379,414,000
	1954	11,967,000	0.64	(d)	32,155,000	1,888,585,000
	1947	8,596,000	0.75	40,713,000	(d)	1,138,407,000
Number Employed (average for year)	1958	2,464	0.96	5,379	3,518	256,897
	1954	2,861	1.13	(d)	3,763	253,144
	1947	2,816	1.23	9,304	4,884	228,553
Employees per Establishment	1958	75	-	71	87	75
	1954	79	-	(d)	81	78
	1947	83	-	121	134	81
Total Payrolls	1958	$8,215,000	0.66	$21,214,000	$18,594,000	$1,241,823,000
	1954	7,836,000	0.79	(d)	15,988,000	987,559,000
	1947	5,653,000	0.93	23,617,000	(d)	612,035,000

(d) Withheld to avoid disclosure

Source: U. S. Census of Manufactures

Table 18

TRENDS IN WHOLESALE TRADE

Frederick City, Related Cities & State Total

1948 - 1958

Subject	Year	Frederick No.	Frederick % of State	Hagerstown No.	Cumberland No.	Maryland Total No.
Number of Establishments	1958	52	1.54	109	69	3,363
	1954	52	1.71	119	77	3,038
	1948	50	1.61	105	85	3,101
Sales	1958	$28,527,000	.86	$57,755,000	$40,609,000	$3,313,203,000
	1954	23,328,000	.90	68,665,000	38,044,000	2,583,748,000
	1948	15,280,000	.73	51,859,000	33,347,000	2,083,715,000
Active Proprietors (Unincorporated Business)	1958	36	1.87	35	40	1,925
	1954	46	2.51	53	37	1,833
	1948	40	1.88	50	42	2,130
Number of Paid Employees (Full & Part-Time)	1958	543	1.46	1,150	566	37,297
	1954	450	1.27	1,132	649	35,330
	1948	344	.98	1,062	717	35,143
Total Payrolls	1958	$2,059,000	1.24	$4,502,000	$2,439,000	$165,804,000
	1954	1,727,000	1.22	4,438,000	2,204,000	141,396,000
	1948	828,000	.78	3,267,000	2,031,000	105,916,000

Source: U. S. Census of Business

Frederick's wholesale business has been growing at a faster rate than in the state at large, so that its share of the state total has increased. In 1958 this city claimed .86% of the total state sales, 1.46% of its employees, and 1.24% of the payrolls -- all higher figures than in 1948.

Wholesale trade includes those establishments primarily engaged in selling merchandise to retailers, institutions, industries, and commercial or professional users. Products sold might include drugs, dry goods, groceries, farm products, feeds, fertilizers, electrical goods, hardware, fuels, scrap, beverages, paper products, furniture, lumber, and many others. About two-thirds of the total business done in Frederick is by merchant wholesalers - the independent distributors not including sales offices or branches of manufacturing or mining companies, bulk plants for distribution of petroleum products, agents, brokers, or assemblers of farm products. Sales by merchant wholesalers increased 106% between 1948 and 1958, a very healthy sign.

The prospects seem good for further expansion of wholesaling in Frederick, because of the improvements being made in the trunk highway systems radiating from this city and the general tendency for some distributors to decentralize from the congested metropolitan centers.

Service Trades

This group of establishments deals in services of various kinds rather than commodities. It includes the hotels and tourist places, personal service establishments, auto repair and service shops, amusement and recreation services and miscellaneous business and repair services. In 1958 there were 151 such establishments in Frederick, employing 455 persons and paying them a total of $864,000. By reference to Table 12 it will be seen that this industry employs more people than does wholesale trade, but at much less total pay. In gross receipts, it measures up to only about 8% of the retail sales. Economically, the service trades are among the less important in the city.

Since 1954 the service trades increased 20% in gross receipts and total payrolls, but declined slightly in number of employees. This rate of growth has been slower than in the state generally, as shown by the comparative figures in Table 19. To keep up with the rest of Maryland, Frederick will have to accelerate its rate of expansion in the service trades.

Of the 151 service establishments in 1958, 82 were of the personal service type (barber and beauty shops, laundry and dry cleaning services, etc.), 15 were auto repair and service places, and 54 were of miscellaneous types including hotels, motels, amusements, recreation, repair shops, and the like. Substantial increases have occurred in all these categories since 1948, the most rapid increase being among the "miscellaneous" group.

Prospects seem favorable for additional growth in the service industries. Future population growth in the Frederick trade area coupled with a rapid increase in touring and other travel will certainly produce additional demands for various types of service. In some localities the service trades are the most rapidly growing types of business. Ample zoning provision for service-type business areas, and annexation of the city's highway approaches to include the natural locations for highway service establishments, will assist in pro-

moting further development of this type.

Other Industries

By far the largest single "industry," and most important to Frederick's economy, is Fort Detrick. This military establishment employs about 2,500 persons or approximately the same as all the manufacturing plants in the city combined. Its annual payroll of some $13,000,000 exceeds that of any other major industrial group, and its average pay per employee, at $5,200, is the highest of all. The principal facilities at this establishment are the Biological Warfare Laboratory and the East Coast Relay Station, a communications center. Employment at the Fort has tended generally upward over a period of time.

No statistical information comparable with that for manufacturing, retail sales, etc. are available for such other activities as transportation, communications, construction, education, welfare, and the other professions and activities. From other Census information, however, it appears that major gains have been made during the past decade in professional services, public administration, finance, insurance, real estate, and public utilities, while construction, transportation, and communications have either lost ground or have barely held their own.

Summary and Recommendations

The future economic prospects of the city, as mentioned earlier, will continue to depend on its position as a trade and service center and as a location for manufacturing, military, educational, and professional activities. Continued population growth may be expected not only for Frederick itself, but generally within its trade territory, as closer association with the rapidly growing metropolitan centers of Baltimore and Washington is being brought about through the completion of the expressway system. Some local benefits may be expected from the establishment between this city and Washington of such major government agency headquarters as the Atomic Energy Commission and the Bureau of Standards. When the planned improvements are completed on U.S. Route 15 and 340, especially into Virginia and West Virginia, Frederick's effective trade territory is likely to be extended in those directions. There is ample land suitable for manufacturing and other activities within the potential urban service area, where city water, sewers, and other facilities can be provided. There is a growing labor supply, especially of women, and the city's labor relations record has always been good. Living conditions are attractive.

Continual efforts should be made to encourage the location of desirable new industries and expansion of existing ones in or near Frederick, in order to strengthen the economic base of the city. Its prosperity now depends to a large extent on the continuation of activities at Fort Detrick, and this is unpredictable due to the uncertainties of national military policy. There are many possibilities for growth in manufacturing, such as in the production of small components, tools, and equipment used by the major industries in the Baltimore area, more consumer goods for local and nearby consumption, research and development establishments related to Fort Detrick and the other Federal establishments between Frederick and Washington, and others.

Table 19

TRENDS IN SERVICE TRADES

Frederick City, Related Cities & State Totals

1948 - 1958

Subject	Year	Frederick No.	Frederick % of State	Hagerstown No.	Cumberland No.	Maryland Total No.
Number of Establishments	1958	151	1.13	283	227	13,374
	1954	141	1.33	268	246	10,597
	1948	112	1.42	201	208	7,910
Receipts	1958	$3,484,000	0.83	$6,830,000	$5,264,000	$421,618,000
	1954	2,905,000	0.99	5,659,000	4,580,000	293,743,000
	1948	1,252,000	1.03	2,852,000	2,455,000	121,055,000
Active Proprietors (Unincorporated Business)	1958	154	1.18	266	217	13,000
	1954	140	1.36	273	221	10,264
	1948	115	1.44	190	196	7,987
Number of Paid Employees (Full & Part-Time)	1958	455	0.88	867	624	51,904
	1954	464	1.29	828	594	35,875
	1948	245	1.21	637	509	20,359
Total Payrolls	1958	$864,000	0.69	$2,156,000	$1,526,000	$125,365,000
	1954	713,000	0.81	1,773,000	1,208,000	87,801,000
	1948	352,000	0.88	1,153,000	898,000	40,056,000

Source: U. S. Census of Business

Further growth of the Frederick trade territory during the next two decades seems assured. Assuming that this area, including all of Frederick County and parts of those adjoining, will grow to contain some 100,000 people, and that the amount of retail business done in Frederick will continue at not less then the current rate of $1,580 per capita of trading-area population, the retailers here might easily count on a trade potential of about $60,000,000 or more by 1980, an increase of close to 35%. Wholesale trade can anticipate a similar expansion, as may also the service trades.

Frederick has the oldest Chamber of Commerce in the United States, and it is very active. Several new industries have been brought to the city in recent years through its efforts. No special recommendations would seem to be necessary in this connection except to point out that the aim of the community should be to seek industries of a non-seasonal type, that need moderate to high labor skills and pay good wages, are cyclically stable, growing, and financially responsible, and that maintain favorable employment and wage policies, have a good relationship with local firms and civic activities, and produce a reasonably high local tax yield. Diversification of industries is most important in order to avoid an over-reliance on the fortunes of any one industry. Well-paying jobs for women are becoming increasingly important.

Several suggestions have already been made in this report as to the planning policies and measures needed for the promotion of desirable economic growth. In the allocation of land for various purposes, both within and beyond the city limits, ample provision should be made, through zoning and otherwise, for commercial and industrial development in appropriate locations and in reasonable proportions to estimated needs. There is a special need for the development and protection of desirable sites for light industry, including planned industrial parks. Zoning provisions should be designed to conserve the areas best suited for industrial use and promote their development for the types of industries that seek attractive surroundings and make good neighbors. Commercial developments should be concentrated in modern shopping centers or well-defined service districts at strategic locations. Modern public improvements including city water lines, streets, and the like, are essential. As to the city itself, outside investments in new plants and commercial enterprises can be attracted to a large degree by making the city more attractive as a place in which to live. This will call for positive programs to protect, rehabilitate, and in some cases renew residential areas, improve the means of vehicular access and circulation, augment existing parks, playgrounds, schools, library facilities, and other community services and enhance the city's general appearance. Proposals concerning these and other needs are made in the Comprehensive Master Plan.

One other important recommendation has to do with annexation. Much of the recent industrial and commercial growth of Frederick has taken place outside the city limits, due to the availability of more spacious sites and the general expansion of the community as a whole. Recommendations are included in this report for the annexation of such areas in order that all necessary urban facilities and services can be extended to them in an orderly and economical manner. Experience throughout the country has proved that modern commercial and industrial developments need city water, sewers, thoroughfares, police and fire protection, street lighting, and the like, and that these can be provided most efficiently by a single government serving the entire urbanizing area.

LAND USE AND HOUSING

Land Use Relationships

Land is the basic asset of every community, and the well-being of that community depends in large measure upon how the people use it.

In an urban environment, no one property owner can be completely independent of others in the use of land. The value of his property for a particular purpose is affected mainly by what a group of owners does collectively, rather than what he may do alone. The desirability of property for residential, commercial, industrial or other purposes depends on its relationship to other developments of a similar or related nature. Its usefulness and value are affected also by the public services and facilities provided to serve it, including streets, utilities, parks, schools, and others. Conversely, the use to which a particular piece of land is put may seriously increase the taxpayer's cost of providing such public services and facilities. The way that land is used is of great importance, therefore, to each individual property owner as well as to the community at large.

Efficient city management and community well-being call for an understanding of the inter-relationships between the different uses of land and the means for achieving an orderly and mutually beneficial pattern of land development. Such is the purpose of a Land Use Plan. Each kind of development - industrial, commercial, residential, etc. - must have adequate and appropriate spaces in which to locate, in relation to other uses and to an efficient and economical system of public improvements. Such a plan must obviously take into account, for one thing, the existing uses of land. Surveys and studies were made, therefore, for the purpose of seeing how the land in and near Frederick is being used, and of diagnosing the present situation and estimating the city's needs over the years ahead.

The Land Use Survey

In order to determine the present use of land, a survey was made of the entire city and its surrounding one-mile belt. With the aid of block maps and aerial photographs, every piece of property was inspected on the ground and a record was made of its use and other characteristics. From this information a detailed map was prepared at a scale of 400 feet to the inch, showing by various colors and symbols the existing use of each lot or parcel of property. A more generalized map summarizing this information at a scale of 800 feet to the inch was prepared for reproduction and easy reference (see Plate 7). From these surveys, measurements were made to determine the amounts of land utilized for various purposes. Summary statistics on the existing use of land are presented in Table 20 and are shown graphically on Plate 8.

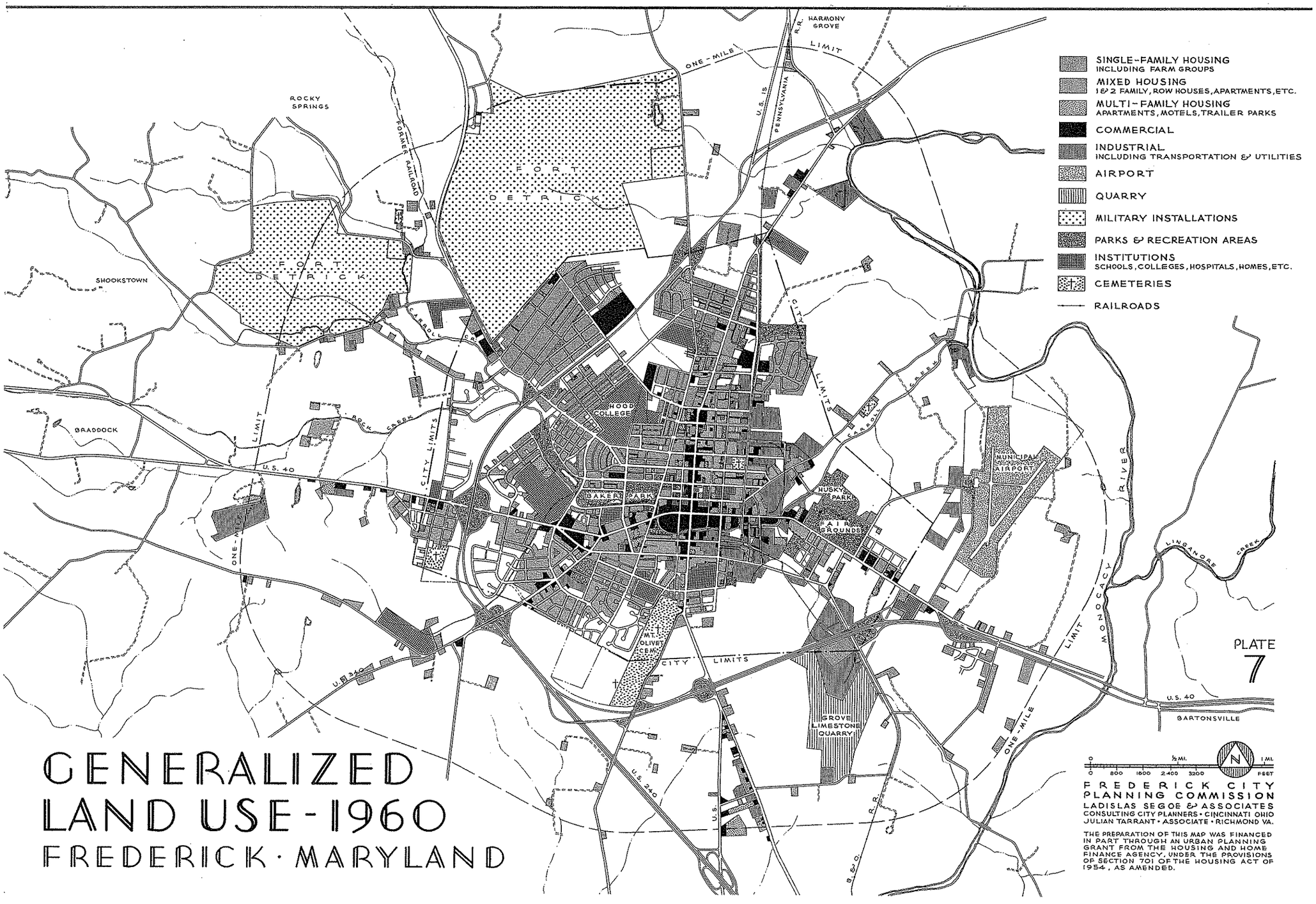
The various categories of land use depicted on these maps, and for which the area measurements have been tabulated, are as follows:

One-family Residential - Areas occupied by detached single-family dwellings, including farm houses with their groups of out-buildings.

Table 20

LAND USE IN FREDERICK - 1960
(Inventory from Land Use Survey, 1960)

Category of Land Use	In City Limits			In One-Mile Belt			In Combined Area		
	Acres	% of Developed Land	% of Total City	Acres	% of Developed Land	% of Total Belt	Acres	% of Developed Area	% of Total Area
Residential, total	905	42.8		183	8.3		1,088	25.2	
1-family dwellings	(666)	(31.5)		(166)	(7.6)		(832)	(19.3)	
2-family dwellings & row houses	(154)	(7.3)		(3)	(.1)		(157)	(3.6)	
Multi-family dwellings	(85)	(4.0)		(14)	(.6)		(99)	(2.3)	
Commercial, total	141	6.7		16	.7		157	3.6	
Professional offices	(10)	(0.5)		(0)	(0)		(10)	(.2)	
Retail business	(65)	(3.1)		(8)	(.3)		(73)	(1.7)	
General business	(66)	(3.1)		(8)	(.4)		(74)	(1.7)	
Industrial, total	174	8.2		144	6.6		318	7.4	
Light industry	(85)	(4.0)		(31)	(1.4)		(116)	(2.7)	
Heavy industry	(89)	(4.2)		(52)	(2.4)		(141)	(3.3)	
Mining	(0)	(0)		(61)	(2.8)		(61)	(1.4)	
Transportation & Utilities	24	1.1		49	2.2		73	1.7	
Public & Institutional, total	196	9.3		1,404	64.0		1,600	37.1	
Airport	(0)	(0)		(141)	(6.4)		(141)	(3.3)	
Other	(196)	(9.3)		(1,263)	(57.6)		(1,459)	(33.8)	
Parks, Golf Courses, Cemeteries	213	10.0		36	1.6		249	5.8	
Streets & Alleys	465	21.9		363	16.6		828	19.2	
DEVELOPED LAND, totals	2,118	100.0	66.2	2,195	100.0	28.7	4,313	100.0	40.0
VACANT LAND, FARMS & STREAMS	1,082		33.8	5,461		71.3	6,543		60.0
TOTAL AREA	3,200		100.0	7,656		100.0	10,856		100.0



GENERALIZED LAND USE - 1960

FREDERICK · MARYLAND

Two-family Residential - Areas of two-family dwellings or row houses.

Multi-family Residential - Areas of dwellings for three or more families each, such as apartments, motels, trailer parks, etc.

Professional Offices - Buildings designed or used exclusively for professional or similar offices, without store fronts, including converted dwellings.

Primary Retail Business - Retail stores and shops that serve the general public directly and of a type usually found in a shopping center, such as clothing, variety, food, drug, hardware, furniture, and jewelry stores, banks, barber and beauty shops, launderettes, shoe repair shops, restaurants, antique shops, and business offices with store fronts.

General Business - Those types of business not usually found in a shopping center but more often located along main thoroughfares or in less valuable locations, including auto sales and services, gasoline stations, garages, tire shops, implement sales, business equipment sales and services, printing, plumbing, electrical and similar shops, amusements, commercial recreation places, pet shops, veterinarians, drive-in and other roadside establishments, wholesale houses, and distributors.

Light Industry - Light manufacturing and distributing plants, warehouses, repair shops, and the like - of an inoffensive type not likely to be seriously objectionable in close proximity to residential developments.

Heavy Industry - Those industries having more objectionable characteristics in relation to residential developments, such as stock yards, meat packing plants, asphalt paving plants, sewage disposal plants, rock crushers, mixers, and screening plants, junk yards, bulk oil or gas storage plants, and the like.

Mining - This includes the limestone quarries and dumps of the Grove Lime Company.

Transportation and Utilities - The railroad yards and terminals, bus and truck terminals, airport, water works, gas, electric, and telephone service yards and buildings, etc.

Public and Institutional - Schools, hospitals, churches, clubs, and other public buildings, including Fort Detrick, Hood College, the State School for the Deaf, and the like.

Parks and Cemeteries - The various city parks and playgrounds, other public parks, the fairgrounds, and cemeteries.

Vacant - Land in farms, woods, or other rural uses, or vacant.

Present Use of Land

The City of Frederick comprises about 3,200 acres of land and water (5 square miles), of which two-thirds are presently developed with various kinds of urban use. Over two-fifths of this developed area (42.8%) is occupied by dwellings of various kinds, mostly single-family, while the next largest percentage, 21.9% or more than one-fifth of the total, is taken up by streets and alleys. Commercial and industrial developments occupy only 6.7% and 8.2% respectively, whereas parks and playgrounds occupy 10% of the area and other public and institutional uses another 9.3%. Frederick can be said to be very largely a city of homes, parks, and public or semi-public institutions of an educational or similar nature.

It has been found by experience that cities are very much alike in the amounts of land they require for various purposes, in proportion to their total size and population. In the following table a comparison is made between the Frederick figures and those for an average of 28 other self-contained cities of less than 50,000 population.

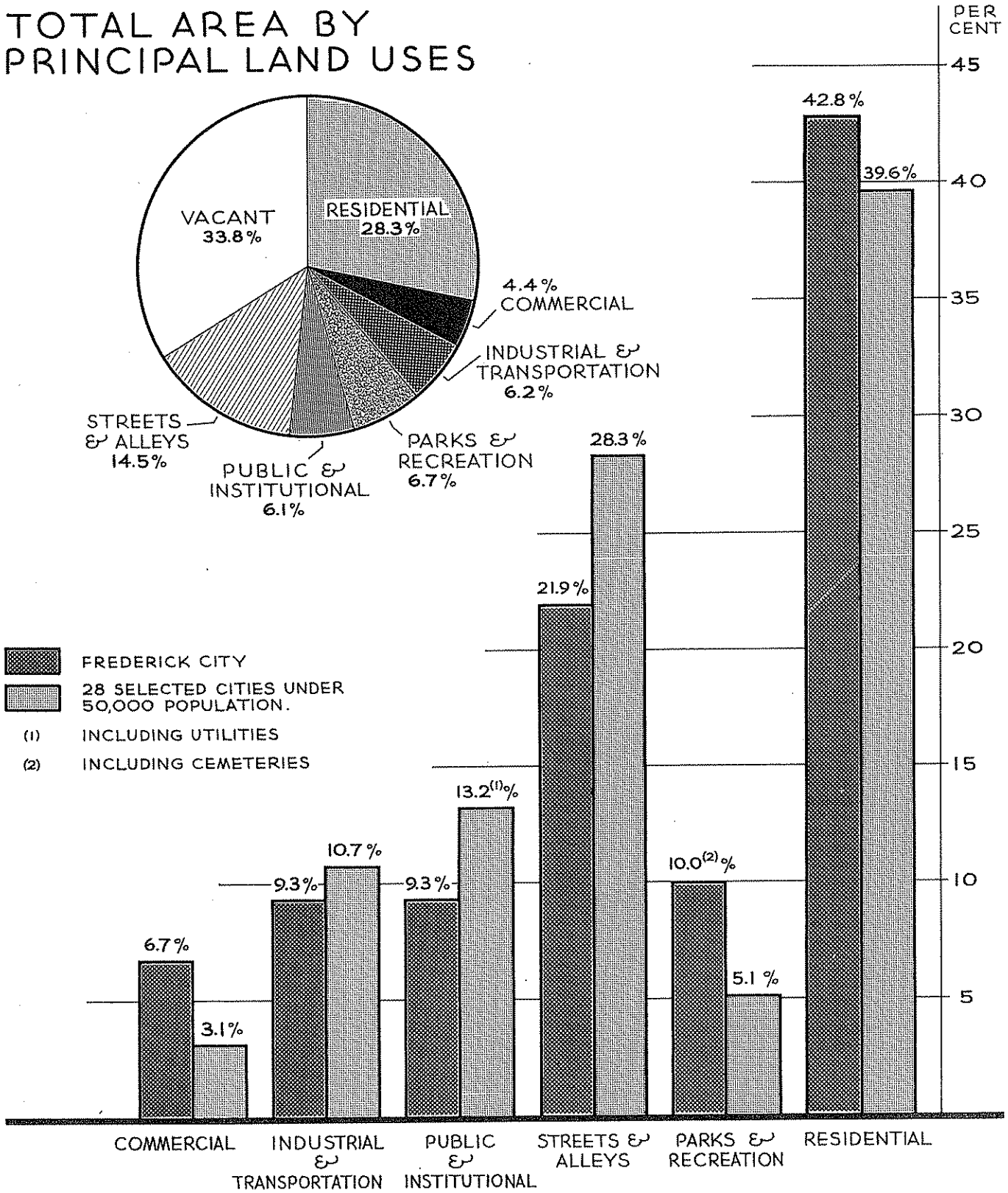
Frederick Development Compared with the Average Self-Contained City

Categories	Frederick	Average Self-contained city
Residential	42.8%	39.6%
Commercial	6.7	3.1
Industrial and Transportation	9.3 (1)	10.7
Parks and Playgrounds	10.0 (2)	5.1
Public and Institutional	9.3	13.2 (1)
Streets and Alleys	21.9	28.3
	100.0%	100.0%

(1) Includes utilities
(2) Includes cemeteries

In most respects, Frederick compares favorably. It is higher than average in its proportion of residential and commercial areas and in its parks and open spaces (including cemeteries). Its industries occupy somewhat less than the average proportion of total area, but some of Frederick's most important industries are located outside the city boundary. It is more conservative than the average city in the amount of space allocated to streets and alleys, but this may indicate a serious deficiency in street facilities rather than true efficiency. A further examination of this point will be made in the section of this report dealing with Major Streets. A comparison of the amount of public and institutional land is not as meaningful as the other categories listed, because of wide variations from city to city in the number and size of institutions. Frederick is somewhat below average in this respect, but the fact is not significant.

TOTAL AREA BY PRINCIPAL LAND USES



DEVELOPED AREA BY PRINCIPAL LAND USES

USE OF LAND IN FREDERICK 1960

FREDERICK • MARYLAND
CITY PLANNING COMMISSION

LADISLAS SEGOE & ASSOCIATES
CONSULTING CITY PLANNERS
CINCINNATI • OHIO
JULIAN TARRANT • ASSOCIATE
RICHMOND • VIRGINIA

FINANCED IN PART THROUGH AN URBAN PLANNING GRANT FROM THE HOUSING AND HOME FINANCE AGENCY UNDER SECTION 701 OF THE HOUSING ACT OF 1954 AS AMENDED

A more detailed breakdown of existing land uses both within the City Limits and in the surrounding one-mile belt is given in Table 20. It will be seen that the one-mile belt, in contrast to the city proper, is less than one-third developed and that most of this development consists of major public and institutional establishments. Chief among these are of course the two parts of Fort Detrick and the Frederick Municipal Airport. Residential development accounts for only about 8% of the developed land in this belt, while industries, including the Grove Limestone Quarries, comprise a little over 6%.

From Plate 7 the existing pattern of development in the city and surrounding belt may easily be visualized. Concentrated in the heart of the city is the central business district, the nucleous of economic activity in the community, with arms reaching out along the main thoroughfares to the north, east, and west. Surrounding it are the older residential areas consisting of a mixture of one-family and two-family houses, row houses, apartments, and other types, with an inter-mixture of small business places, churches, and other institutions. Within this general area are also a number of larger apartment developments, both publicly and privately owned. Beyond the old inner belt of mixed housing are the newer and more extensive areas of exclusively single-family housing for the most part, extending to the City Limits on the north, west, and southwest. Here also are the larger parks and institutions such as Hood College and the junior and senior high schools.

Industries are concentrated almost entirely along the eastern edge of the old city, adjacent to the railroads. Other industries have grown up next to the airport. The two parts of Fort Detrick are situated to the northwest of the city, blocking further urban development in that direction. Highway-service types of business are strung out along the main city approaches from the south, east, and west. Water-supply and sewage disposal facilities are adjacent to the Monocacy River.

The existing pattern of land development is due to the early and natural grouping of similar uses in localities especially suited for them, and in more recent years to the guidance exerted by city planning and zoning measures. The concentration of business establishments in the geographic center of the city is a result of physical economic factors which made this location most accessible and thus most suitable for such purpose. There has been only one major detachment so far of prime shopping establishments into outlying areas, this being the Frederick Shopping Center on West 7th Street near Fort Detrick. More will be said later about the role of the central business district in the future of Frederick and the need for its improvement and revitalization.

In the older residential sections close to the central business district, particularly northward between East Street and Bentz Street, the residential character has been preserved through the years in spite of the pressure of commercial and industrial expansion. This area still has many fine qualities, especially its unique architecture and beautiful gardens. Intelligent zoning has undoubtedly been a major factor in protecting this area from change and deterioration, particularly in the areas along Church and Second Streets, where a special type of zoning has been used to preserve the appearance of the buildings while permitting a limited amount of conversion for certain non-residential uses. In other parts of this older section, pockets of slums have been cleared out and replaced by modern public housing developments. The same applies to certain parts of the older residential areas south of Patrick Street.

Frederick's growth has been of an unusally compact nature, controlled no doubt by the city's water and sewer extension policies. This has prevented an indiscriminate and haphazard scattering of new housing, for which the community should be thankful. The industrial development likewise has remained fairly compact, thus making for economical and efficient provision of the types of transportation, utilities and other facilities required by industries.

Whereas the original town was laid out almost equidistant around its center at Patrick and Market Streets, in recent years its growth has become more onesided. Because of the railroads and industries to the east, the residential development has gone to the west and northwest. A balanced growth is desirable, but this need not consist entirely of residential development in all directions; a more intensive industrial growth would be desirable on the east side of town in order to maintain a good balance.

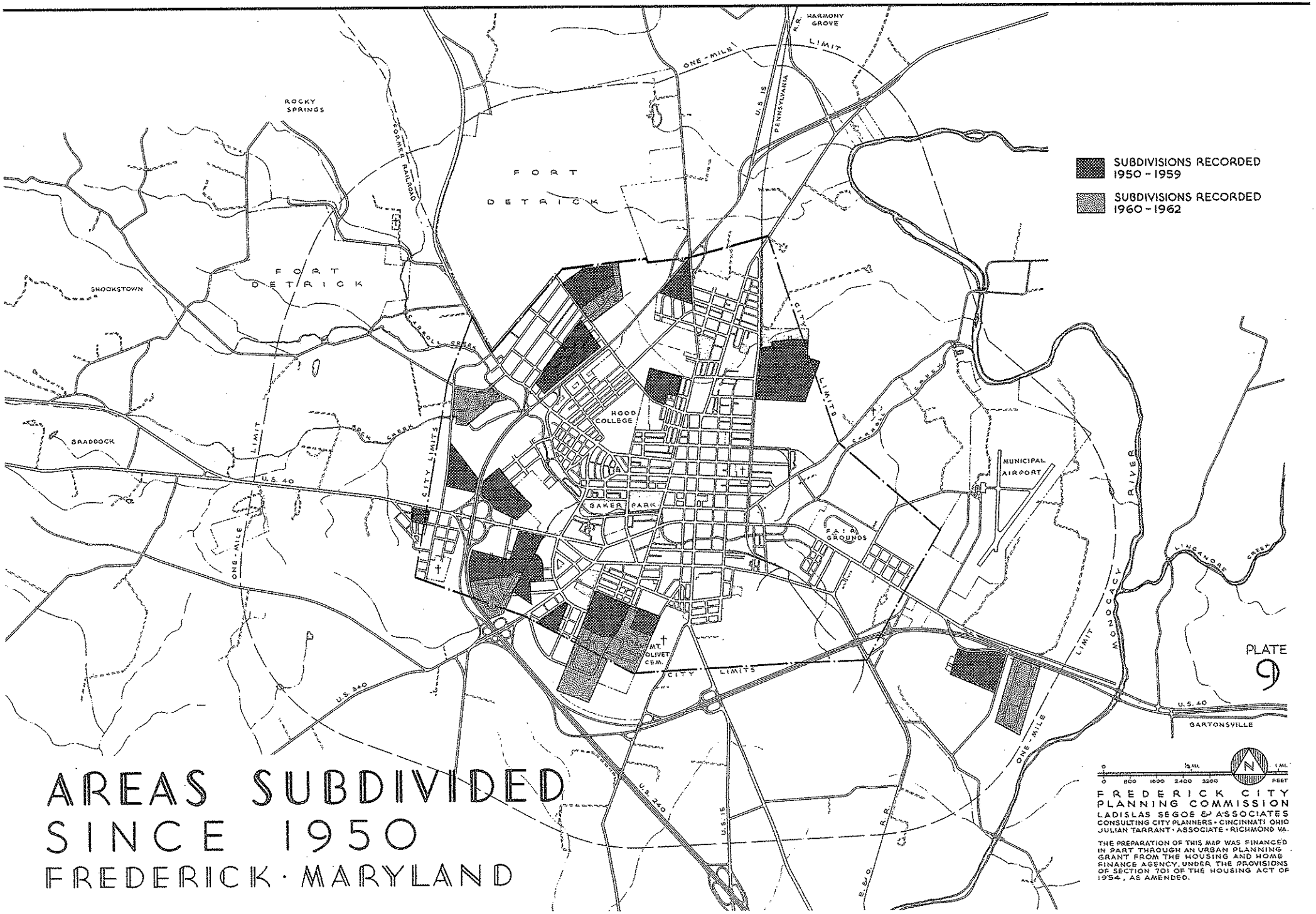
Few large vacant areas remain within the City Limits for further growth. Most of those to the east are unsuitable for residential use because of industrial zoning and development. Much of the vacant land to the north is known to be held for institutional uses. It is becoming increasingly obvious that the city boundary lines should be extended soon to encompass additional vacant areas, in order to provide tracts for urban growth where a full complement of city services and facilities can be provided by the municipal government. Fortunately, most of the one-mile belt is still undeveloped and unspoiled, and the city should have no difficulty in meeting its land requirements for future growth.

Recent Growth

The rate at which urban growth is spreading into previously undeveloped areas is most significant as an indicator of probable future growth in the years ahead. This may be measured in several ways.

Plate 9 shows the areas subdivided for residential development between 1949 and 1959. During this period twenty subdivisions or units thereof were recorded covering 334 acres and containing 1,288 lots, an average of 33 acres or 129 lots per year. Since 1959 there have been several additional subdivisions or their extensions, also shown on Plate 9. A list of the subdivisions recorded between 1949 and 1959 is given in Table 21, from which it will be seen that subdivision activity has been fairly continuous in recent years and of an accelerating rate. Subdivisions are eating rapidly into the reserves of undeveloped land for residential development, after allowance is made for commercial, industrial, institutional, and other non-residential uses. While most of the new subdivisions -- about 90% -- have been within the present City Limits, these developments are now spreading out beyond the city proper. For the most part, new subdivisions have been on the north, west, and southwest sides of the city, in general accord with current residential growth.

New building construction during the last ten years provides another valuable clue as to what might be expected in the future. Plate 10 was prepared from the City's building permit pecords to show the extent, type, and direction of such growth. By reference to Table 22 it will be seen that 1,382 permits were issued for new buildings within the city, not including alterations, additions,



AREAS SUBDIVIDED SINCE 1950

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or accessory buildings. Over 93% of these were for dwellings, mostly single-family. The total value of such construction amounted to $22,545,455, for an average of more than two and a quarter million dollars per year. Of this amount 59% was for single-family dwellings, 18% for public and semi-public buildings, 11% for apartments and two-family dwellings, 9% for commercial developments, and only 3% for industrial buildings. Construction outside the city is not covered, for the most part, by City building permits. Major projects during this period included the Stewart Manor Apartments (70 families), Detrick Plaza Apartments (53 families), College Park Apartments (48 families), and two public housing projects -- George Washington Carver homes (60 families) and John Hansen Apartments (78 families) -- a total of 171 privately financed apartment units and 138 public units. Other major projects included the North Frederick and East Frederick Elementary Schools, West Frederick Junior High School, three buildings at Hood College, five churches, the Frederick Shopping Center, and several others.

Of the 1,597 new dwelling units constructed in this period, it is significant to note that 80% were in one-family dwellings, 19% in apartment developments, and less than 1% in two-family buildings -- a good indication of the dominant demand for single-family detached homes in this city.

Although new buildings in some cases were constructed on land previously occupied by older buildings, as in the case of some of the public housing projects, or were built on sites already in use and counted as developed land, such as the new buildings at Hood College and the West Frederick Junior High School, most of this new development involved vacant land. Altogether, some 674 acres (over one square mile) of land was brought into use during this decade -- an area representing 38% of the city's entire developed area. These figures dramatically testify to the acceleration of Frederick's growth in the last few years. They show that in just ten years the city added to its developed area almost two-thirds as much territory as had been developed previously in all its 200-year existence. As a result, the city is breaking out all around and must realize that further spreading at the same or even a greater rate is inevitable.

As a guide in estimating future land requirements, it should be noted that the 674 acres of new development consisted of 495 acres (73%) for single-family dwellings, 28 acres (4%) for apartments and two-family units, 80 acres (12%) for business development, 37 acres (6%) for industries and utilities, and 34 acres (5%) for public and community buildings. These are gross measurements including adjacent streets. The figures, while helpful, are not absolutely indicative because they do not include certain industrial and other developments outside the city limits for which city building permits were not required but which should be taken into account in estimating the requirements for future industrial growth.

Further evidence of the recently expanding rate of development may be gained from the Census figures on Housing. According to the latest report, Frederick had 1,460 new dwellings built during the ten year period 1950-1959, but only 746 (about half as many) in the preceding ten years.

Table 21

NEW SUBDIVISIONS - 1950-1959

Frederick City and One Mile Belt

Year Recorded	Name	Gross Acres Subd.	Gross Acres Year	Number of Lots Subd.	Number of Lots Year
1950	West Knolls	18.6	18.6	51	51
1951	Briggs Avenue	21.2		63	
	Tollgate Manor	16.7	37.9	40	103
1952	Brigadoon	15.1		52	
	W. Linden Hills *	4.6	19.7	13	65
1953	(None)				
1954	Monocacy Village	64.8	64.8	205	205
1955	Catoctin Park	11.7		51	
	College Estates A	13.0		51	
	S. Catoctin Park	8.2	32.9	26	128
1956	Carrollton A	8.0		106	
	Maplewood	10.6		126	
	Rosedale A	15.0		33	
	Stewart Manor	14.7	48.3	37	302
1957	Carrollton B	8.0		106	
	Tulip Hill *	31.7		37	
	Westbrook B	24.1	63.8	62	205
1958	Rosedale B	2.0	2.0	4	4
1959	Carrollton C	9.0		107	
	College Estates B	14.6		51	
	Wyngate	22.8	46.4	67	225
Totals			334.4		1,288
Average per year			33.4		129

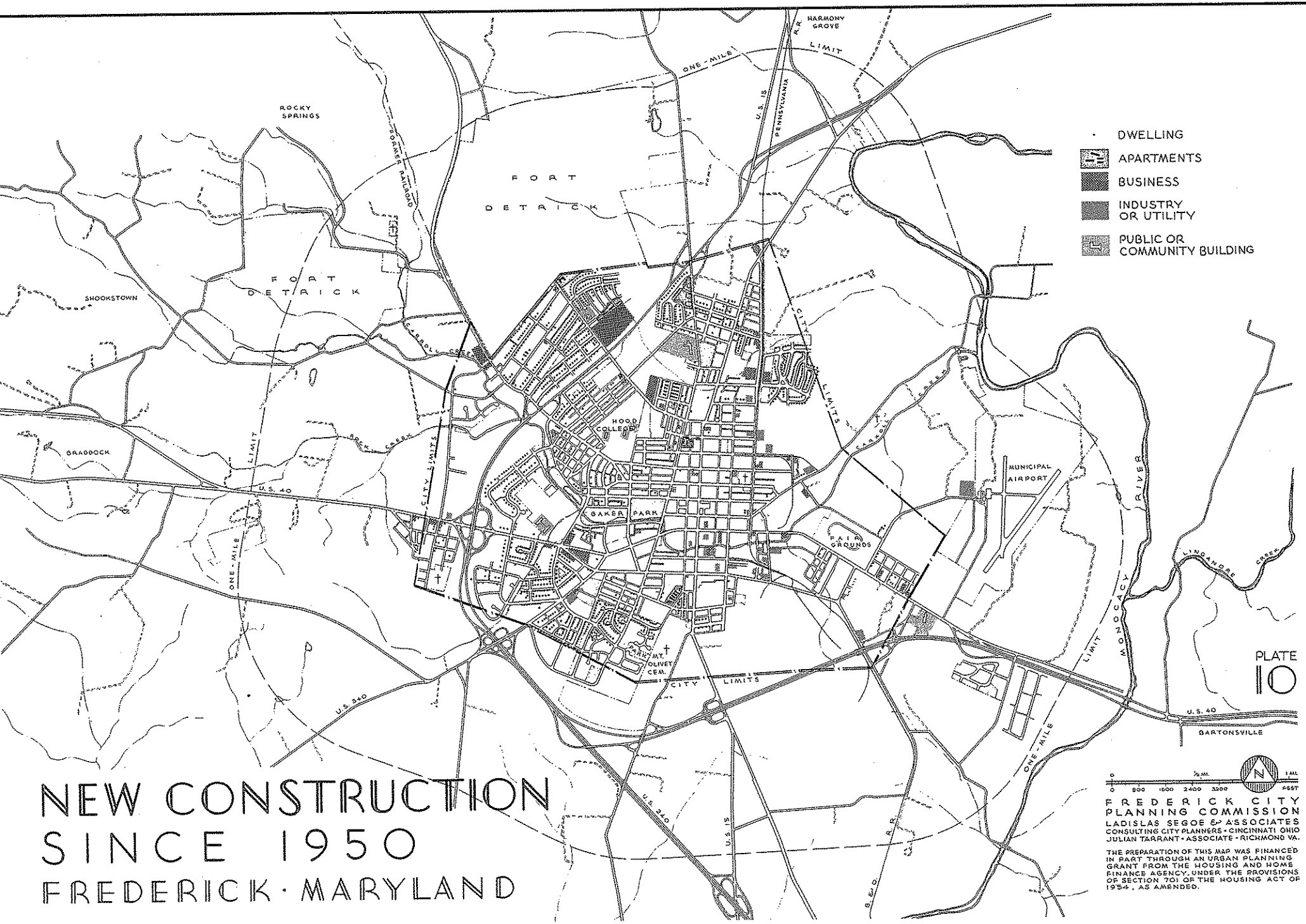
* Outside city limits

Table 22

NEW CONSTRUCTION - 1950-1959

Frederick City Building Permits

Year	1-Fam. Bldgs.	2-Fam. Bldgs.	Multi-F. Groups	Business Bldgs.	Indust'l. Bldgs.	Public Utilities	Public & Semi-P.
1950	106			5	4		
1951	132	1	1	4	2	1	1
1952	188	1		4	2		
1953	54		2	4	4		3
1954	87	4		6	2		1
1955	215			6	3		
1956	129			8	2	1	3
1957	123	1		4	3		1
1958	105		1	10	2		1
1959	135	—	2	2	6	—	—
TOTALS	1,274	7	6	53	30	2	10
Dw. Units	1,274	14	309				


DWELLING
APARTMENTS
BUSINESS
INDUSTRY OR UTILITY
PUBLIC OR COMMUNITY BUILDING
ROCKY SPRINGS
SHOOKSTOWN
BRADDOCK
FORT DETRICK
FORMER RAILROAD
HARMONY GROVE
ONE-MILE LIMIT
U.S. 15
PENNSYLVANIA R.R.
CITY LIMITS
CARROLL CREEK
BROOK CREEK
HOOD COLLEGE
BAKER PARK
FAIR GROUNDS
MUNICIPAL AIRPORT
MONOCACY RIVER
LINGANORE CREEK
MT. OLIVET CEM.
U.S. 40
U.S. 340
B.&O. R.R.
BARTONSVILLE
PLATE 10
NEW CONSTRUCTION SINCE 1950
FREDERICK · MARYLAND
FREDERICK CITY PLANNING COMMISSION
LADISLAS SEGOE & ASSOCIATES
CONSULTING CITY PLANNERS · CINCINNATI OHIO
JULIAN TARRANT · ASSOCIATE · RICHMOND VA.
THE PREPARATION OF THIS MAP WAS FINANCED IN PART THROUGH AN URBAN PLANNING GRANT FROM THE HOUSING AND HOME FINANCE AGENCY, UNDER THE PROVISIONS OF SECTION 701 OF THE HOUSING ACT OF 1954, AS AMENDED.

Future Land Requirements

As stated earlier in this report, the 1980 population of Frederick is expected to approximate 28,000 to 32,000 or more, an increase of as much as 45% over the 1960 figure. It may be assumed in accordance with current trends, both locally and nationally, that the additional population of some 6,000 to 10,000 persons will for the most part reside in single-family private homes at an average density of 2-1/2 to 3 families, or about 8 persons, per gross acre of residential land, in which case some 750 to 1,250 acres or roughly 1-1/2 to 2 square miles of suitable land will be required for residential development, in addition to the land presently in such use. Assuming further that the growth of other types of development will be in at least the same proportion to residential development as now prevails, these requirements would amount to about 200 acres for commercial development, 275 acres for industrial use, and another 275 acres for public and semi-public buildings and institutions -- a total of 750 acres for these purposes or 60 acres of non-residential development for every 100 acres of residential. At present there are 16 acres of commercial development per 100 of residential within the city, 22 acres of industrial, transportation, and utility uses, and 22 acres of public and institutional uses. To these figures must be added of course sufficient land for parks and other open spaces and for various types of special uses, so that the total additional area likely to be required for urban expansion to accommodate a city of 28,000 to 32,000 persons will be 3 to 4 square miles at a minimum.

If the areas provided for new development were to be tailored precisely to the amounts of land thus estimated, monopoly values would soon be created as the opportunities for choice in sites for various enterprises and developments become more limited. Therefore it is considered not only desirable but necessary to allocate in the Land Use Plan substantially larger areas for each type of use than the foregoing minimum estimates would indicate, but not excessively larger since this would encourage undesirable scattering of developments. Such additional allocation provides not only a customary factor of safety in design, but also recognizes the fact that Frederick is not likely to stop growing by 1980 but, on the contrary, might conceivably grow even faster than anticipated. The Land Use Plan includes a built-in reserve against such contingencies.

The Land Use Plan

Based on the foregoing surveys and studies of existing development, recent growth trends, and estimated future needs, a long-range Land Use Plan was prepared as depicted on Plate 11. After lengthy study by the Planning & Zoning Commission, followed by public hearings and some adjustments, this plan was adopted by the Commission on March 26, 1962, for the immediate purpose of serving as a guide in the preparation of the new Zoning Ordinance and District Maps.

In contrast to Plate 7, Generalized Land Use 1960, which shows existing uses, the Land Use Plan portrays in terms of long-range growth and development the proposed use to which different parts of Frederick should be put, in consideration of existing use, functional suitability, and estimated future land requirements. It shows by different symbols, patterns, and tones the various broad categories of use recommended for each section of the present city and

adjoining areas. While resembling a zoning map in many respects, it differs in others -- such as in the designation of public and semi-public properties for which there are no separate zoning designations. Also, it is more generalized, being intended to serve only as a guide in the consideration of proposals for future zoning changes. Besides assisting thus in promoting sound and systematic amendments in the years ahead, in accordance with a comprehensive plan, the Land Use Plan is meant also to encourage and aid in bringing about appropriate subdivision practices in each part of the as-yet-undeveloped sections, to assist in determining the proper locations and sizes of various utilities or extensions such as sewers and water mains, and to provide a basis for the acquisition of appropriate sites for major public or semi-public uses. The plan covers the present city plus the adjoining unincorporated belt extending a mile or so beyond the city limits, into which the city is growing and over which it has both zoning and subdivision control authority. At the outer fringes of this belt the plan has been correlated with similar plans adopted by Frederick County.

On the whole, the plan comprises more than twice as much area for urban use as is presently developed. Table 23 shows the amounts of land allocated to each of the various types of use, both within the present city and in the one-mile belt, compared with existing developments of similar nature. For all urban developments a total of 8,963 acres (14 square miles) are designated, or 108% more than the 4,313 acres presently used. The space allocated to single-family residential development is nearly three times as much as at present, there is about 60% more land for general residential use, more than three times as much for various types of business development, 4-1/2 times as much for industrial and related uses, and substantial increases in the space for parks and other public and semi-public purposes. By comparison with the estimates of future requirements, already presented, it is felt that quite ample allowance has been made for the growth of the city in all its various aspects.

The Land Use Plan contemplates that by 1980 or shortly thereafter, practically all the area within the present city will be utilized for some kind of urban purpose, and the urban development will have spread out also into adjoining territory in several directions. Because of the shape of the natural drainage basin in which the city is situated, residential growth is directed mostly to the west and north where city water, sewers, and traffic arteries can be extended most feasibly and economically. Such, incidentally, is the predominant direction of current growth. Expansion southward is effectively blocked by the Interstate Highway complex which coincides also with the drainage basin divide beyond which it becomes relatively more expensive to extend the sewer system. Industrial expansion is indicated mainly to the east and southeast, into areas already committed to such uses by existing development and zoning and where heavy utilities, transportation, and the like are most readily available. Future shopping centers and areas for other types of commercial growth are designated in accordance with customary practice and the economic laws of location and suitability. No development of an urban nature is proposed, nor should it become necessary, for a distance of more than about one mile from the edge of the present city, inasmuch as within this distance there is more than ample holding capacity for all the urban development that can at this time be anticipated during the next twenty years and more.

Table 23

LAND USE PROVISIONS COMPARED WITH EXISTING USES

A. In City Limits

Type of Area	Existing Use-1960 (gross acres)*	Provided in L.U. Plan (gross acres)*	Increase in Area	Existing % of Developed Area	Proposed % of Total Area
Single-family Residential	831	1,014	22%	39.2%	31.7%
General Residential	299	500	67	14.2	15.6
Special Business & Professional	11	83	650	0.5	2.6
Shopping Center Business	80	86	7	3.8	2.7
General Business	81	212	162	3.8	6.6
Industry, Transportation, Utilities	233	640	174	11.0	20.0
Public & Semi-public Buildings and Institutions	231	251	9	10.9	7.8
Parks and Cemeteries	253	315	35	11.9	9.9
Expressways	99	99	0	4.7	3.1
TOTAL URBAN USES	2,118	3,200	51%	100.0%	100.0%
VACANT, FARMS, ETC.	1,082	0			
TOTAL CITY AREA	3,200	3,200			

* Gross acres includes contiguous streets

Table 23, Cont'd

LAND USE PROVISIONS COMPARED WITH EXISTING USES

B. In One-mile Belt

Type of Area	Existing Use-1960 (gross acres)*	Provided in L.U. Plan (gross acres)*	Increase 1/ in Area	Existing % of Developed Area	Proposed % of Total Area
Single-family Residential	199	1,873	845%	9.1%	32.5%
General Residential	20	12	-40	0.9	0.2
Special Business & Professional	0	0	0	0.0	0.0
Shopping Center Business	10	12	20	0.5	0.2
General Business	10	220	2,100	0.5	3.8
Industry, Transportation, Utilities	222	1,399	530	10.1	24.3
Public & Semi-public Buildings and Institutions	1,414	1,452	3	64.4	25.2
Parks and Cemeteries	40	391	880	1.8	6.8
Expressways	280	404	44	12.7	7.0
TOTAL URBAN USES	2,195	5,763	162%	100.0%	100.0%
VACANT, FARMS, ETC. (reserves)	5,461	1,893	-65%		
TOTAL AREA	7,656	7,656			

1/ or decrease

* Gross acres includes contiguous streets

Table 23, Cont'd

LAND USE PROVISIONS COMPARED WITH EXISTING USES

C. Combined City and One-mile Belt

Type of Area	Existing Use-1960 (gross acres)*	Provided in L.U. Plan (gross acres)*	Increase in Area	Existing % of Developed Area	Proposed % of Total Area
Single-family Residential	1,030	2,887	180%	23.8%	32.2%
General Residential	319	512	60	7.4	5.7
Special Business & Professional	11	83	650	0.3	0.9
Shopping Center Business	90	98	9	2.1	1.1
General Business	91	432	375	2.1	4.8
Industry, Transportation, Utilities	455	2,039	347	10.5	22.8
Public & Semi-public buildings and Institutions	1,645	1,703	3	38.2	19.0
Parks and Cemeteries	293	706	141	6.8	7.9
Expressways	379	503	33	8.8	5.6
TOTAL URBAN USES	4,313	8,963	108%	100.0%	100.0%
VACANT, FARMS, ETC. (reserves)	6,543	1,893	-71%		
TOTAL AREA	10,856	10,856			

* Gross acres includes contiguous streets

For many practical reasons a reasonably compact community is most desirable. When new developments of an urban type are consolidated in certain sections, each of which is successive or contiguous, at least in part, to an already developed area, it should be obvious that the cost of providing sewers, water lines, street paving, and other municipal facilities and services will be minimized. It would be all too costly, if not prohibitive, to provide even the minimum of municipal improvements or services too numerous, small, widely-scattered residential areas or non-residential developments. Therefore, the Land Use Plan, by indicating the extent of the area estimated to be fully adequate to accommodate all likely prospective growth of the urban type, within the next twenty to twenty-five years or so, provides the basis for establishing such policies by the City in respect to the extension of utilities and other minicipal services and facilities as will further urban expansion along desirable lines indicated herein and at a minimum cost to the taxpayer, the developer, and the prospective property owner.

Beyond the desirable limits of urban growth indicated by the Land Use Plan, the remaining land within the one-mile belt and somewhat beyond in certain directions may be considered a reserve for additional urban development in the more remote future. Meanwhile, public policy should be directed toward the preservation of this land in its present open use as farms or otherwise, inasmuch as its urbanization in the near future does not appear to be economically necessary or desirable.

Six classes of urban areas for residential or industrial development are shown on this plan, together with areas for different kinds of public or semi-public developments either existing or contemplated. The principal use classifications designated on the plan are to be interpreted substantially as follows:

Residential Areas. Areas for two types of residential development are shown in the plan, Single-family Residential and General Residential. The Single-family Residential areas are primarily for single-family detached homes, together with churches, schools, playgrounds, and other structures commonly incidental to and permitted in residential areas. The General Residential areas are those in which there is a mixture of various kinds of dwellings such as apartments, row houses, flats, duplexes, or others as well as single-family homes. Some of these areas contain nothing but apartments. Most of the General Residential areas will be found in the older central parts of the city where mixed types of housing have been established through the years, while most of the Single-family Residential areas are in the newer outlying portions of the city which were developed after protective zoning was adopted or where protected by deed restrictions. Most of the areas suitable for new residential expansion have been placed in the single-family category, since this constitutes the bulk of new construction and requires the greatest amount of new land.

Business Areas. Three types of business areas are indicated on the plan. The Special Business and Professional classification is comparable to the old "Service District" classification in the Frederick Zoning Ordinance which permits professional and other office buildings, artists' studios, hotels, charitable and other institutions, dwellings, and certain other uses of a restricted nature, provided the existing buildings are conserved in their exterior appearance. This is a special category designed primarily to preserve the old historic sections of Frederick, but the classification also permits the construc-

tion of new professional office centers in certain outlying locations. Some uses in addition to those specified in the old Service District Zone will be desirable in the West Patrick Street area.

The principal retail shopping centers in Frederick are indicated by the classification Shopping Centers. The most important of these of course is the Central Business District extending generally along Market Street from Carroll Creek to about 4th Street, and along Patrick Street for a block or so in either direction from Market Street. This is the dominant shopping center of Frederick County, and of regional importance. Its special identification and enhancement is of utmost economic importance to the city. A detailed study should be made of improvements required in this area to promote its further growth and development. Subsidiary shopping centers are shown on the plan where these have already existed or are in the active planning stages, including the Frederick Shopping Center on West 7th Street, a new center just constructed on West Jefferson Street at the Frederick by-pass, and another center on East Street at Monocacy Village. All four of these centers, including the Central Business District, are intended to be devoted primarily to intensive types of retail stores and services principally of the shopper-goods type which attract patrons from some distance around and require a high degree of concentration and large amounts of off-street parking.

A large variety of business establishments do not require a high value central location but are usually found along some of the principal thoroughfares and on the fringes of the high-value center. These include most of the automotive sales and service establishments, drive-in business places of all kinds, motels, restaurants, places that sell or service business equipment or supplies, machinery and equipment distributors, and many others. The General Business classification is intended to designate areas for such types of business and many of these areas will be found on the Land Use Plan, both within the present city and in the one-mile belt.

Industrial Areas. Most of the existing industries in Frederick are located to the east of town, near the railroads or airport, and this is where most of the future industrial areas are shown on the Land Use Plan. Some of these would be restricted through zoning to the so-called "light industries" which means only the types which do not have any seriously objectionable aspects such as noise, smoke, odors, or fire hazard. Other portions of the industrial area, more remote from the residential sections, will be zoned for the so-called "heavy industries" which have certain objectionable characteristics. The locations for light and heavy industries are details worked out in the zoning plan.

Public and Semi-Public Facilities. On the Land Use Plan are shown the existing schools, colleges, and other public or semi-public institutions including principal churches that are significant in the land use pattern. Existing parks and other recreation areas are indicated together with substantial additions and extensions that are recommended for the purpose of preserving some of the important natural assets of the locality and of enhancing the new residential and other areas. Among these are a proposed extension of Baker Park up-stream along Carroll Creek and Rock Creek, as the residential development expands; a similar parkway along lower Carroll Creek from the Fairgrounds to the Monocacy River for the purpose of preserving the natural flood-way

and separating and expanding residential area from one of the future major industrial areas; a similar extension of Monocacy Park; a park to preserve the historic Rose Hill Manor estate at the north city limits; and a parkway along the Monocacy River. Other parks and playgrounds to meet the more intimate needs of specific neighborhoods are recommended in the Recreation section of this report.

Existing cemeteries are indicated, along with the two sections of Fort Detrick as presently constituted, and the Frederick Municipal Airport. As to the Airport, provision is made in the plan for extension of the two existing runways to 4,000 and 5,000 feet, respectively, and the addition of a third runway 4,000 feet long, as provided for in the City's Airport Master Plan. In addition to the runways themselves, authoritative recommendations call for the provision of an over-run area at least one-half mile long and 1,000 feet wide at the end of each runway, within the airport property, and an approach zone extending another two miles and fanning out to a width of 6,000 feet. Within the approach zones the authorities recommend no schools, no hospitals, no churches, and no other places of public assembly, and no building or structure tall enough to constitute a flight hazard. Residential development within these zones should be discouraged and the land should be restricted to agricultural or other open uses so far as possible. These recommendations are made primarily to protect people against the hazards of aircraft accidents.

Housing

According to the U. S. Census of Housing, 1960, Frederick had at that time a total of 6,911 housing units of which 80.7% were in sound condition and equipped with all modern plumbing facilities. Of this total, however, some 603 units (8.7%) were deteriorating and 169 units (2.4%) were classified as dilapidated. An additional 563 units (8.2%) were found to be structurally sound but lacking in some or all plumbing facilities. These and other figures relative to the existing housing supply in Frederick will be found in Table 24. Comparisons with the combined figures for all urban areas in the state show that Frederick has about the same proportion of "dilapidated" dwellings, a higher percentage of "deteriorating" (8.7 compared with 8.3), and a much higher proportion (8.2 compared with 1.7) lacking in plu bing facilities although otherwise sound. Even though Frederick has the usual city building, plumbing, electrical, and other codes and ordinances, and in 1951 it adopted a "Hygiene of Housing" Ordinance, the 1960 Census found 820 dwellings, not dilapidated, that were lacking in some or all plumbing facilities. Among these were 637 units without bath and 58 without flush toilets. Also there were 15 dwelling units without heating equipment.

If it were not for Frederick's continuing public housing program, its housing situation obviously would be considerably worse. Through this program at least 230 substandard units that formerly existed have been cleared away and replaced (not always on the same site) by new low-rent housing. This program seems to have been hitting at the major part of the need, inasmuch as Table 24 shows that by far the majority of the worst housing that remains (80%) is occupied by renters. In the long-run, however, it is suggested that public rental housing be regarded as only a temporary solution and that these renters be encouraged to become home owners through the provision of acceptable homes,

not necessarily new, within their means. Widespread home ownership would seem to be a fairly good safeguard against premature property depreciation and obsolescence.

From field observations supplemented by information furnished by the city police and building officials, the locations of clearly deteriorating or dilapidated buildings have been mapped -- including both dwellings and other types of structures. Likewise, the locations of incompatible uses in residential districts have been noted. By reference to Plate 12 it will be seen that these deteriorating or dilapidated buildings are clustered for the most part around the old center of town, as would be expected, with only a few isolated cases scattered through the outlying sections, The principal clusters are north of the central business district in an area bounded generally by Third, Seventh, East, and Bentz Streets; from Carroll Creek southward to about South Street and from Market to DeGrange Streets; in the Second-and-East-Streets area; and around the B. & O. Railroad yards in the southeast part of the city. Incompatible uses are concentrated generally in the same areas and also, as will be noted, in such locations as along West Patrick Street and in an alley between Dill Avenue and West Fifth Street known as Evergreen Place. These misfits are the result mainly of old intrusions into residential areas by small shops and industries prior to zoning. The West Patrick Street situation developed through the years when this was the main highway to the west (U. S. 40), prior to construction of the by-pass highway. The Evergreen Place situation is curious in that it is a group of business enterprises that developed more or less prior to zoning, which has been allowed to grow and intensify even after becoming non-conforming.

Treatment Areas Plan

On the basis of the foregoing information, together with the Land Use Plan which shows the most desirable and practicable type of development for each part of the city, presently or in the future, the various sections of the city have been classified in accordance with the kinds of treatment to be accorded them. Principal attention in this respect was given to the older parts of the city where growth has practically ceased and decay has started to set in. Measures required in such areas must necessarily be of a corrective nature, requiring a positive approach as contrasted to the remainder of the city -- its major part -- where a healthy and stable condition now exists and may be preserved almost altogether through protective measures. Such measures would include continuous and consistent enforcement of the zoning, building, and housing regulations, including especially the Hygiene of Housing Ordinance already mentioned, along with the proper maintenance of existing public facilities such as schools, parks, playgrounds, streets, street lights, trees, and the like. Some environmental improvements will also be needed in certain of these areas, such as additional playgrounds, street improvements, lighting, tree planting, or otherwise. Removal of the occasional but more flagrant non-conforming uses can be achieved without cost, over a period of time, through enforcement of the time-limit provisions in the new zoning ordinance.

As to the older parts of the city where corrective measures are indicated, these have been classified under three main headings according to the general type of treatment that is required.

Table 24

HOUSING FACILITIES

Frederick, Maryland

Selected data, 1960

(Based partly on sampling, as indicated)

Total Housing Units (100% sample)	6,911
Occupied	6,675
Vacant	236
Occupied Units (25% sample)	
By Owner, white	3,343
By Owner, nonwhite	113
By Owner, Total	3,456
By Renter, white	2,742
By Renter, nonwhite	477
By Renter, Total	3,219
Vacant Units (100% sample)	
Year-round, sound or deteriorating	213
-available for sale only	29
-same, with all plumbing facilities	26
-available for rent	82
-same, with all plumbing facilities	66
-rented or sold, awaiting occupancy	68
-held for occasional use	7
-held for other reasons	27
Year-round, dilapidated	16
Seasonal	7
All Units (25% sample)	
Sound, with all plumbing facilities	5,576
Sound, others	563
Deteriorating, with all plumbing facilities	346
Deteriorating, others	257
Dilapidated	169
All Units, no piped hot water (25% sample)	685
All Units, no toilet, or no flush toilet	58
All Units, no bath	637
All Units, no heat	15
Trailers	8

Table 24 (Cont.)

Structure built since 1949 (25% sample)	1,460
Structure built 1940 - 1949	746
Structure built before 1940	4,705
Population	
In housing units, per occupied unit (1960)	3.1
In dwelling units, per occupied unit (1950)	3.2
Value of owner-occupied units	
Less than $5,000	155
$5,000 to $7,500	332
$7,500 to $10,000	321
$10,000 to $15,000	1,106
$15,000 to $20,000	740
$20,000 to $25,000	259
$25,000 or more	252
Total	3,165
Median Value	$13,300
(Same, range in State for places of 10,000 to 25,000 population: $8,300 to $21,300)	
Median monthly rent paid, renter units	$ 65
(Same, range in State for places of 10,000 to 25,000 population: $59 to $106	

Source: U. S. Census of Housing, 1960

1. Conservation Areas, in which there are some blighting influences and evidence of slow deterioration. In these areas the treatment would consist primarily of the rehabilitation of existing structures that are sound and suitable for continued use, the weeding out of structures that are deteriorated beyond repair or are blighting non-conforming uses, and the introduction of new developments consistent with the general character of the neighborhood, including public improvements and facilities where needed. Strict enforcement of zoning, building, housing, and sanitary laws is an essential part and one of the first steps in such conservation operations.

2. Historic Restoration Areas, consisting primarily of antique buildings interspersed with non-conforming and other inappropriate buildings and uses. Treatment would consist mostly of restoring the old buildings that have not already received attention by their owners, removing the inappropriate buildings and uses, introducing new uses compatible with the area, developing unused land, and eliminating unattractive features.

3. Redevelopment Areas, consisting primarily of buildings and uses that need to be eliminated because of substandard conditions or obsolescence and where re-design and redevelopment for other uses are desirable.

Six areas or units for active treatment of one or more kinds are recommended, as shown on the plan, Plate 12. The boundaries and extent of each area are necessarily tentative and subject to confirmation after a more intensive community renewal survey for which federal aid would be available. However, the approximate boundaries and general characteristics of each of these areas may be described as follows:

1. Central Business Area. This would extend generally from 4th Street to Carroll Creek, between Court Street and Middle Alley. It comprises the principal shopping and service center for Frederick County and contains many sound buildings and stores. Obsolescence, inadequate parking, congestion due to unrelated through traffic, and many unattractive and disturbing aspects tend to create an atmosphere adversely affecting its appeal to shoppers which combined with the competing outlying shopping centers is reflected in store vacancies, lack of building maintenance, loss of business, and other troubles. Some commendable efforts are being made currently to brighten up the district through voluntary measures. A general renewal plan aimed at meeting the more fundamental defects and needs should be prepared.

2. Northwest Conservation Area. This area extends generally along Klineharts Alley and Bentz Street from about 3rd Street to 6th Street. It is a basically sound residential area of good brick dwellings most of which have been well maintained, but there is some slum housing particularly along the alleys, inadequate parking space, narrow streets, and a few non-conforming uses. One problem is the very narrow but deep lots with large open spaces in the block interiors. Many of these rear yards contain attractive gardens but others need attention.

3. Northeast Conservation Area. This embraces the area extending generally from 3rd Street to 7th Street and east of Market Street to East Street. This too is a basically sound residential area of solid brick homes and nice gardens, mostly well maintained, but here too there is slum housing in the alleys, some dilapidated buildings other than dwellings, a mixture of non-conforming uses, and several blighting uses such as junk yards. Narrow

streets, inadequate parking areas, and limited play areas add to the growing undesirability of the area.

4. West Patrick Restoration Area. This extends generally along West Patrick Street from Court Street almost to West College Terrace, and southward to include a part of South Street. The area consists principally of antique and historic buildings dating back as far as 1790 or earlier, many of which have been nicely preserved or restored by their owners. Some of these old buildings, however, have been "modernized" or converted to inappropriate uses such as garages, laundries, and the like, or have been neglected. Some incompatible buildings and uses have been introduced, and there is some substandard housing. Deep lots, unused or misused rear yards, inadequate parking, unattractive streets, add to the decline. The area has great possibilities for restoration - for residential and commercial development as a tourist attraction and for housing the arts and professions. Some expansion of the central business district into this area is likewise possible.

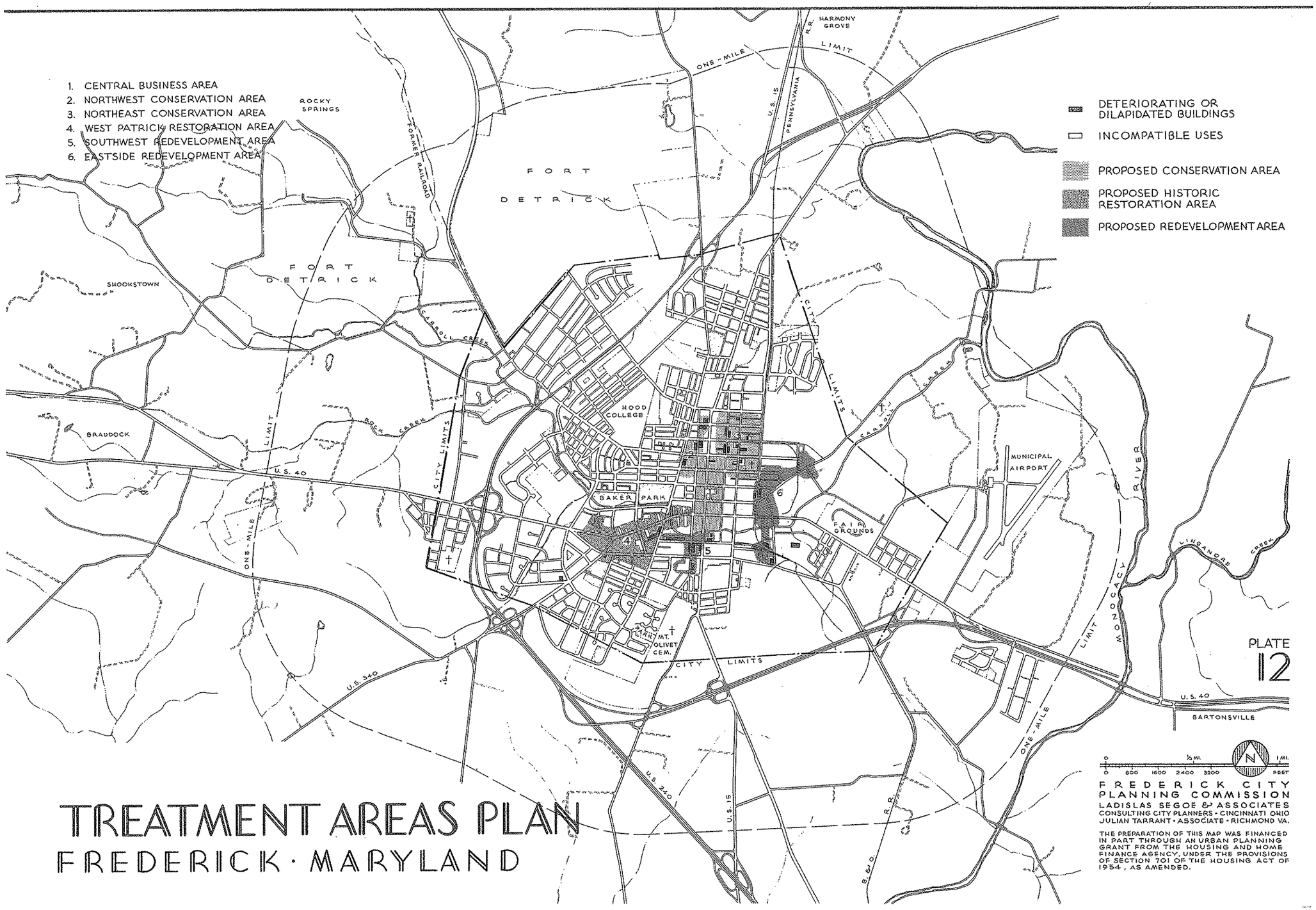
5. Southwest Redevelopment Area. This is a small section extending along Broadway and Ice Street from All Saints Street to the Carver Apartments, and between All Saints Street and Carroll Creek from east of Market Street to Bentz Street. It contains considerable substandard housing and other buildings, non-conforming and blighting uses, narrow streets, inadequate parking areas, and inappropriate uses. Redevelopment is proposed partly for additional multiple housing and neighborhood business, including parking, park enlargement, and street widening.

6. Eastside Redevelopment Area. This includes the old residential fringe lying in the industrial districts east of East Street, from about 4th Street to South Street. There are many old dwellings mixed in with industries, at high density on narrow streets without parking facilities, play areas, or other residential amenities. There are many substandard or dilapidated buildings, both residential and industrial. The area needs to be redeveloped mainly for industrial uses, with new or wider streets, parking areas, and other improvements appropriate to an industrial section.

As to priorities, it is suggested that early attention be given perhaps to the Central Business Area and the West Patrick Restoration Area. Third priority might go to the Southwest Redevelopment Area, with the other three areas following in any suitable order.

With particular reference to the foregoing recommendations for Area 4, the West Patrick Restoration Area, and also to a considerable extent in Areas 1, 2, 3, it is of importance to note that a survey was made in 1952 of the principal areas in the city that contain the older and more historic buildings. This survey, conducted by a committee of local architects headed by Mr. Charles F. Bowers, found nearly 500 buildings dating from 1850 or earlier that remained "in good condition and are readily adaptable for restoration and preservation". One result of this survey and recommendations by the committee was the adoption in 1955 of an ordinance creating a "Historic Frederick" district, in which the alteration, reconstruction, or razing of any building is prohibited except on recommendation of an architectural commission as to its architectural features.

Such an architectural commission was appointed in 1955 but its terms have expired and it appears now to be relatively inactive. Measures such as this can be helpful in arresting the further decline of existing neighborhoods, but something more is needed where an entire neighborhood of old buildings is deteriorating because of the intrusion of inappropriate uses and unsightly features. The city now has the power and opportunity to make use of urban renewal processes in these areas, as will be discussed in a later chapter.



TREATMENT AREAS PLAN
FREDERICK · MARYLAND

PLATE 12

TRAFFIC AND PARKING

A thorough study of the traffic characteristics and thoroughfare needs in the city of Frederick was made in 1948 by the State Roads Commission, Included were traffic counts, an origin-destination survey and analysis, recommendations for immediate traffic improvements such as parking restrictions, an internal by-pass system, certain street improvements, and changes in the traffic control arrangements; and finally, a Proposed Trafficways Plan consisting of a system of internal and outlying by-pass routes. The Internal loop, designed to relieve the central business district, consisted of portions of Bentz, South, Carroll, East and Eighth Streets, while the outlying by-pass system called for the construction of expressways to the south and west of town connecting U. S. Highways 40, 240, 15, and 340 in all directions. This outlying by-pass has virtually been completed and some of the other recommendations have also been carried out.

During the 1950's a voluminous "Master Plan" for the city of Frederick was prepared by Mr. Jefferson C. Grinnalds, Planning and Zoning Consultant. One feature of this plan was a Major Street Plan consisting of a system of internal thoroughfares intended to supplement the proposed by-pass highway system by improving the pattern of circulation and access within the city. Most of the existing trafficways were recognized in this plan, together with a number of connections, extensions, and additional routes. Among the latter were a number of "parallel" thoroughfares to be located primarily in the outlying areas where urban development had not yet occurred. Among the proposals for street extensions within the city were an extension of Seventh Street to the East, Fairview Avenue from Seventh Street to Motter Avenue, and East Street from Patrick Street southward. Some of them have been effected.

The present study of traffic and thoroughfare requirements has been limited to a restudy and revision of the previous Major Street Plan in consideration of subsequent and prospective highway developments, the new Land Use Plan, and other current Master Plan Studies.

The city of Frederick now has about 90 miles of streets of all kinds, of which about 18 miles or 20% are State Primary and Secondary Highways. Some 5½ miles of these state routes are maintained by the State Roads Commission, and the city is responsible for the rest. State funds are allocated to the city for this purpose, on a mileage basis. There are also 2.85 miles of State Expressways within the city limits. The Primary State Highways are Market Street and Patrick Street, both State-maintained, and South Jefferson Street, South Street and Bentz Street, maintained by the city. The Secondary Highways include West Fourth Street-Rosemont Avenue, West Seventh Street, Motter Avenue, Thirteenth Street, East Street (part), Gas House Pike, Monroe Avenue, South Carroll Street-Clarke Place, New Design Road, and Baughman's Lane-Military Road.

In the original plat of Frederick (see Plate 2) the east-west streets were laid out 60 feet wide but the only north-south streets of that width were Market Street and East Street. Bentz (Pence) Street was platted 33 feet wide, and then there were three alleys running north and south, each 16 wide, which have survived with little change to the present time. Most of the present

traffic difficulty in the central business area may be attributed to the lack of adequate north-south streets. Beyond the original platted area, the streets in various additions were laid out mostly 50 and 60 feet wide, some only 40 or 45 feet. Frederick now possesses only a few streets wider than 60 feet, among which are notably West Second Street (70 feet), a part of West Fourth Street (82 feet), and portions of East Street (66 feet and 70 feet). By comparison with modern standards for main thoroughfares, there is hardly a single street in Frederick that measures up to desirable minimums in this respect.

The street pattern in the older sections of town is mostly rectangular while some of the more recent additions have employed a curvelinear or cul-de-sac system, but in both cases there is usually a lack of coordination between adjacent sections. An adequate number of through streets is notably lacking. The only completely through street north and south is Market Street, and the only one east and west is Patrick Street. The other main travelled routes are handicapped by limited continuity, dead ends, twists, turns, and inadequate widths. On the west side of town there is no through route for northbound traffic between Market Street and the by-pass highway. This deficiency is particularly acute in the area between Hood College and Market Street, which includes the hospital and two schools. Across the south part of town there is no through route beyond South Street which is for eastbound traffic only. East Street provides a good north-south route from Patrick Street northward, but it needs to be extended southward through the railroad and industrial areas to a connection with South Market Street extended. Other through routes are needed beyond East Street for better access to this growing industrial district and to provide a direct route to the airport from the north side of town. Because of these and other major deficiencies in street articulation, a large volume of unnecessary traffic continues to pour through the central business district on Market and Patrick Streets, in spite of the by-pass highways that were constructed to relieve this situation.

Traffic volumes continue to increase each year. Several main arteries in the city are now at their capacity, especially in the central business district, and will need further relief in the very near future. The effectiveness of East Street is impaired by the railroad track and freight station that still occupy street space. Bentz Street has varying widths, including a bottleneck south of Fourth Street, while Court Street and Middle Alley are very much in need of additional capacity.

Although the by-pass highways have been constructed in accordance with the 1948 plan, to divert the principal through highway movements from the downtown area, and have succeeded well in doing so, there are still some large volumes of traffic moving over these streets. The reason may be found in the 1948 Origin-Destination Survey, in which it was learned that only 30% of all the traffic crossing the city boundary lines was "through" traffic whereas 52% of it was going to or from the central business district. At the same time, it was found that 87% of all the internal traffic movements either began or ended in the central business district. Taking all the traffic together, both internal and external trips, nearly 65% had their origins or destinations in the central district. These figures undoubtedly have changed somewhat as a result of some decentralization of business activities, but there is no doubt that the downtown section of Frederick is still the primary traffic focus of Frederick County. It may be noted also, from the 1948 study, that most of this downtown traffic approaches from the north, south, and west, and this

pattern does not appear to have changed materially.

Within the central district, the 1948 analysis is helpful again. Some 32% of the traffic destinations in this area were along Patrick Street or the first block of Market Street to the north or south; 48% was north of Patrick Street and 20% south. The destinations north of Patrick Street were distributed 20% east of Market, 10% west of Market, and 18% along Market Street itself. These figures, which cannot have changed significantly, indicate that a street system in the central area should be designed to channel most of the traffic into the areas along Patrick Street and to the north, especially the northeast quadrant, and that the parking facilities should be distributed accordingly.

Traffic volumes in Frederick County are increasing at the rate of 45 to 50% per decade, on the average. The State average is a little under 5% per year. In terms of total vehicle-miles of travel on the State roads in this county, the increase from 1952 to 1962 was 62%. Automobile registrations in Frederick County increased nearly 40% from 1950 to 1960, while the population increased only about 15%.

Traffic increases at individual locations show wide variations due to such factors as the opening of new routes, institution of one-way operation, impetus of new urban developments, and the like. At the city limits on South Jefferson Street an increase of 26% occurred in the 12 years from 1948 to 1960, in spite of the new by-pass. Traffic on West Patterson at the city line increased 145% while a 240% increase was recorded on U. S. 40 at the Monocacy River bridge. On East Patrick Street at the city line, even after the by-pass was constructed, the traffic increased 38% in 12 years. On the other hand, the volume of traffic across the city line on South Market Street showed a 23% decrease after the by-pass was completed, and on North Market Street it decreased 41% although the total volume of traffic approaching the city from the north and northeast (Routes 15 and 26) more than doubled. Quite obviously the by-pass has relieved Market Street to a major extent, as is further evidenced by comparable figures at other points along Market Street within the city. Relief has been afforded also to Patrick Street, both by the by-pass and by the one-way traffic operation that was instituted after the 1948 study.

In the case of several traffic arteries that are not a part of the main State Highway System, no apparent relief has been afforded by the by-pass. Traffic on West Seventh Street at Bentz increased 300% between 1948 and 1962, as a result of the shopping center development, increased activities at Fort Detrick, and new residential and apartment developments. Traffic on Second Street west of Bentz increased 170% while that on Fourth Street increased 27%, both reflecting new residential growth in that direction. In the case of South Street, a 53% increase is noted as a result of the eastbound movement it now carries which used to be on Patrick Street.

Data on current traffic volumes were available from a number of recent counts at various locations throughout the city. Most of these, including a series of intersection counts in 1962, were made for the City by the State Roads Commission, and some additional counts were made in 1962 and 1963 by the planning consultants. The most heavily travelled street at this time, within

the city, appears to be East Street at Church with a daily volume of 9,920 cars in both directions. Closely approaching this is Seventh Street at Fairview Avenue with 8,760 cars per day, due largely to the Frederick shopping center, the Fort Detrick traffic, and the new residential and apartment developments in that direction. Rosemont Avenue beyond Military Road also carries in excess of 8,000 vehicles per day. In the downtown area, the traffic on Market Street (one-way) varies from 6,140 at the City Hall to 4,770 at Fourth Street and 3,200 at Seventh, while the two-way traffic on Market Street at Thirteenth amounts to 5,300 per day. On South Market Street at Madison (two-way), total daily traffic registers only 4,620. Patrick Street traffic (one-way) ranges from 6,530 at Market Street to 4,330 at Jefferson, with a two-way total at Monroe Street of 5,320. One-way traffic on Motter Avenue at Seventh is 2,430, on Bentz Street at South Street 2,830 and on Bentz Street at Second 5,720. East Street traffic at Ninth is 6,320. Other streets in the central area have considerably less traffic, such as West Second Street at Market with a daily total of around 2,600.

By comparison with accepted standards for workable street capacities, as determined by pavement width, parking, signal timing, location in the city, and other factors, there are a number of streets in Frederick that are running at or in excess of desirable capacity. According to design standards used by the Maryland State Roads Commission, Market Street in the downtown area has an optimum capacity of about 6,000 vehicles per day but is already carrying more than this volume with peaks of over 600 per hour.

Patrick Street, with the same basic capacity of 6,000 per day, is carrying more than 6,500. South Street, with a similar basic capacity, is closely approaching this limit. East Street would be over its theoretical limit of 9,280 even without the railroad track and freight station interference. Seventh Street, on the other hand, has been widened to four lanes without parking and now has a capacity of 15,800 per day, considerably in excess of the present traffic load of 8,760. Motter Avenue, also four lanes wide, has a more-than-ample capacity of 10,200 with parking, or 15,800 without parking, to accommodate its present traffic load of 3,000 per day. Most of the other streets in Frederick also have spare traffic capacities for the present.

Theoretical capacities can be exceeded, and are frequently exceeded, to a substantial degree - sometimes up to 20% or more - but not without sacrifice to safety, convenience, and expeditious traffic movement. Excess traffic loads are considered to be congestion and require some relief. It should be remembered, too, that the volume of traffic continues to grow at an average rate of around 5% each year. In connection with its recent study of highway requirements in the next 20 years, the State Roads Commission has estimated a range of two to three times as much traffic on the State Highways by 1982 as compared with 1962 levels. Similar increases can easily occur on the main thoroughfares in Frederick.

Existing street capacities can be increased by several methods. The quickest and most inexpensive method is by parking restrictions, either all day or at least during the rush hours. With parking restricted to one side only, the capacities of Market Street and Patrick Street could be increased about 25% to 7,540 vehicles per day, and with no parking at all the capacities could be more than doubled, to 14,000 per day. With two-way traffic on Church Street,

Second Street, and Third Street, the elimination of parking would increase their capacities by 85 to 90%. A slight increase in the capacity of South Street (one-way traffic) would be effected by parking elimination on one side, but restrictions on both sides would more than double the capacity. Many cities now prohibit street parking on most of the downtown streets during at least the evening rush hours, and on some of the feeder streets at all times. Rush hour parking restrictions require strict enforcement for their effectiveness, including tow-away arrangements.

Other types of traffic relief include one-way operation (a device now being used to a considerable extent in Frederick), restrictions on left turns at certain intersections, channelization, changes in signal timing, and the like. These are traffic regulation measures designed to obtain a more efficient use of existing street space. Beyond this point it becomes necessary to increase the amount of street space by widening existing streets or creating additional thoroughfares, both of which are costly and difficult but sometimes must be done.

Principles of Thoroughfare Design

An urban thoroughfare system must be considered within the context and as an integral part of a functional, properly scaled and balanced Land Use Plan for the area which it is to serve. The land use pattern of the city is composed of a multiplicity of private residential and non-residential land uses, plus public and semi-public areas and facilities. Thoroughfares serve to carry people and commodities between the various areas of economic and social activity and must be carefully related thereto. Adequate and correctly located traffic facilities will afford reasonably direct travel routes, protect the stability and desirability of existing residential, commercial, and industrial developments, and further the orderly development of new areas or of relatively undeveloped sections.

Any thoroughfare system proposed to meet present and future needs must of necessity be developed by rehabilitating, modernizing, and augmenting the existing network of traffic arteries. In the built-up sections of the city this involves the correction of existing defects and inadequacies, while in the presently undeveloped areas provision must be made for the orderly, coordinated, and adequate extension of the street system. Obviously, the planned capacity of the thoroughfare system must be in scale not only with the present but also with the prospective requirements of future urban growth and traffic.

One of the prime objectives in preparing the Frederick thoroughfare plan was to further enhance the accessibility of the central business district from all parts of the city and its market area, and at the same time to relieve it of unnecessary traffic which only interferes with the transaction of business and normal traffic and pedestrial circulation within the district. Modern concepts for shopping centers, whether outlying or downtown, require as much separation as possible of traffic from pedestrians, even to the extent of prohibiting all traffic and converting the street space into pedestrian malls.

Other major objectives in designing the thoroughfare plan were to make the maximum possible use of existing thoroughfares, with extensions and additions,

but with a minimum of street widening; to divert all intracity through traffic around the central business district instead of through the middle; to provide well defined and continuous thoroughfares across town in the various residential and industrial sections; and to augment the existing system of radial thoroughfares by extensions into outlying areas where necessary and by additional routes where needed to fill existing gaps.

One of the principles of thoroughfare planning that may need to be emphasized is that of preserving the several residential neighborhoods intact. Thoroughfares in the residential areas ought not to be closely spaced or haphazardly routed but should be limited to as few as possible which should be arranged to go around or pass between the residential units, following other natural or man-made dividers such as streams, railroads, or expressways. The acquisition of generously wide right-of-ways for future thoroughfares in newly developing areas, spaced to allow for neighborhood units between the thoroughfares, will make it possible to provide ample traffic capacities without duplications or parallels.

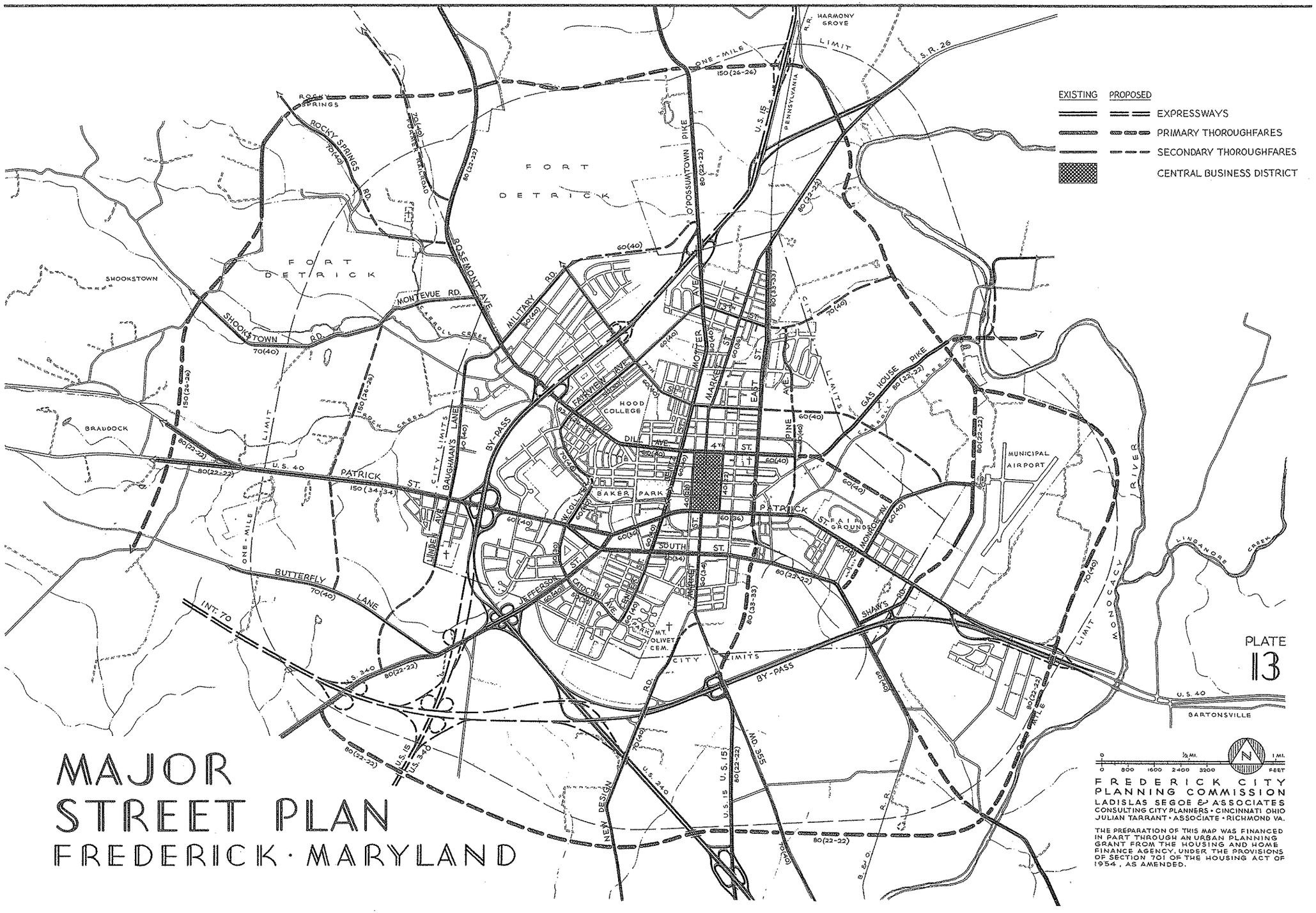
Major Street Plan

The Major Street Plan, Plate 13, shows by distinctive symbols the general location, right-of-way, and pavement width recommended for each existing or proposed thoroughfare in a comprehensive system designed to meet the growing needs of Frederick for the next 20 years or more. The scale of the plan was determined by experience, on the basis of present and prospective needs with respect to both traffic and anticipated and desirable land use requirements. These recommended highway and street improvements should be carried out gradually and systematically over a period of years, according to priorities of need and availability of means, in order to provide an adequate major street system for the community.

In respect to functional categories, the Frederick street system may be divided into four groups as follows:

1. Highways of regional importance.
2. Primary thoroughfares.
3. Secondary thoroughfares.
4. Local collector and minor access streets.

To accommodate the principal regional highway movements, Frederick already has a nearly-completed system of expressways through or around the outlying parts of the city, known as the Frederick By-pass. The southern part of this loop, with an extension westward as shown, is a part of the Interstate Highway System requiring the highest standards of highway construction. These interstate routes lead eastward to Baltimore, southeastward to Washington, and westward to Pittsburg and beyond. Other portions of the loop extend northward to Harrisburg, Pennsylvania, and southwestward to the Blue Ridge Mountains, Shenandoah Valley, and West Virginia. In addition to these expressways, other regional highways extend from Frederick northeastwardly to Baltimore by way of Route 26, and southeastwardly toward Washington by way of the present U. S. 15 and Md. 28. Most of the heavy through traffic approaching Frederick on these regional highways is intercepted and by-passed around the city by the expressway loop,



MAJOR STREET PLAN
FREDERICK · MARYLAND

PLATE 13

FREDERICK CITY PLANNING COMMISSION

LADISLAS SEGOE & ASSOCIATES
CONSULTING CITY PLANNERS • CINCINNATI OHIO
JULIAN TARRANT • ASSOCIATE • RICHMOND VA.

THE PREPARATION OF THIS MAP WAS FINANCED IN PART THROUGH AN URBAN PLANNING GRANT FROM THE HOUSING AND HOME FINANCE AGENCY, UNDER THE PROVISIONS OF SECTION 701 OF THE HOUSING ACT OF 1954, AS AMENDED.

but the loop is incomplete on the east side. To accommodate traffic between U. S. 40 east and U. S. 15 north, a new Primary Thoroughfare in the airport area and northward close to the river is recommended in the plan, to relieve a part of the present burden on East Street.

On the expressway system, an additional set of ramps is recommended at Seventh Street for better access to the Frederick Shopping center, the main gate to Fort Detrick, and the new residential and apartment developments in this locality. When the by-pass was constructed it was thought that the entrance to Fort Detrick would be on Rosemont Avenue and the ramps at Seventh Street were temporarily omitted, although some property was acquired for them. Subsequent developments have made an interchange at Seventh Street more important than at Rosemont Avenue and they should be built along with the planned second lane on the expressway itself.

Final determination has not yet been made by the State Roads Commission and the Bureau of Public Roads as to the exact location for Interstate 70 to the west and its interchange arrangements with U. S. 340 and 15. Some flexibility in interpretation may therefore have to be attached to the scheme shown on the Major Street Plan. Additional studies are continuing in this respect.

In addition to the foregoing highway routes, more or less fixed as to alignment and design, a number of other improvements in the primary or secondary thoroughfare system are proposed in the Major Street Plan. Foremost among these perhaps is the loop around the central business district consisting of Patrick, Fourth, Bentz, and East Streets. Traffic approaching the central district would be fed into this loop, from which it would be distributed around the periphery of the shopping district into marginal parking areas. An essential feature of this system will be the extension of East Street southward to the by-pass interchange at South Market Street. Traffic between the south and north parts of town would then use East Street instead of Market Street, thus reducing congestion and conflicts through the shopping area and improving the circulation of pedestrians and local traffic. Portions of East Street will require widening, largely through urban renewal project areas, and the removal of railroad tracks or the curtailment of their use by relocation of the freight station. The Pennsylvania Railroad already owns (or did own) about 21 acres of land east of East Street at Sixth, some part of which could be used for this purpose. The dual street arrangement now existing through the Monocacy Village area should be extended northward and possibly to some extent southward, with the railroad track in the center island. An 80-foot or greater right-of-way with dual roadways is recommended throughout.

Within the downtown loop, further improvement of traffic circulation will require the widening of Middle Alley to at least 40 feet with a 22-foot pavement, and of at least one block of Court Street to match the 40-foot width in the wider sections. These laterals will be needed to feed the parking areas back of Market Street, existing and proposed.

The narrower portions of Bentz Street, from Fourth Street southward, should be widened at least to match the 60-foot width of other sections. This is another area where some urban renewal is required and can assist in reducing the cost of street widening. Building setback lines should be established immediately

along this street to insure the preservation of an ultimate 60-foot right-of-way throughout.

Very little more street widening will be involved in carrying out the major street recommendations within the City of Frederick, and most of this is in undeveloped or sparsely developed locations. Fairview Avenue from Seventh Street northward can still be widened to a standard 60 feet through open land, and the same is true of most of Baughman's Lane. Some arrangement may have to be made with Fort Detrick for the widening of Military Road to a standard 60 feet and its extension north and eastward to O'Possumtown Pike. A continuation of this important crosstown thoroughfare southward from Patrick Street will require some widening of Linden Avenue through a low-density residential section and its extension through open land to U. S. 340.

As the southeast industrial area develops further, it will become necessary to widen South Street eastward from its intersection with the proposed East Street extension. This is relatively open territory. The use of the South Street Interchange on the By-pass Expressway (Interstate 70-N) will increase substantially enough to require dual roadways for this section of South Street.

Other Primary Radial Thoroughfares inslude South Jefferson Street (U. S. 340), West Patrick Street (U. S. 40), Rosemont Avenue, O'Possumtown Pike, Maryland Route 26, Gas House Pike, East Patrick Street, and Buckeystown Road (U. S. 15). Most of these are also a part of the Master Road Plan for Frederick County. Widenings will be required in most cases for those portions of the routes that lie generally outside the presently built-up city or beyond the Frederick By-pass, to provide for eventual dualization and in anticipation of further urbanization of contiguous areas. One of the first such widening projects should be West Patrick Street from the By-pass at least to Braddock Road, a measure that has already been in contemplation by the State Roads Commission, the County, and the City, for a number of years. Construction of Interstate 70 will not eliminate the need for this widening inasmuch as Patrick Street will continue to be the principal feeder to Frederick from the west, including the Interstate traffic from that direction. It should be remembered that a substantial portion of the traffic now entering the city on West Patrick Street (47% in 1948) has destinations within the city and cannot be by-passed.

Most of the Secondary Radials will also require widening beyond the presently built-up areas of the city, to accommodate future urban growth and increased traffic to outlying communities. In most cases the recommended width will be 70 feet of right-of-way together with some straightening or minor relocation where necessary. The Secondary Radials include Shookstown-Montevue Road, Rocky Springs Road, South Street Extended, Maryland Route 355, New Design Road, Butterfly Lane, and a new thoroughfare along the old right-of-way of the P. & E. Railroad.

On the east side of town, where extensive industrial development is being provided for in the Land Use and Zoning Plans, and where there is presently a severe lack of continuous thoroughfares, a number of major street extensions are proposed. Fourth Street is to be extended through to Gas House Pike with a branch to Monroe Avenue and the airport. Seventh Street should be extended also to the airport area. Thirteenth Street should be extended to the new

loop route bordering the Monocacy River, and a new route to interconnect all these and Patrick Street will utilize the short existing sections of Pine Avenue. Monroe Avenue, which leads to the airport, should be widened and extended to South Street, eliminating the jog at Patrick Street.

As the area west of town becomes subdivided and developed, there will be a need for additional cross-town thoroughfares at convenient intervals. Such a route is recommended along existing property lines and private lanes about 5/8 mile west of Baughman's Lane, and extending from Montevue Road to Butterfly Lane. Still farther out, a new Primary Highway is planned just beyond Fort Detrick, connecting the Braddock, Shookstown, Rocky Springs, and Harmony Grove areas and continuing around to the airport and Interstate 70-N on the east. This route is also a part of the County's Master Plan and is proposed for dualization on a 150-foot right-of-way.

If there should be further development to the south and southeast of town, it will be desirable to have a Primary cross-thoroughfare for service to these developments, from U. S. 340 eastward. A location is recommended about ½ mile south of the Frederick By-pass.

Most of the Major Street extensions and widenings shown on the plan, it will be noted, are in relatively open areas or in locations where urban renewal projects are recommended. In most cases the necessary right-of-ways can be reserved through subdivision control or otherwise at the time of property development, and at little or no cost to the public. More deliberate and immediate action may be necessary in some cases, however, as in the recent extension of Baughman's Lane. Under Title IV of Article 66B, the Maryland Code, the city has authority to establish future taking lines for street widenings or extensions and to control the construction of buildings within these lines. Some early property acquisitions may be advisable to forestall impending private construction that would block a major street improvement, but in most cases it will just be a matter of time in carrying out these major street recommendations.

The Minor Streets comprising the balance of the Frederick street system, while not strictly a part of the Major Street Plan, are nevertheless subject to planning considerations at a different level. These local collector and access streets should be laid out in the future in compliance with the principles and standards expressed in the new Subdivision Regulations, and in accordance with modern subdivision and neighborhood design practices. Within each neighborhood it is important to work out a local street system that will provide reasonably direct access to all parts of the neighborhood and good circulation within the area, and that will result in desirably shaped lots and blocks with adequate access to all properties. Local access streets should have right-of-ways at least 50 feet wide, with 60 feet or more for feeders and collectors.

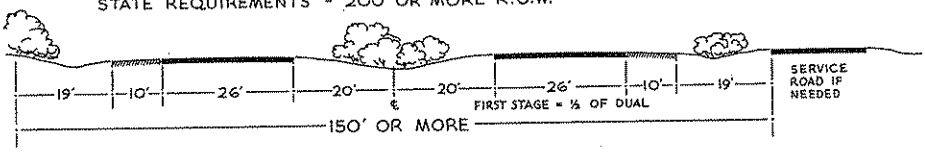
Recommended Street Cross-Sections

The proposed pavement and right-of-way width for each street in the Major Street Plan is indicated on the plan. In order to show more specifically the type of improvement contemplated in each case, however, the accompanying diagram entitled "Recommended Street Cross-Sections" has been prepared. This

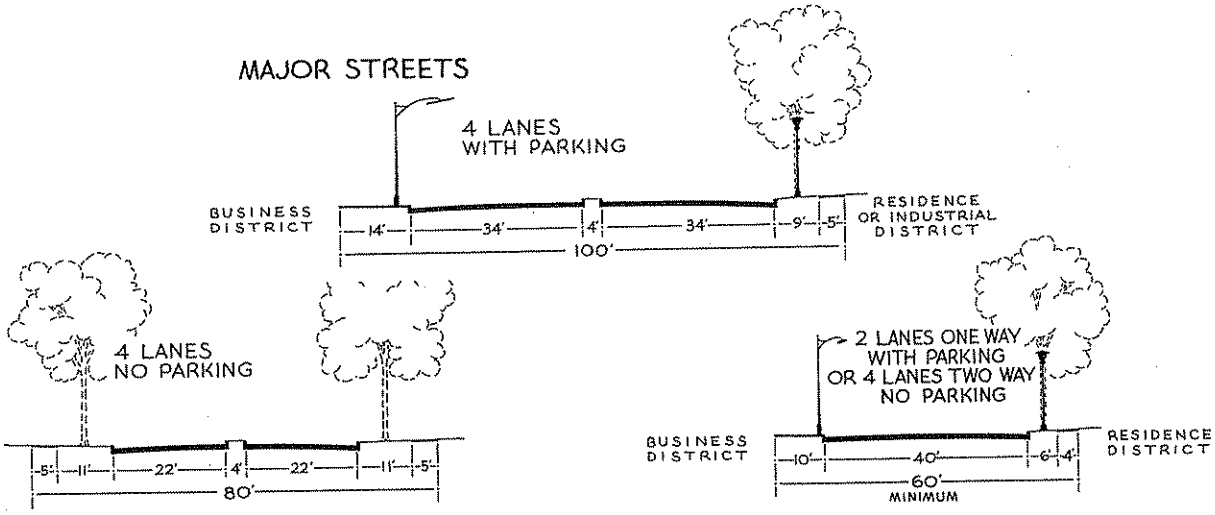
PRIMARY THOROUGHFARES

MODIFIED EXPRESSWAY

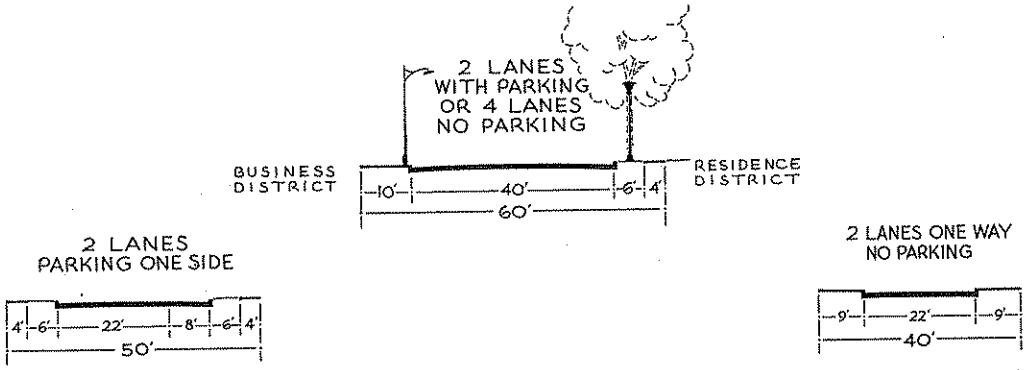
FULL EXPRESSWAYS WILL BE DESIGNED IN ACCORDANCE WITH STATE REQUIREMENTS - 200' OR MORE R.O.W.



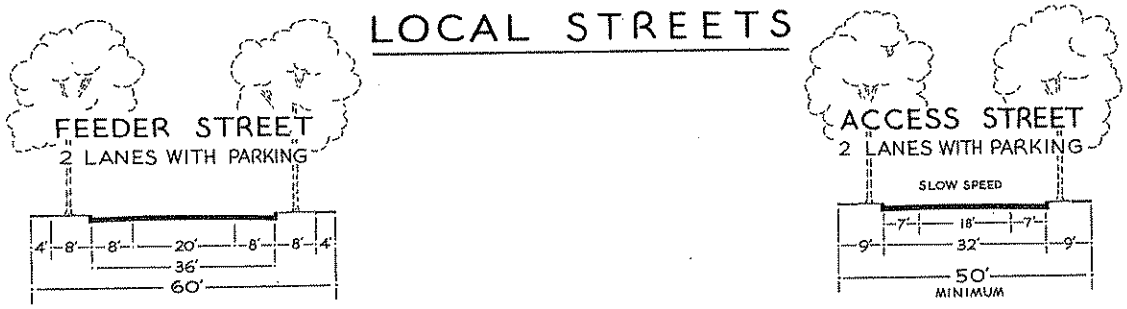
MAJOR STREETS



SECONDARY THOROUGHFARES



LOCAL STREETS



NOTE: STREET TREES ONLY IN ACCORDANCE WITH SEC. 18.11.1, CITY CODE.

RECOMMENDED STREET CROSS-SECTIONS

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diagram is not intended to establish rigid specifications for every street in all circumstances, but is meant to serve as a guide for the Planning Commission and other officials in establishing standard pavement width, right-of-way requirements, and the appropriate arrangements within the right-of-way of pavements, curbs, sidewalks, and green strips for each of the different types of streets. Minor variations from these standards will be advisable, of course, to fit many existing situations, but the recommendations contained herein are considered rather generally to represent the best prevailing practice.

The appropriate cross-section for a given street is determined by the following: (1) amount of traffic anticipated, which establishes the number of traffic lanes required; (2) standard widths for traffic lanes, for moving traffic and for parking; (3) present and desirable future use of abutting properties; and, (4) provision for sidewalk spaces, including strips between sidewalks and curbs to be used as green plots and street trees, adequate to accommodate the anticipated pedestrian traffic and produce a well-balanced street of attractive appearance.

Manifestly, overall pavement widths should be multiples of standard traffic lane widths; and, in arriving at the recommendations herein, modern standards of lane widths were used as follows: (1) moving lanes on primary thoroughfares and highways -- 10 to 13 feet, and parking or accessory lanes, where necessary or desirable -- 10 feet; (2) moving lanes on secondary thoroughfares -- 10 or 11 feet, with parking lanes 8 to 10 feet. On minor residential streets, moving lanes of 9 or 10 feet, with parking lanes of 8 feet, are generally considered to be adequate. A generous distance between curb and property line is always desirable.

No pavement on any street should be made narrower than 22 feet, to provide one moving lane in each direction -- and no parking should be permitted on such pavement. A pavement width of 30 or 32 feet should be quite adequate on minor residential streets serving exclusively, or almost exclusively, the properties abutting thereon, where developed with single-family dwellings on fairly large lots with off-street parking, - although 26 feet of pavement is usually considered to be sufficient for such streets. For local feeder or collector streets in residential areas, of relatively little traffic importance, a pavement width of 36 feet is recommended. Wider pavements are necessary on primary and secondary thoroughfares as well as all streets in business and industrial districts, apartment districts, and other localities that generate heavier traffic movements, all as multiples of standard lane widths.

Odd numbers of traffic lanes are not acceptable except on one-way streets or minor residential streets. On two-way streets where traffic is heavy, a third lane (or fifth lane) is an open invitation to head-on collisions unless clearly marked for traffic in one direction only. Sometimes a middle lane can be specially marked and used effectively for left-turning movements at important intersections, but the best practice is to incorporate these into a median strip design. Otherwise, if an odd width of pavement should prove necessary on a major thoroughfare, such as 30 or 50 feet, parking should be limited to one side of the street so as to leave an even number of lanes for moving traffic in the two directions. Should the street be utilized for one-way travel, however, parking may be permitted on both sides.

Sidewalks in residential sections should be at least 4 feet wide and should be placed as far from the curb as possible. Sidewalks in business districts should be at least 10 feet wide and preferably 15 or 16 feet, especially in a shopping district. In the industrial districts, sidewalk of at least 5 feet are recommended, which should be separated from the curb by a planting strip of 9 or 10 feet.

The width of the green strip, between sidewalk and curb, should be more generous than has been the general practice in Frederick up to now. A width of approximately 4 feet or less has proved to be inadequate for the proper growth of street trees, and as a result the city has turned away from street trees as a general policy. This is contrary to the almost universal practice elsewhere, of insisting upon a uniform planting of street trees throughout the residential districts in particular, - and elsewhere, too, in many cases. Trees in these green strips can be grown successfully if the following conditions are observed: (1) a space of generous width must be provided, (2) only certain species of trees having growth characteristics suitable for such plantings should be utilized. In most cases, a successful tree program has been achieved where the city has assumed the responsibility of planting and caring for all trees within the public right-of-way, through its city forestry or park department. Many cities maintain tree nurseries in which they grow their own stock for new plantings or replacements along the city streets.

There are other reasons also for requiring sidewalks to be placed well back from the curbs. The safety of children walking or playing along the walks, protection of pedestrians from the splash of passing vehicles in wet weather, and the distance required at driveways for an easy transition of grade from gutter to sidewalk level, without causing a dip in the sidewalk, plus an adequate planting space for trees, calls for a green strip of from 6 to 11 feet or more, with 5 feet as the absolute minimum.

Stage development of a wide right-of-way is often possible. Whereas the ultimate development of a primary thoroughfare of the modified expressway type (on a right-of-way 150 feet or more in width) calls for two roadways with a 40 foot dividing strip (one road in each direction), in the initial stage of development only one of the roads may need to be constructed. During this stage, the single road, two lanes wide, would accommodate traffic in both directions. In the case of an 80-foot or 100-foot primary thoroughfare, a temporary development less than the full cross-section may suffice in outlying areas before the surrounding areas become built up and the full traffic and parking requirements materialize. In every such instance, however, it is most important to acquire the full right-of-way initially, even though current traffic volumes would not seem to justify it. Such foresight will prove to be a valuable insurance against future traffic congestion and the possibly prohibitive expense of widening the right-of-way later on.

Applying these standards in Frederick and vicinity, it should be possible to develop a considerable part of the major thoroughfare system within existing right-of-ways. Where new thoroughfares or extensions are indicated in undeveloped territory, there should be no trouble in obtaining the standard right-of-way width when these areas are subdivided or otherwise developed. Widths of 80 feet to 100 feet will usually be required for primary thorough-

fares, except in the case of the proposed outer belt for which a right-of-way of 150 feet or more is recommended. It is expected that the outer belt will be part of the state highway system, complying with state requirements. For new secondary thoroughfares or extensions, a minimum of 60 feet will be needed. In built-up areas, where right-of-ways are less than recommended, some widenings will be necessary where the existing right-of-way is less than 60 feet. Local streets in residential areas should have a width of not less than 50 feet, as presently required by the city, with 60 feet as the minimum for neighborhood feeder or collector streets. Streets in business districts should be at least 60 feet wide, with 80 feet or more in industrial districts.

Parking

A rather complete survey of parking habits, facilities, and possibilities in downtown Frederick was included in the Grinnalds report of about 1953. This included a detailed survey of each downtown block with recommendations for off-street parking lots in several of these blocks to take advantage of the large interior spaces not fully utilized because of the rather excessive block dimensions, ranging from 363 to 393 feet in width. Three such lots have since been established, in addition to one already in operation at that time which has been enlarged. Mr. Grinnalds reported a total of 391 parking meters in operation on the streets and 141 on the South Court Street lot, with more on order. All-day free parking was permitted on the streets as far as East Street on one side and Bentz Street on the other, between Carroll Creek and Fourth Street, except for the 391 meters. In addition to the one municipal parking lot, on South Court Street, there was a free lot for customer parking operated by a group of merchants, in the block south of Patrick Street and east of Market.

Recommended in the Grinnalds report were 11 off-street parking lots located in as many blocks, in addition to the existing lot on South Court Street, and accommodating a total of 1,385 cars. It was recommended also that curb parking be prohibited on Market and Patrick Streets in the business district, except for some 15-minute parking in each block for the convenience of short-stop customers such as banking patrons. These recommendations were basically sound.

It would be an ideal arrangement if every store and shop in the central district could have a parking area immediately at its door, just like in the modern shopping centers. Such parking areas must have greater depth and capacity, however, than the street space in front. Shopping centers require 2 to 2½ times as much gross parking area as floor area, according to the best authorities, plus loading spaces and some landscaping. The vehicular approaches to these lots must be from the periphery of the business district as explained in the preceding discussion of the Major Street Plan, in order to remove as much traffic as possible from the streets in front of the stores. There are many instances where stores have built a second front opening onto the parking area at the rear, doubling their show window assets.

Frederick has undertaken to provide a system of municipal parking lots in the downtown district in an effort to meet the increasing demand for parking accommodations in a manner comparable to the arrangement provided in a typical decentralized shopping center. This is a progressive policy by which the City Government shows that it is willing and able to assume the responsibility.

Without such community action the downtown merchants and property owners would be helpless to meet their needs individually. Further expansion of the program is clearly indicated.

Parking conditions at the present time were ascertained by a parking survey conducted during 1961 and 1962. In the area bounded by Fourth Street, Bentz Street, Carroll Creek, Ice Street, South Street, and Carroll Street-Chapel Alley, it was found that only 50% of the total curb space, aggregating 43,380 linear feet or more than eight miles, is available for parking or loading of any kind. One-hour parking meters occupy 14% of the total space, 2-hour meters 12%, and special parking 2%. Loading zones occupy 6% while 16% is available for unlimited parking. The other 50% of total curb space is restricted against parking because of the narrowness of streets, reservations for fire hydrants, driveways, turning space at corners, and other needs, or because of other reasons.

By narrowing the foregoing area down to just the metered area, bounded generally by Fifth Street, Bentz Street, South Street, and Middle Alley, it was found that there are 1,076 parking spaces available to the general public in this area of which 999 are metered and 77 are free. In addition there are 130 parking spaces reserved for particular users such as government officials, and 93 loading zones. Of all the 1,299 parking and loading spaces thus accounted for, 784 are on the streets and 515 are in the four municipal parking lots. A further breakdown and classification of these facilities is presented in Table 25. The four municipal lots and their capacities are as follows:

Municipal Parking Lots, 1962

Lot	General public spaces (meters)	Other spaces	Total Capacity
1. South Court St. (10-hour limit)	182	39	221
2. City Hall (2-hour limit)	66	15	81
3. Winchester Hall (2-hour limit)	74	8	82
4. E. Patrick St. (10-hour limit)	108	23	131
Totals	430	85	515

Off-street parking for the general public is afforded by several privately-owned and operated lots in the central area, having a total capacity of about 280 cars. The largest of these, accommodating 134 cars, is operated by the Optimist Club on property located south of Carroll Creek and connected to the East Patrick Street municipal lot by a foot bridge. Others are maintained by individual stores for the free use of their customers. Besides these, there are private parking lots or spaces in garages available on a monthly or similar basis, to the extent of 250 vehicles capacity or more.

Table 25

EXISTING PUBLIC PARKING FACILITIES

Central Business District*

	Metered	Free	Totals
A. Street Parking			
Public parking			
- 1 - hour or less	285		285
- 2 - hour	284		284
- Over 2 hours		77	77
Total	569	77	646
Reserved parking		45	45
Loading zones 1/	15	78	93
Totals	584	200	784
B. Off-street Parking (4 municipal lots)			
Public parking	430		430
Reserved parking		85	85
Totals	430	85	515

* Area generally between 5th St., South St., Middle Alley, and Bentz St.

1/ Cars 10 minutes after 11 A.M.

The extent to which the public parking spaces are utilized was measured at 24 different times during 1961 and 1962. Checks were made at various hours on various days of the week and in different seasons of the year, on each of the 999 metered spaces. It was found that the maximum demand during an average week and month occurs on Friday evenings, at which time the facilities are being used to their practical capacity. On a typical Friday evening in April, 93% of all available spaces were in use including virtually 100% occupancy in the more central locations. The December demand will exceed the average condition by 20% or more as determined by the records of parking meter collections.

A further analysis of the parking survey data indicates that the parking lots are not yet as attractive to the public as are the curb spaces. Most of the vacant parking spaces still available at times of high demand were found to be in the parking lots, and in no instance was the South Court Street lot ever filled. The records show that the use of this lot declined sharply after a peak in 1956, due to a change in an adjacent supermarket. This lot is not fully effective in serving the high-value shopping district because of its distance from the center.

By analysis of the detailed parking survey data, it was found that parking shortages are particularly acute, either chronically or at certain times, in the following areas:

- Within a one-block walking distance of the intersection of Market and Patrick Streets.

- In the area west of Market Street between Church and Second Streets.

- In the area north of Second Street.

No definite measurement of long-range parking trends is available in Frederick. Records show that parking meter revenues increased 140% between 1950 and 1957, an average of 20% per year, but this was due mostly to a continuing expansion of parking meter installations. After 1957, meter revenues decreased 3% in 3 years although another 100 meters were installed. Competition from outlying centers may be having its effect. On the other hand, the traffic volume counts continue to show a gradual increase in traffic entering the business district, so that the picture is not fully clear. Very little if any downtown business expansion has taken place in the last few years, due possibly, at least in part, to the lack of additional parking capacity at the times of peak demand. One of the most necessary measures to help the downtown area get going again is the addition of more off-street parking spaces. This is especially true in view of the possibility that street parking may have to be curtailed further, during rush hours at least, in order to improve the flow of traffic.

Unlike most old cities in America, Frederick does not have a belt of depreciated property surrounding its central business district. Immediately adjoining the high-value business properties are good homes, historic churches, public buildings, and the like, with their beautifully kept rear gardens and private garages. Most of this is protected by special zoning, so that it becomes a problem to find acceptable locations for additional parking areas even within the block interiors. This situation applies particularly in the blocks

immediately adjoining Market Street between Church and Second Streets where the need for additional parking capacity is greatest. The solution to this problem would be to create more parking capacity north of Second Street, on both sides of Market, to relieve the load on existing facilities in the area between Second and Patrick as well as on Market Street itself. Additional parking areas north of Second Street would have the additionally desirable effect of encouraging a more substantial business expansion northward.

Five new parking lots in the area north of Church Street are recommended at this time. Their locations, together with some expansion of the existing Winchester Hall and City Hall lots, are shown on Plate 15. These are as follows:

	Minimum Size (Cars)
New lot east of Market between Second and Third	50
New lot east of Market between Third and Fourth	94
New lot west of Market between Church and Second	64
New lot west of Market between Second and Third	50
New lot west of Market between Third and Fourth	64
Addition to Winchester Hall lot	24
Addition to City Hall lot	54
Total	400

These recommendations, if carried out, would increase the number of metered public parking spaces in the downtown area by 40%. At least one of the lots, as indicated on the plan, could be enlarged in the future by another 100 cars or more, and the time may come when some of the others can be enlarged also. Initially, however, the 400 additional spaces would make it possible to curtail street parking on Market Street between Patrick and Fourth, if necessary, which would eliminate 88 metered spaces while still providing for considerable overall growth.

Because of the desirability and value of property on the cross streets such as Church, Second, Third, and the like, there may come a time when it will be more economical to erect multi-deck parking structures on the existing parking lots adjoining the business frontage than to acquire additional developed property. Parking decks can be built for around $1,200 per car space, which is cheaper than additional land acquisition if the necessary property should cost more than about $4.00 to $4.50 per square foot. Parking decks have the additional advantage of concentrating a large number of parking spaces close to the shops or offices they are to serve, thus minimizing the walking distance involved in extended parking lots. Experience has shown that parking lots more than 300 feet or so from the places they serve are largely ineffective.

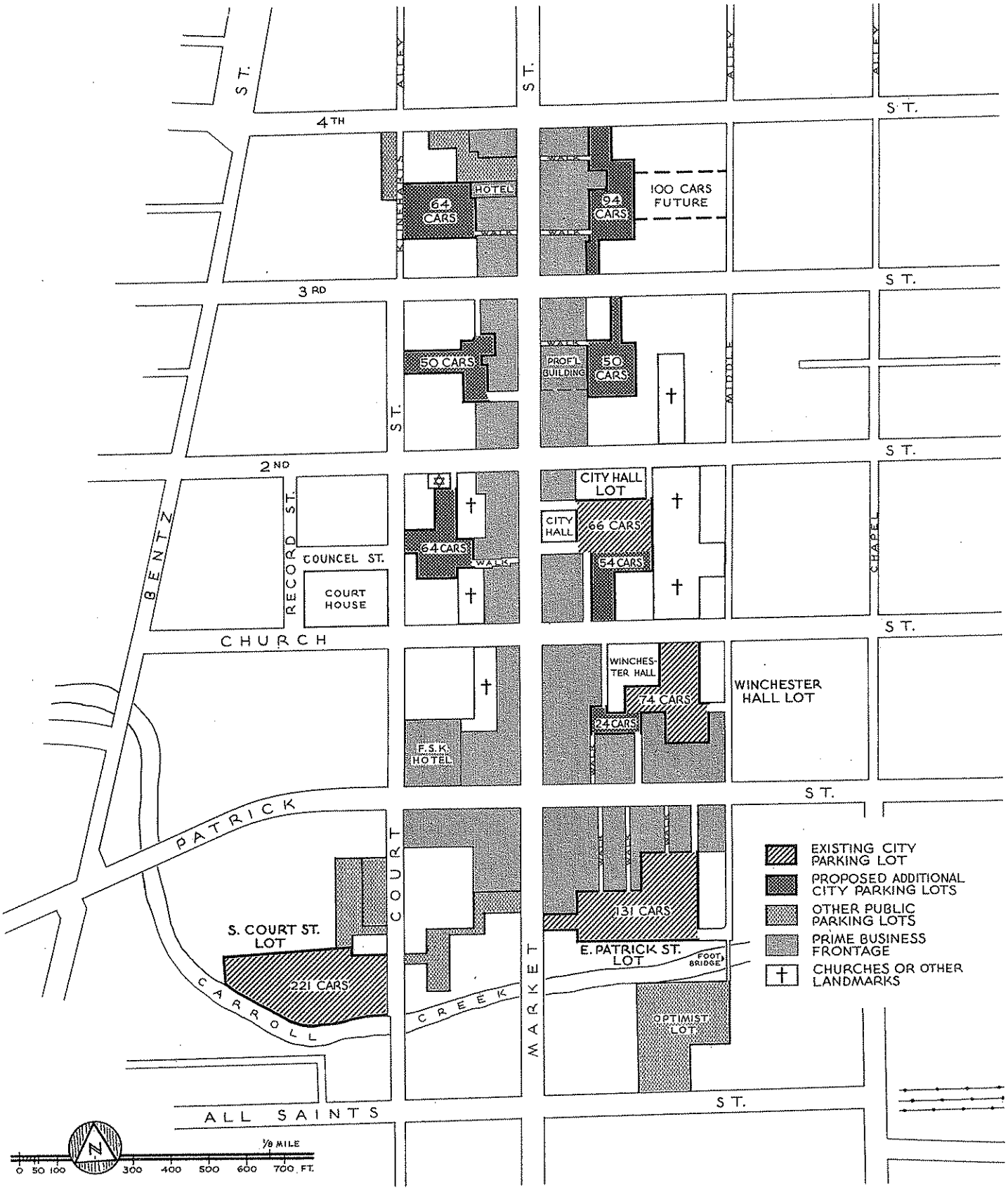
In the parking lot plan recommended herein it will be noted that the lots are located as nearly as possible directly behind the business frontage on Market Street. Some establishments will want to open new entrances onto these lots, while for others it is essential that public walkways be provided from the lots to the Market Street frontage. Locations for these are shown on the plan where advantage can be taken of existing gaps between buildings. Vehicle entrances to the lots should not be located on Market Street, however, but should be situated at the side or rear so that traffic will be encouraged to use the proposed downtown loop streets in reaching these lots and avoid the use of Market Street. Detailed plans for these lots should include a generous use of landscaping and ornamental lighting to make the lots both attractive and safe for public use.

Additional parking areas can be acquired by the City through purchase or lease. The practice so far has been primarily to lease on about a ten-year basis. Annual rentals on the East Patrick Street property amount to $1,440.44, and on the leased portion of the Winchester Hall lot, $2,184. The paving, lighting, and other improvements are installed at City expense. There are no renewal options. Part of the Winchester Hall lot is leased from the County Commissioners at $1.00 per year, part of the South Court Street lot at $2.00 per year, and the City Hall lot has always been public property.

Parking meter revenues are running in the neighborhood of $55,000 or more annually, which receipts go into the general fund. If earmarked for parking lot expansion and further improvements, along with other traffic and parking improvements, these funds would seem to be more than enough to provide for a systematic expansion of off-street parking facilities. Annual charges for parking meter operation and maintenance are only a little more than $5,000. New meters cost about $56 each, installed, and their average life is 10 to 20 years or more. Taking all these factors into account, it appears that the City is making a good profit on its meters and could easily re-invest some of it in additional parking areas.

No bond issue has yet been utilized for the acquisition of parking facilities. An economic study is suggested to ascertain the possible savings that might be realized if the city were to acquire its parking lots outright and save the annual rental of over $3,600 it now pays. Property acquisitions could be financed through bond issues guaranteed by parking meter revenues.

City ownership of its parking lots would assure their permanency. As it is now, there is nothing sure about the continuation of the leased lots beyond the current leasehold period. Business investments that might be made on the strength of parking facilities so necessary for them should have the guarantee of continuity that only public ownership can give.



PARKING FACILITIES PLAN

CENTRAL BUSINESS DISTRICT
FREDERICK · MARYLAND

FREDERICK CITY PLANNING COMMISSION

LADISLAS SEGOE & ASSOCIATES
CONSULTING CITY PLANNERS · CINCINNATI OHIO
JULIAN TARRANT · ASSOCIATE · RICHMOND VA.

FINANCED IN PART THROUGH AN URBAN PLANNING GRANT FROM THE HOUSING AND HOME FINANCE AGENCY UNDER SECTION 701 OF THE HOUSING ACT OF 1954 AS AMENDED

PUBLIC SCHOOL FACILITIES

Among the most important facilities in the community are its public schools. Besides providing for the general education of the children, both mental and physical, school buildings and grounds are of ever-increasing importance in meeting various other community needs - social, cultural, recreational, and others - for all the people in their respective neighborhoods, at all age levels. The public school system represents in most communities about one-half the total capital investment in public facilities of every kind, and a similar or even higher proportion of the annual operating expenses for all public services.

The Master Plan is concerned primarily with the number, size, and appropriate location of schools and school sites in relation to other features of community development. It is not concerned with educational or administrative matters, but only with the coordination of school plant with long-range overall physical development of the community and in the most effective use of tax funds in providing the needed school plant.

One object of coordination between school plant planning and the other aspects of city planning is to estimate long-range school needs in relation to the prospective overall development of the city some 20 years or more ahead. Another is to determine the best locations for needed future schools or additions. Such planning is aimed at achieving the most effective utilization of all school facilities, not only in regard to the education and training of children but also as focal points for social, cultural, and recreational activities by all the people in each neighborhood.

Principles and Standards of School Planning

While there are no hard and fast rules governing the size and location of public school plants, certain principles and standards have evolved through the years that are widely recognized and observed by school administrators and community planners. Following are some of the principles and standards observed in the present study:

1. While the appropriate size of elementary school buildings will vary somewhat from place to place, it has been found that units with a capacity of 400 to 500 pupils are the most desirable and economical to operate. New schools should contain not less than 12 classrooms (two for each grade) plus kindergarten, with minimum capacity of 300, while the maximum size for an elementary school is desirably about 24 rooms or 600 pupils. To provide for proper setting of school buildings and adequate playground space, and also to comply with State requirements, elementary school sites should be at least 8 acres in size with one additional acre for every 100 pupils in excess of 300. School yards should be adequately equipped to provide for year-around recreation for children of school age. Bus loading and parking space, other parking space, and landscaping must also be accommodated on the site.

2. Junior High Schools are justified where enrollment in the junior high grades is approximately 500 students or more, although the more desirable size for a junior high school would be 700 to 1000 or more. Sites ranging from 15 to 25 acres or more are generally considered to be adequate, including the necessary athletic facilities normally incident to junior high schools.

3. Senior High Schools should be designed to serve not less than about 1000 students in order to justify and provide for a reasonably full complement of the various courses and specialized facilities now required in a modern high school program. A size range of 1000 to 1600 students or more is considered desirable. A site of 30 to 40 acres or more is usually recommended in order to accommodate the various recreational and athletic facilities normally considered a part of such a school, including the school plant itself.

4. Classroom capacities should not exceed 30 pupils in elementary grades, and 25 in high school grades.

5. School locations should be as close as possible in each case to the geographic center of the neighborhood or district to be served. Within a radius of 1/2 to 2/3 miles of a school, the children of elementary school age may be expected to walk to school; for this reason, it is most economical to locate each elementary school within a reasonably compact neighborhood. For high schools, and for the students of other schools who have to be transported by school bus, it is desirable to locate the school at approximately the focal center of the section of the city to be served, and readily accessible from the major street system.

6. School locations on or near heavily traveled thoroughfares, or requiring the crossing by children of these or of railroad tracks, or in industrial or commercial districts, should be avoided. Where such conditions cannot be avoided, provision should be made to protect and facilitate the crossing of such barriers.

7. The advantages of combining school and community recreation facilities, in line with modern principles and practices of public recreation and school planning, should be recognized in the provision and operation of schools, parks and playgrounds. This "park-school" concept combines park, school, and recreational facilities on a single site. Such a unit makes it possible to program year-around recreation and education activities, and the facilities, by serving as a cultural and social center for the community, will more fully justify their cost.

Existing Public School System

The public schools in Frederick are part of the county-wide system operated by the Board of Education of Frederick County. This is a relatively large system, having an enrollment in excess of 14,000 pupils which places it in the top one per cent of all the school systems in the nation. Its size enables it to provide modern and efficient facilities and services commensurate with the best anywhere.

As part of the county-wide system, the schools in Frederick serve an extensive territory both inside and beyond the city limits. From available information it appears that about 30% of the enrollment comes from outside the city, the proportion varying somewhat from school to school and from grade to grade. For this reason it is impossible to make precise estimates and firm recommendations as to future school facilities in the city, inasmuch as these must be related to the county system as a whole, the study of which is beyond the scope of this report. Such a study* has been made, however, by the School Superintendent and his staff, with recommendations based on enrollment estimates to about 1968.

Schools are operated here on the 6-3-3 system - six years of elementary school, three years of junior high, and three years of senior high. Kindergartens are not yet operated but are contemplated. A community college (two years) is also in operation, as an evening school only, using the High School facilities. The authorities intend to establish this college on its own campus as soon as possible so that it can offer day courses and accommodate a larger enrollment. Present enrollment is about 215 full or part-time students.

Besides the public schools, there are parochial schools which serve about 600 Frederick children, according to the 1960 U. S. Census, or some 13% of the total school population of the city. While an allowance has been made herein for the continuation of such schools, no recommendations would seem to be in order.

In or near Frederick there are eight public school plants, including five elementary, one elementary-high combination, one junior high, and one senior high. There is also one small school for special pupils, located near Harmony Grove about 1-½ miles north of the city, housing less than 100 boys and girls. Construction is to start in 1963 on a large new junior-senior high school in the north part of the city, to be named the Governor Thomas Johnson High School in honor of Maryland's first governor upon whose former estate, Rose Hill, this school will be situated.

A list of existing schools and school sites, with their sizes, capacities, enrollments, and other information will be found in Table 26. All are reasonably modern and well-equipped with the exception of the North Market St. Primary School (grades 1-3), constructed in 1878 and now in poor condition, overloaded, and on an inadequate site unsuitably situated. The school authorities intend to discontinue this school upon completion of the Thomas Johnson High School, when space in the Elm St. School will become available. The South Frederick Elementary School actually is two separate schools, formerly the Washington St. and Lincoln Schools located across the street from each other, now operated as one integrated school with three grades in one building and three in the other. All schools are now operated on an integrated basis.

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* "Immediate and Long-Range School Building Program," Board of Education of Frederick County, February, 1959; supplemented January, 1963.

Table 26

EXISTING PUBLIC SCHOOL FACILITIES

Frederick, Maryland, 1963

School	Grades	Year Built	Regular Classrooms	Special Rooms	Normal Capacity	Enrollment Oct. 1962 No.	% of Cap.	Site (acres)	Rating (1) L	S	B
Elementary Schools											
Parkway	1-6	1930	13	6	325	423	130 %	5	G	S	G
N. Market St.	1-3	1878	14	4	350	414	118 %	2	U	U	U
Elm St.	4-6	1912-'53 -'58	12	-	300	388	129 %	8.8	G	S	S
S. Frederick	1-6	1912-'38 -'51	26	9	650	612	94 %	11.4	S	G	S
E. Frederick	1-6	1952-'58	13	5	325	413	127 %	8.9	U	G	G
N. Frederick	1-6	1952-'58	20	5	500	605	121 %	15	G	G	G
Total Elementary Schools			98		2,450	2,855	116 %	51.1			
High Schools											
Elm St. Jr. High	7-9	*	22	5	500	495	99 %	*	U	U	S
W. Frederick Jr.H.	7-9	1958	44	9	1,100	1,370	124 %	40.1	G	G	G
Frederick High	10-12	1940	40	11	900	1,502	167 %	"	G	G	S
Gov. Thos. Johnson High School	-	(site)	-	-	-	-	-	40	G	G	-
Total High Schools			106		2,500	3,367	134 %	80.1			
System Totals			204		4,950	6,222	126 %	131.2			

* See Elementary

(1) L - location
S - site
B - building

G - good
S - satisfactory
U - unsatisfactory

Plate 16 shows the locations of existing schools and school sites. Generally speaking, these are well distributed through the residential sections, although undesirably close together with overlapping service areas. Nevertheless, each elementary school serves a well-defined section of the city plus a wedge-shaped section of the county beyond. The Frederick High School (grades 10-12) and the West Frederick Junior High School (grades 7-9) are located on the same forty-acre campus in the western part of the city, in accordance with a policy now being followed by the School Board of coordinating the junior and senior high schools wherever possible. The new six-year high school to be built in the north end of town is also on a forty-acre site, which, incidentally, has been found by the architects to be none too large. This will give Frederick two modern high school plants well situated to serve both current and future requirements of the city. Selection of the site for the new high school was guided very largely by the Master Plan studies available at the time.

Altogether these ten schools will occupy sites aggregating 131.2 acres, a very respectable total. By comparison with the standards outlined previously, only one of these existing school sites, North Market Street, can be said to be seriously inadequate and it is to be abandoned. One or possibly two others might be enlarged somewhat to bring them up to standard. For new schools, the School Board has adopted the policy of acquiring at least 12 to 15 acres for elementary schools and 40 to 60 acres for high schools, both well above the minimums prescribed by state authorities.

The existing schools in Frederick have a normal combined capacity of some 4,950 pupils, 2,450 in the six elementary schools and 2,500 in the three high schools. Enrollment figures for October, 1962, showed an overloading of this capacity by 26% as a whole. The two major high schools (junior and senior) are seriously overloaded. Among the elementary schools, only the South Frederick is not overloaded; the group as a whole lacks 16% of adequately meeting current needs. Further overloading will be inevitable in the near future in view of the constantly rising school enrollments shown in Table 27. In the twenty-year period from 1940 to 1960 there was a 71% increase in total enrollment and further increases on a similar scale must be anticipated.

Public Schools Plan

Any estimate of future school requirements in Frederick must take into consideration factors outside the city, including the School Board's plans for schools in other localities to which a part of the present pupil load in the city might be transferred. Some relief was afforded the city schools just recently, for example, on completion of the new Linganore High School several miles to the east. Further relief would be provided by other proposed schools in the Bartonsville, Braddock, and Shookstown areas. Since none of these new schools is insured as yet, the following analysis and proposals for Frederick should be regarded as somewhat flexible, depending on the overall program of the County School Department. Existing school capacities will be affected, too, by what the decision may be concerning kindergartens.

Elementary Schools. After completion of the Gov. Thomas Johnson High School and discontinuance of the North Market Street Elementary School, with attendant reshuffling of classes, the five remaining elementary schools in Frederick will have a total adjusted pupil capacity of 2,500, of which some 200 is to

Table 27

SCHOOL ENROLIMENT TRENDS

Frederick, Maryland

(Enrollment in city schools, including pupils from outside city)

Date	Elementary grades 1-6	High grades 7-12	Total
June 1925	1,900	795	2,695
June 1930	2,139	1,054	3,193
June 1935	2,438	1,103	3,541
June 1940	2,355	1,483	3,838
June 1945	2,284	1,363	3,647
June 1950	2,030	2,067	4,097
June 1955	2,688	2,736	5,424
June 1960	2,970	3,611	6,581
Oct. 1960	2,769	3,623	6,392
Oct. 1962	2,855	3,367 1/	6,222
Estimate for Oct. 1967 2/	3,120	3,935	7,055
School capacities available, 1967 3/	2,300	3,800	6,100

1/ New Linganore High School in use, east of city.

2/ By School Superintendent, January 1963.

3/ With new Thos. Johnson H.S. and adjustments in other city schools.

be earmarked for possible kindergarten use, leaving only 2,300 seats for grades 1-6. This will be far short of the anticipated 1967-68 enrollment of 3,120, estimated by the school authorities in a study made in January, 1963, including students from outside the city as well as those from within. By 1970, the anticipated growth of Frederick will have increased its elementary school enrollment by about 450 pupils as compared with its 1960 enrollment, and if the enrollment in Frederick elementary schools from the outlying portions of their service districts should increase in the same proportion, the total enrollment would approximate 3,650, or 1,350 in excees of present normal capacity. This would require at least two additional elementary schools of 24 to 30 rooms each. In the same manner it is estimated that by 1980 the accumulated shortage in capacity will reach about 1,730 pupils or 69 classrooms - equivalent to three elementary schools of 24 rooms each.

The School Board has proposed one new elementary school in the northeast portion of Frederick, to accommodate 500 pupils, and another of the same size in the Braddock area two or three miles west of the city. Both of these schools are proposed for construction by 1967 and both will certainly be needed; consideration might even be given to locating both in Frederick or its immediate environs. Need for a third large elementary school is indicated before 1980 (see Table 28).

As may be noted in the Land Use Plan and the new Zoning Map, provision is made for considerable expansion of residential development on small lots in the northeastern section of the city, adjoining Monocacy Village. A new elementary school will be justified in this area if it develops as anticipated - especially in view of the number of children already living in Monocacy Village and the proposed closing of the North Market Street School. Such a school would serve a residential neighborhood of close to one square mile, lying east of East Street and extending from 8th Street to the Odd Fellows Home. A school site of 12 to 15 acres should be secured in or near the center of the neighborhood, adjoining preferably the existing Monocacy Park and its proposed extension eastward.

As the city continues to grow westward, following the Carroll Creek Valley, additional elementary schools will be necessary to serve these new residential areas. Approximate locations indicated on the plan would provide a school and playground in each new neighborhood of approximately one square mile, the sites to be located near the center of each neighborhood and to be associated with a larger park or parkway where possible. If the city should expand also to the north, between Fort Detrick and U. S. 15, another new elementary school will be needed to serve this neighborhood. Each of these outlying schools could serve, of course, some of the rural population, thus relieving the older schools within the city so that they will be able to handle some growth in the older sections. One of the new west side schools, possibly the one between West Patterson Street and Butterfly Lane, might preferably take the place of the new school proposed by the School Board in the Braddock area.

Insofar as the existing schools are concerned, not much additional improvement could be desired beyond what is already planned by the school authorities. Enlargement by about 2.5 acres of the Elm Street site is recommended, to bring it up to a size more nearly in line with State standards. There is vacant

land adjoining to the northeast, extending to West Seventh Street. Discontinuance of the North Market Street school will eliminate the only really substandard condition in the city.

High Schools. On completion of the Governor Thomas Johnson High School, Frederick will have three high school units with a combined capacity of 3,800 pupils in grades 7-12. Inasmuch as the 1980 high school requirements for Frederick itself are estimated at only 3,300, this capacity would be quite ample if it were not for the students from out of town. Assuming, however, a continuation of the present ratio of around 45 out of town pupils for every 100 in town, Table 28 indicates a potential need for still another small high school or junior high in the Frederick area by 1970, with enlargement by 1980.

The School Board has proposed an additional junior high school after 1967, to serve the growing area west of Frederick. Such would be consistent with the city's Land Use Plan which anticipates a major residential growth to the west, with primarily industrial development on the east side. Other new high schools have been proposed by the School Board elsewhere in the county, such as at Walkersville and in the Urbana area. These would provide additional relief for the schools in Frederick.

Community College. The Board of Education now operates a small Community College, evenings only, in the Frederick High School building with about 215 students full or part-time. When the North Market Street School building is vacated by its present primary classes, it is planned to move the Community College into this building temporarily, so that it can offer both day and night classes. By such arrangement it will be able to handle comfortably about 300 students, but the demand is expected to exceed 400 as soon as day classes are available.

As a permanent arrangement for the Community College, a completely new campus is contemplated by the school authorities. According to their estimates, this should be planned for about 500 students at first, on the basis of a two-year school, with provision for possible expansion to a four-year college as well as a normal growth in the student body. A satisfactory site should contain 100 acres or more, should have a prominent location with good vehicular access, and be within reach of city water and sewers. All students will be expected to live at home and drive to class. The site may be outside the city proper, but should preferably be within the urbanizing area.

Among the various possibilities considered, two sites stand out. One of these, suggested by the school authorities, would occupy the remaining portion of Rose Hill Manor, just north of the city, adjoining the 40 acres recently purchased for the Thomas Johnson High School. This would be one way of preserving the beautiful and historic old home and grounds, but the area now available in one piece would be less than 50 acres and acquisition of additional farm land across the railroad track to the east or beyond the express highway to the west would be needed to secure anywhere near 100 acres. Both of these barriers would prove to be troublesome, and in addition there is restricted access to the site and some commercialization along the front, bordering on North Market Street. Also, the location is not particularly prominent, having an elevation of only about 300 feet.

Table 28

PROJECTED SCHOOL ENROLLMENTS & FACILITIES NEEDED

Frederick, Maryland

	1960	1970	1980
Population data			
(see Population Chapter)			
Total City population	21,744	26,000	30,000
Ages 5 - 14	3,920	4,730	5,220
Ages 15 - 19	1,752	2,620	2,860
School Enrollment - Elementary			
City residents (1)	2,100	2,550	2,840
County residents (2)	870	1,100	1,190
Total, grades 1-6	2,970	3,650	4,030
Capacity available	2,450	2,300(5)	2,300
Shortage	520	1,350	1,730
School Enrollment - High			
City residents (3)	2,000	3,000	3,300
County residents (2)	1,611	1,400	1,550
Total, grades 7-12	3,611	4,400	4,850
Capacity available	2,500	3,800(6)	3,800
Shortage	1,111	600	1,050
Additional School Requirements			
Elementary schools			
Number of schools	1	2	3
Number of rooms (4)	21	54	69
High schools			
Number of schools	1	1	1
Number of rooms (4)	50	27	47

(1) Approx. 54% of 5-14 age group, as determined from U. S. Census figures.

(2) Increase assumed at same rate as city, after allowance for Linganore H.S.

(3) Approx. 115% of 15-19 age group, as determined from U.S. Census figures.

(4) Assuming averages of 25 elementary pupils and 20-25 high school pupils per room.

(5) Adjustment for kindergartens, etc.

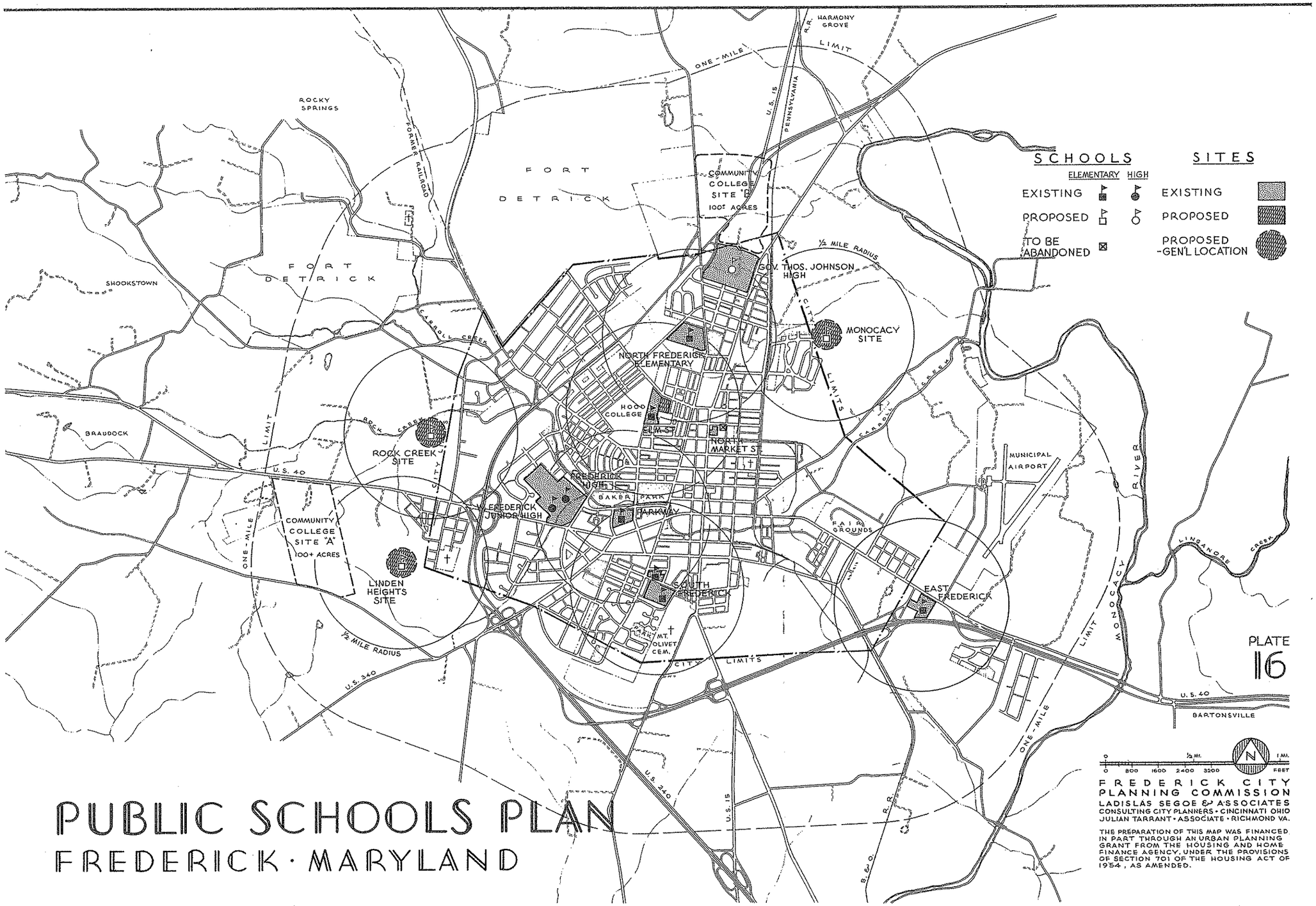
(6) Includes Thos. Johnson H.S., omits Elm Street.

Table 29

PROPOSED PUBLIC SCHOOL FACILITIES - 1980

Frederick, Maryland, 1963

School	Grades	Regular Classrooms	Kindergarten Rooms	Normal Capacity	Notes
Elementary Schools					
Parkway	1-6	12	1	300 + K.	Convert one room to Kindergarten
N. Market St.	-	-	-	-	Combine with Elm St.
Elm St.	1-6	26	2	650 + K.	Discontinue grades 7-9; absorb grades 1-3 from N. Market St.; convert 2 rooms to Kind.
S. Frederick	1-6	24	2	600 + K.	Combines former Lincoln & Washington St. schools; convert 2 rooms to Kind.
E. Frederick	1-6	12	1	300 + K.	Convert one room to Kind.
N. Frederick	1-6	18	2	450 + K.	Convert 2 rooms to Kind.
New school	1-6	24	2	600 + K.	Monocacy Village area.
New school	1-6	24	2	600 + K.	Linden Heights area.
New school	1-6	24	2	600 + K.	Rocky Creek area.
Total capacity, grades 1-6				4,100	
High Schools					
Frederick High	10-12	40	-	900	
W. Frederick Jr. H.	7-9	44	-	1,100	
Thos. Johnson High	7-12	80	-	1,800	Completion due 1965.
New junior high	7-9	49	-	1,100	Area west of city.
Total capacity, grades 7-12				4,900	



PUBLIC SCHOOLS PLAN
FREDERICK · MARYLAND

PLATE 16

FREDERICK CITY PLANNING COMMISSION
LADISLAS SEGOE & ASSOCIATES
CONSULTING CITY PLANNERS · CINCINNATI OHIO
JULIAN TARRANT · ASSOCIATE · RICHMOND VA.

THE PREPARATION OF THIS MAP WAS FINANCED IN PART THROUGH AN URBAN PLANNING GRANT FROM THE HOUSING AND HOME FINANCE AGENCY, UNDER THE PROVISIONS OF SECTION 701 OF THE HOUSING ACT OF 1954, AS AMENDED.

A more satisfactory and desirable location is suggested, on the heights overlooking the city between West Patrick Street and Butterfly Lane. Elevations here reach 460 feet or more, with good views in all directions. City water and sewer facilities can be extended and will be required in any case to serve the anticipated residential and other developments that are anticipated in this direction. Two or three sites of up to 100 acres or more appear to be available here, from which a selection could be made. Access could be secured both from West Patrick Street and Butterfly Lane, both of which thoroughfares lead directly to interchanges on the primary highway system. The best of these three sites, so far as topography, access, present development, and other factors are concerned, is indicated on the plan as Site "A", with the Rose Hill site marked Site "B".

Site Acquisition and Building Priorities

Little need be said here as to a site acquisition and building program. The school authorities appear to be fully cognizant of emerging requirements and have been projecting their needs several years ahead with periodic revisions. Sites have been acquired in advance of actual need and before private development pre-empted the most suitable locations. Construction priorities seem to be in good relationship to relative needs, but an accelerated program is essential if current deficiencies in capacity are to be overcome and growing requirements met.

Under the present program, first priority is being given to the new Thomas Johnson High School, in order to relieve the 34% overcrowding of existing high schools. After that will come the new Monocacy Village Elementary School and then another elementary school on the west side. Along with these there should be a start on the new junior high to the west of town. The exact order of subsequent construction can await developments. Acquisition of the property for enlargement of the Elm Street site should be undertaken whenever it may become available.

PUBLIC RECREATION FACILITIES

The provision of public recreation areas and facilities and a comprehensive public recreation program is generally regarded as one of the major responsibilities of any modern city. Such facilities and programs are recognized as indispensable for the proper physical and social development and mental health of both children and adults. As the population becomes more and more urbanized, and the percentage of leisure time increases, adequate recreation facilities will become still more important.

Although the recreation needs of the total population can be met in part by certain private or commercial facilities, such as the country club (and these of course must be taken into consideration), the major burden normally falls upon the public recreation system. In determining over-all community needs, contemporary standards call for public recreation systems in cities to consist of parks and play areas of several distinctive types, affording a wide variety of recreational opportunities. These must be so distributed throughout the community as to be conveniently accessible to the majority of the users, and inasmuch as recreation facilities are needed the year around and for all age groups of the population, both indoor and outdoor facilities should be provided. For outdoor use, the usual types of areas include playgrounds and playfields for the active use of children, youths, and adults; and community parks for semi-active and passive recreation for family groups, very small children, and older people. These basic facilities are supplemented by neighborhood and community centers, gymnasiums, indoor swimming pools, and other buildings for indoor sports and group activities. To a large extent, these latter facilities in particular should be provided at the various schools, and be used in both the educational and recreational programs.

There are two general standards widely recognized in measuring the adequacy of recreational facilities in a city. One is that there should be ten acres of recreational area available within or near the city per one thousand population, of which three to five acres desirably ought to be in neighborhood playgrounds, playfields and neighborhood parks. The other is that at least ten per cent of the land in the community should be devoted to recreational uses. Some cities have exceeded one or both of these standards, while others have found them more difficult to meet although they are working toward them as eventual objectives. Fully as important as total acreage, however, is the proper functional composition and distribution of such acreage within the city. Each type of recreation facility should be so distributed as to be conveniently accessible to the population age group it is intended primarily to serve, and in the amount that will be proportional to the future population in each area.

Types of Recreation Areas

Two general types of areas usually comprise a public recreation system: (1) playgrounds and playfields, and (2) parks. Playgrounds and playfields include (a) children's playgrounds for children from six to fourteen years of age, corresponding generally to the elementary and junior high school age

groups; (b) playfields for youths over fourteen years of age and for active adults. Playgrounds are provided usually in conjunction with the elementary schools and neighborhood parks, while playfields may include high school fields; community playfields, and athletic fields. Parks ordinarily include (a) neighborhood parks, (b) general city parks, (c) outlying parks and (d) incidental or ornamental parks. Play-lots for children of pre-school age can be provided in connection with recreation areas for older age groups, but otherwise are not usually regarded as a normal responsibility of the city government.

Certain special types of recreation facilities, such as swimming pools, tennis courts, golf courses, camp sites, picnic grounds, community centers, band shells, outdoor theatres, botanical and zoological gardens, museums and art galleries, can be provided and operated most efficiently when in combination with some of the above-mentioned areas such as playfields and general city parks. In the case of smaller cities like Frederick, not all of these special types would be justified or economically feasible, especially if the particular type of facility is being provided by other governmental agencies or by private means.

In Frederick, the types of park and play areas that will be of primary significance will be the playgrounds, playfields, neighborhood parks, and larger city parks. Following is a brief discussion of the principal characteristics and design standards for each.

Playgrounds are intended mainly for the children of elementary and junior high school age. Logically they should be provided as part of the public school system, and if the schools are appropriately located and spaced, and have adequate sites, few children will have to walk more than one-half to three-quarters of a mile to reach a playground. The space required for a desirable variety of play activities, together with adequate border planting for the protection of surrounding residential areas, will necessitate a total playground area of from 2-1/2 to 5 acres.

Playfields are intended for boys and girls of senior high school age, young men and women, and active adults - for outdoor games and active recreation. Generally, one such playfield is justified for each 8,000 to 10,000 of the total population. If a full complement of athletic and other recreational activities and other features are to be provided for, each playfield site should include 16 to 20 acres or more; but if such an area is not available, or if a relatively small area and population are to be served, it is possible to make good use of an area of about 10 acres having a more limited range of recreational facilities. Playfields can easily become objectionable in a residential neighborhood by reason of lights, noise, and crowds, unless careful attention is given to location, layout, and buffering. For this reason a playfield should be so designed and screened with generous border planting as to obviate as much as possible its objectionable aspects.

Neighborhood Parks should be available within 1/2 mile or so of all residential areas in order to meet the daily needs of elderly persons, mothers with little children, and others. Naturally attractive areas make the best neighborhood parks, and where these are lacking, the sites should be made

attractive by imaginative layout and well-designed planting of trees and shrubs. Sites normally ought not to be less than four acres and preferably larger. Neighborhood parks may be combined to good advantage with recreational areas of other types, but may also be located separately.

General City Parks provide a setting for a variety of special facilities and attractions having city-wide appeal to persons of all ages. Areas having special naturalistic features that need to be preserved and made available for the enjoyment of present and future generations, usually make the best city parks. Naturally wooded areas, the banks of streams, and other geographic features, if developed into parks, can contribute immeasurably to the living qualities and property values in a city, whereas if neglected they can become expensive problems.

Existing Recreation Areas

Frederick now has a total of approximately 182 acres of publicly owned recreation areas in or near the city, or about 8.5% of the presently developed city area. Based on the 1960 population of 21,744, this amounts to 8.3 acres per thousand population. Both these figures are very close to the desirable ratios previously mentioned, but in consideration of the approximately 30,000 population anticipated by 1980 they will soon become seriously inadequate. Of this total acreage, 46% (84 acres) is accounted for by the play areas on public school sites. Also there are about 34 acres of private lands now being used by the public for recreational purposes on more-or-less a temporary basis. In some cases these have been improved and equipped at city expense.

Supplementing these recreation areas within or near the city, there are extensive mountain parks in the Catoctin and other mountains to the west and northwest, operated by the state or federal governments, and a golf course west of the city operated by a veteran's organization for public use on a fee basis. Frederick City itself maintains three small outlying parks on its extensive water-works or water-shed lands. The Linganore Creek Park is on the old water-works property east of the Monocacy River; Fishing Creek Park and Yellow Springs Park are in the Catoctin Mountain water-shed to the northwest. These are used mostly for picnics, fishing, and by gun clubs.

Existing facilities include neighborhood parks and playgrounds, community parks, playfields, athletic fields, and incidental areas. There are two swimming pools with bath houses, a dozen tennis courts, about ten softball and baseball diamonds, a band shell, and a wide variety of other facilities - not counting those on school play areas. McCurdy Field features a professional baseball and football stadium, with lights, for league use. A comprehensive recreational program is operated by a recreation commission, using both city and school facilities.

Neighborhood playgrounds, playfields and parks, including the recreation portions of school sites, aggregate approximately 129 acres or 5.9 acres per thousand population in 1960. This is a very good figure. By current standards it would still be a good amount in 1980, for an estimated population of 30,000. Efficient utilization of these areas is handicapped, however, by

the multiplicity of tiny parcels scattered somewhat at random through the older sections of the city, many of them comprising only fractions of an acre. Such small units are limited in usefulness and are costly to maintain. Interior block playgrounds, such as the three in Rosedale, are usually impracticable and should be discouraged.

The principal deficiency in the Frederick park and playground system is in its provision of large parks. Baker Park, presently the largest, is less than 50 acres in extent and is becoming overcrowded with a wide variety of features and facilities. More extensive areas of this type should be laid out and acquired to meet the needs of the growing city.

Proposed Recreation System

The proposed system of recreation areas shown on Plate 17 consists of about 302 acres within or immediately adjoining the city or 10 acres per thousand of the 1980 estimated population and 9.5% of the total city area. Another 640 acres are recommended beyond the city, for a grand total of around 940 acres in Frederick and its vicinity, for general recreation and conservation of natural assets. In designing this system, the object was to provide recreation areas which, together with those already available, would serve the urban area as a whole as well as its various neighborhoods individually, for each type of recreational need. Table 30 lists the recommended additions as well as those already existing, by general type of area and location. These may be summarized as follows:

1. Acquire four new neighborhood parks or playgrounds in the city, and eventually five or more beyond.

2. Enlarge three existing neighborhood parks or playgrounds in the city and one beyond (Tulip Hill).

3. Discontinue the playground at the North Market Street School, when this school is abandoned.

4. Extend Baker Park along Carroll Creek, in and beyond the city.

5. Create a new Rock Creek Parkway.

6. Establish a new Carroll Creek Parkway to the east of the city.

7. Provide a new major park on the northside, consisting of the Rose Hill Estate.

8. Extend the Monocacy Village Park eastward as a parkway along the creek that flows through this area.

9. Cooperate with Frederick County in creating a major parkway or preserve along the Monocacy River for a distance of some 6 miles or more.

Table 30

Proposed Public Recreation System

	Acreage		
	Existing	Proposed Additions	Total
Neighborhood Parks & Playgrounds			
Brigadoon	-	3.2	3.2
Carrollton	4.3	-	4.3
College Estates	-	5.0	5.0
East Frederick School	6.7*	-	6.7
East Third Street	0.6	1.7	2.3
Elm Street School	4.2*	2.5	6.7
Harmon	1.7	-	1.7
Laboring Sons (Chapel)	1.1	-	1.1
Maryland Avenue	(1)	6.5	6.5
Monocacy Village	10.4	-	10.4
Mullinix	2.3	2.0	4.3
N. Frederick School	9.4*	-	9.4
Parkway School	3.3*	-	3.3
Peters Lane	-	2.5	2.5
Rosedale Park (Kidwiler)	2.9	-	2.9
South End Civic Ass'n	3.2	-	3.2
S. Frederick School	9.7*	-	9.7
Staley	6.9	-	6.9
Thomas (Catoctin)	0.9	-	0.9
Total in city	67.6	23.4	91.0
Linden Heights School	-	12.0	12.0
Monocacy Village School	-	12.0	12.0
New Design	-	5.0	5.0
Possumtown	-	5.0	5.0
Rock Creek School	-	12.0	12.0
Tulip Hill	2.4	2.6	5.0
Total adjacent areas	2.4	48.6	51.0
Community Parks and Preserves			
Baker Park	47.2	40.0	87.2
Carroll Creek Parkway	-	30.0	30.0
Rock Creek Parkway	0.5	30.0	30.5
Total in city	47.7	100.0	147.7

Table 30, Cont'd

Community Parks & Preserves (cont'd)			
Baker Park	-	25.0	25.0
Carroll Creek Pkwy	-	60.0	60.0
Monocacy Village Park	-	40.0	40.0
Monocacy Valley Pkwy.	-	375.0	375.0
Rock Creek Pkwy.	-	40.0	40.0
Rose Hill Park	-	50.0	50.0
Total adjacent areas	-	590.0	590.0
Playfields & Athletic Fields			
Frederick High	24.0*	-	24.0
Johnson High	25.0*	-	25.0
McCurdy Field	6.2	-	6.2
Total	55.2	-	55.2
Incidental Areas			
Baughman Playground	0.3	-	0.3
Carroll Park ("The Spring")	0.4	-	0.4
Courthouse Park	0.4	-	0.4
Hospital Park	1.6	-	1.6
Kiddie Park	0.5	-	0.5
Memorial Park	1.4	-	1.4
Mt. Olivet Parkway	0.2	-	0.2
N. Bentz Parkway	0.6	-	0.6
Rosedale Playfrounds			
- A	0.9	-	0.9
- B	0.5	-	0.5
- C	0.5	-	0.5
Schley Park	0.5	-	0.5
N. Market Street School	1.7	Discontinue	0.0
Total	9.5	-	7.8

Total Public Areas	Existing	Proposed Additions	Proposed Deletions	Total
In City	180.0	123.4	1.7	301.7
Adjacent Areas	2.4	638.6	-	641.0
Totals	182.4	762.0	1.7	942.7

Private properties on loan for public use	Acreage	Comments
Husky Park	23.1	Acquire part.
Linden Hills Park	1.2	Discontinue eventually.
Little League Park	1.5	May be continued.
Bowers lot	1.3	Discontinue eventually.
Maryland Ave. Playground	6.5	Acquire.

* Net play area only, not entire school site.
(1)Existing private ownership 6.5 ac.

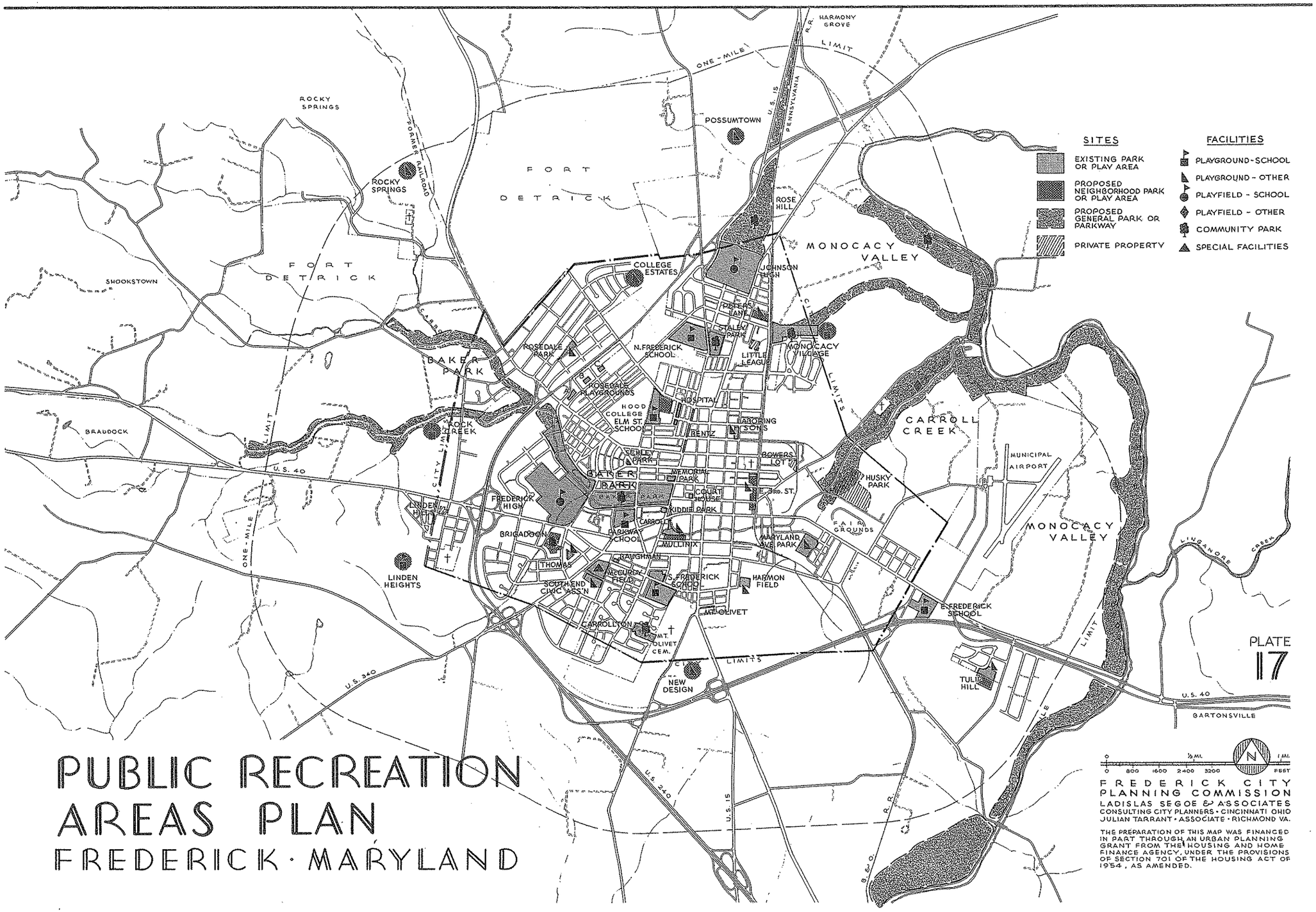


PLATE 17

PUBLIC RECREATION AREAS PLAN
FREDERICK · MARYLAND

FREDERICK CITY PLANNING COMMISSION

LADISLAS SEGOE & ASSOCIATES
CONSULTING CITY PLANNERS · CINCINNATI OHIO
JULIAN TARRANT · ASSOCIATE · RICHMOND VA.

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Following are some comments about specific sites recommended for acquisition.

Brigadoon - This small site should be acquired for a neighborhood park to supplement the undersized Thomas Playground in the adjacent block, both sites serving the residential neighborhood surrounded by three heavily travelled thoroughfares - West Patrick Street, South Jefferson, and U. S. 15. The wooded site of about 3 acres lies within the block bounded by Catoctin Avenue, Valley Street, Mary Street, James Street and West Patrick Street.

College Estates - The city has already indicated its desire to secure a playground in the neighborhood west of the U. S. 15 expressway and north of West Seventh Street. A site of 5 acres, approximately, centrally located, would be desirable in order to provide the necessary buffering for such a playground and an opportunity for a quiet park area in addition.

East Third Street Playground - Space for the enlargement of this tiny playground serving the east central part of the city should be obtained in connection with a conservation program for the area through Urban Renewal. By acquiring the non-residential properties along the west side of East Street, southward to the mid-block between Church and Patrick Streets, nearly 2 additional acres of neighborhood park and play area can be obtained which will insulate the fine old residential area to the west from the railroad and industry to the east.

Elm Street School - Recommendations for enlargement of this school site to bring it into line with modern standards of size are found in the chapter on school facilities.

Maryland Avenue Park - This privately owned area serves a residential section running east of the industrial belt, in the vicinity of the fair grounds. To insure its continued availability, it should be acquired in public ownership.

Mullinix Park - This small park serves one of the more densely developed residential sections of the city and is intensively used. Its facilities include one of the municipal swimming pools. Expansion can be achieved through an Urban Renewal Program in which a row of predominantly sub-standard housing along All Saints Street would be cleared out and the land added to the park, increasing its total size to about 4.3 acres.

Peters Lane - A small neighborhood park and play area to serve the residential section lying between North Market Street and East Street can be provided through the acquisition of a wooded tract of land in the block between East 13th and 14th Streets. Except for its East Street frontage, the tract is bounded by alleys and is unsuitable for residential use.

Indoor Facilities

To meet the need for a year-round program of recreational activities, indoor facilities are required for athletics, dances, other social affairs, and community gatherings. Where suitable facilities have been provided in con-

nection with the various schools, it should not be necessary to duplicate them elsewhere. The existing schools in Frederick are mostly well supplied with such facilities. Six of the schools have gymnasiums, four have auditoriums, six have libraries, and three have multi-purpose rooms. These are available for public use on application to the principal of each school.

At four of the city parks or playfields there are field houses suitable for dances and other activities during winter months. Several others contain shelter houses of various types. There does not appear at this time to be a need for any new major buildings for any of these purposes in Frederick.

PUBLIC BUILDINGS AND UTILITIES

Public Buildings

One of the most effective ways in which a city can express its civic pride and personality is in the housing of its public agencies. Handsome public buildings, prominently located and attractively sited, add greatly to the appeal of any city and set a good example for private development to follow. Frederick has done well in this respect. Its public buildings may be regarded as a credit to the community, of which the citizens can well be proud.

A roster of public buildings now located in Frederick would include the City Hall, Frederick County Court House, Winchester Hall (County office building), C. Burr Artz Library, U. S. Post Office, School Board Offices, Memorial Hospital, National Guard Armory, City Police Headquarters, and County Jail. Also there are four fire stations, the yards and shops of the City Works Department, the County Roads Department yards and shops, and other facilities of a public utility nature. Following is a brief description of each building, with recommendations.

City Hall. This is a solid old brick structure in the 100 block North Market Street, dating originally from 1769 and re-built in 1873. During the last two years it has been extensively altered, restored, and modernized at a cost of about $40,000. Formerly it housed not only the City Offices but also an opera house and a public market, both of which latter facilities have been discontinued because of changing needs. The space formerly occupied by the market building and most of the opera house is now utilized for public parking. The remaining structure, three stories in front and one in the rear, now provides adequately for the various city offices and there is some space to spare. The exterior of the building has been handsomely restored to very nearly its original brick finish, the interior has been remodeled and air-conditioned, and it would seem now to be quite adequate and suitable for its purpose during the next several years.

Frederick County Court House. This historic brick structure is located in a small park at Court and Church Streets. It houses the County courts and the principal county government offices. No change is contemplated.

Winchester Hall. This is another handsome old brick structure, located on Church Street just east of Market Street. It houses a variety of county offices and related agencies. Formerly a part of Hood College, it was restored and remodeled in the late 1950's when the county took it over and is likely to continue in use for many years to come.

C. Burr Artz Library. This is a semi-public facility to which the City contributes $13,000 per year. Additional funds come from the County and other sources. The library occupies a beautiful old brick building at Counsel and Record Streets, across from the Court House, in the Historic Frederick District. There is space on the property for considerable expansion if needed.

U. S. Post Office. This building, at East Patrick and Carroll Streets, has been enlarged just recently and would seem to be fixed in location for the next several years at least.

National Guard Armory. This solid two-story building occupies a corner of Baker Park at Second and Bentz Streets. No change is contemplated.

School Board Offices. The administrative offices of the County School Department are located in a former school building in the 100 block East Church Street. This fine old brick building is well located and quite adequate for its purpose.

Frederick Memorial Hospital. The City contributes $5,000 per year to this community hospital, located in the near-northwest section of town at Park Avenue and Park Place, adjoining the Elm Street School. Just recently it has been enlarged and may be regarded as permanently situated.

County Jail. This structure is located in the 400 block of West South Street, in modest residential surroundings. It is a small two-story brick building of uncertain age which ought to be abandoned and the facility relocated when there is an opportunity to do so, in order that the surrounding area can be revitalized through a conservation or renewal program.

City Police Headquarters. For the last 10 years or more, the Police Department has occupied a large three-story converted house, of brick and frame construction, at 731 North Market Street. There is a lockup in the basement and a shop for the traffic sign department. The site of 1.38 acres includes a garage, parking areas, a large yard, and a dog training area. The property seems adequate for the foreseeable future.

The Pink House. This small building on Bentz Street north of Patrick Street houses the Park Department administrative offices and shops. The shops will be moved to the new Public Works yard on Hamilton Avenue, leaving the Pink House for administrative offices exclusively. The location adjoins Baker Park and would seem to be appropriate for its purpose.

Fire Stations. There are four volunteer fire companies in the City plus 13 others in Frederick County, all of which support each other regardless of where a fire occurs. The City of Frederick provides a certain amount of financial support for the four companies in town, including building repairs and improvements. Two of the stations have recently been remodeled and renovated, and all four are in substantial condition. Three of them, unfortunately, are located in the congested downtown district where traffic and one-way streets are a handicap. If the opportunity should ever come for relocating any of these three stations, they should be placed in different sections of the city at a little distance from the downtown center. Locations should be selected near the confluence of two or more major thoroughfares so that fast runs may be made in various directions. Decentralization would not only provide more immediate protection for the outlying sections of the city, including the major residential and industrial districts and the outlying business developments, but would also permit the quick concentration of forces on the Central Business District from different directions. The Junior Fire Company, on Market Street at Sixth, is well located in these respects.

The only substantial need for any new or additional public buildings at this time or in the near future might be for a public auditorium or convention center. Because of its proximity to Baltimore and Washington, Frederick is not

a mayor convention city but does attract some smaller gatherings. Limited facilities are available at the Hotel Francis Scott Key which can accommodate gatherings of 200 to 250 people or more for meetings or banquets. Larger auditoriums are available at the high schools and Hood College. The armory is also available, although not particularly suitable for conventions, but it is within walking distance of the downtown hotels.

There has been some talk of a civic center in Frederick, and if this is to be designed as a convention facility it ought to be located downtown, within easy walking distance of the principal hotel and dining facilities and of the downtown stores and shops. A location might be found, for example, on Patrick Street west of Court Street where it would compliment the effort that should be made to revitalize this section of the city in keeping with its architectural and historic traditions. Such a downtown location would help materially in underpinning the central business activities, as opposed to a decentralized location.

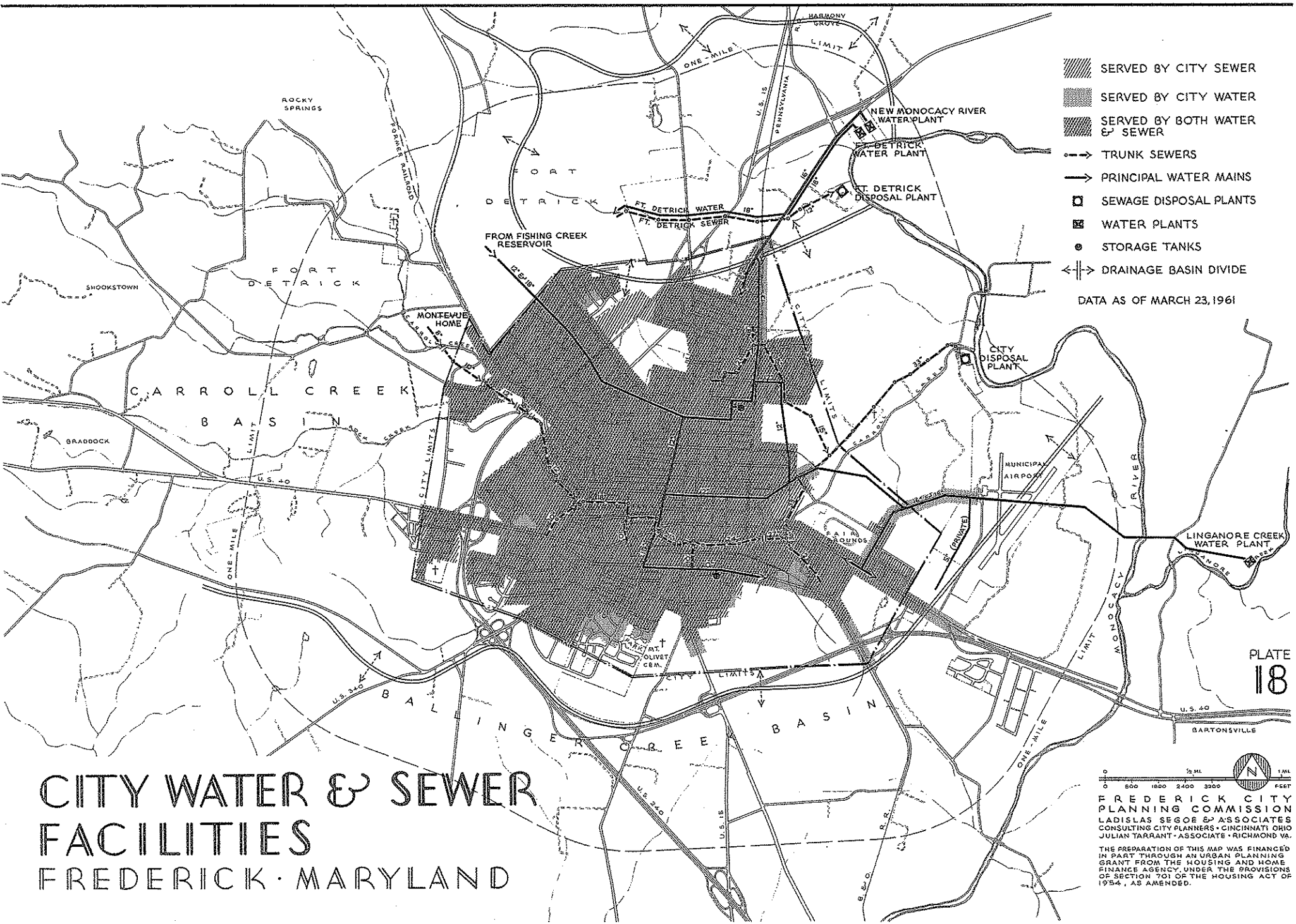
There seems to be no prospect for creating the kind of civic center in Frederick that will be found in certain other cities, consisting mainly of a group of public and semi-public buildings around a common open space. The existing public buildings are too substantial and too attractive to abandon. Their locations and appearance actually create a series of more intimate focal points, each contributing to the enhancement and value of the surrounding area. There is a special charm in this arrangement which Frederick should retain.

Public Utilities

Practically all of the developed area of the city is served by public water and sewer facilities. Extensions are being installed as needed, in connection with new subdivisions or for new business or industrial developments. The extent of these areas is shown on Plate 18.

Water supplies are obtained from three sources: the Monocacy River, Linganore Creek, and the Catoctin Mountains. Water treatment and pumping plants are located on both of the streams first mentioned while the third supply is by gravity from the Fishing Creek Reservoir located about 2½ miles northwest of the center of town. Plate 18 shows the locations of the two treatment plants, one to the east of town and the other to the north. Storage capacity is in excess of 77,000,000 gallons, including two overhead tanks within the city. Pumping capacity is approximately 8,000,000 gallons per day and this can be expanded to 10,000,000 gallons without expensive changes. Average water consumption is in the neighborhood of 4,000,000 gallons per day with peaks of around 5,000,000 gallons.

All three water supplies feed into one system, by means of 10-inch to 18-inch feeder mains from which the smaller distributor mains radiate. It will be noted that the city is fed from three directions. The distribution system within the city consists of standard 6-inch and 8-inch mains which extend to the city limits at several points. Areas beyond the city limits are not served as a general policy, but some exceptions have been made for a few industries, a school, and several dwellings in the airport area just east of town. Fort Detrick has a separate water system, taking its supply from the Monocacy River just below the city intake.



CITY WATER & SEWER FACILITIES

FREDERICK · MARYLAND

A sanitary sewer system serves generally the same area as the water system and is being extended along with the water extensions. The main trunk sewer follows the bed of Carroll Creek through the heart of town, to a disposal plant on the Monocacy River. This line ranges from 10 inches in diameter at the western city limits, where it has a connection from the Monteview (County) Home, to 33 inches at the disposal plant. Branches and laterals range from 8 inches up. The disposal plant has a capacity of $6\frac{1}{4}$ million gallons per day and is handling a peak load of about 80% of this. The plant could be doubled in capacity by the addition of more units, but the trunk line down Carroll Creek is nearing its limit and would have to be duplicated if the load from upstream were to be increased materially.

Fort Detrick has a separate disposal plant on the Monocacy River, about 1,800 feet down stream from the new city water intake.

In any system of gravity sewers, the shape of the land is a considerable factor. Frederick lies in the very shallow trough of the Carroll Creek drainage basin, the north and south boundaries of which are shown on Plate 18. City development has already reached the northern divide which is located just inside the city limits, while to the south there is still some room for growth, but not very much. This drainage divide follows almost exactly along the highway by-pass. Any major sewer extensions to the north or south, beyond these drainage divides, would require pumping over the divide into the existing gravity system within the city, or would necessitate the construction of separate sewer systems. Any growth to the west, however, could be sewered by gravity into the present disposal plant if there were sufficient capacity in the Carroll Creek trunk sewer or if additional sewers were to be constructed through the city. Growth to the east, toward the Monocacy River, would be the easiest to serve through the existing trunk sewer and disposal plant.

The limiting factor in the present sewer system is the capacity of the Carroll Creek trunk sewer which would have to be supplemented in order to handle any substantial volume of sewage from west of the present city limits. This is the direction in which the principal growth of the city is anticipated. The present system will be able to handle the additional loads from within the present city and eastward to the Monocacy River that will result from the filling up of existing gaps in urban development, but other means will be required to serve any substantial development to the north, west, or south. Sanitary engineering studies are presently being made in these areas, for the Frederick County Sanitary Commission which was organized recently and would have the power to serve such areas. Other possibilities are under consideration by the City, for extending both its water and sewer services upstream in the Carroll Creek Basin and over the Ballinger Creek Basin to the south, as well as into the smaller drainage basin on the north.

Streets and Other Facilities

The public street system in Frederick is fully paved, and any new streets are required to be improved by each developer for acceptance into the city street system. The City of Frederick is responsible for all streets and alleys except the primary state highways which are maintained by the State Roads Commission.

The Public Works Department of the city has maintenance shops, yards, and offices at 33 Hamilton Avenue, near the fair grounds, which serve the Street Department, Water Department, Sewer Department, Sanitation Department, and Traffic Signals Department. Some facilities presently located at the old electric plant on the corner of Second and East Streets, and the maintenance facilities of the Park Department which are now located at the "Pink House", will be moved to the Hamilton Avenue property so as to consolidate all these shops and yards at one point. The old electric plant on East Street now houses the transformers and switching equipment for the street lighting system.

The City has an old incinerator and refuse dump on a small part of the airport property at the edge of the Monocacy River. The incinerator is inadequate and obsolete, which means that some refuse must be dumped and burned. This practice results in many complaints from residents in the north and east parts of town. The City is working with the County on a plan to locate a modern landfill disposal area somewhere outside of town, after which the present incinerator and dump will be discontinued.

An animal shelter is maintained by the City at the sewage disposal plant, where it will be continued.

The Municipal Airport is situated to the east of town, on a site of some 315 acres. There are two runways with provision for a third, in accordance with a Master Airport Plan that was prepared some time ago. There is little conflict at present between air traffic and urban development, except for a public school and a few houses at the south end of one runway, and future conflicts will be avoided if the recommendations of the Land Use Plan are followed out. These provide for relatively clear areas extending two miles beyond the end of each runway which should be kept free of residential development and of schools, hospitals, churches, and other places of public assembly. The airport's location with respect to the city will make this objective relatively easy.

COMPREHENSIVE CITY PLAN

In preceding chapters of this report the several plans and recommen
been presented with respect to the use of land, a system of major t
public school and recreation facilities, public buildings, utilities, and
matters. The City Plan, however, is a composite of all these matters, in which the separate elements of the plan are tied together and harmonized with one another. All through the report there have been explanations of the inter-relationships between the different forms of urban development, and these influences have been considered all along in the designing of each element of the plan. Now it is possible to show how the different parts of the plan are composed into a single comprehensive pattern, as shown on Plate 19.

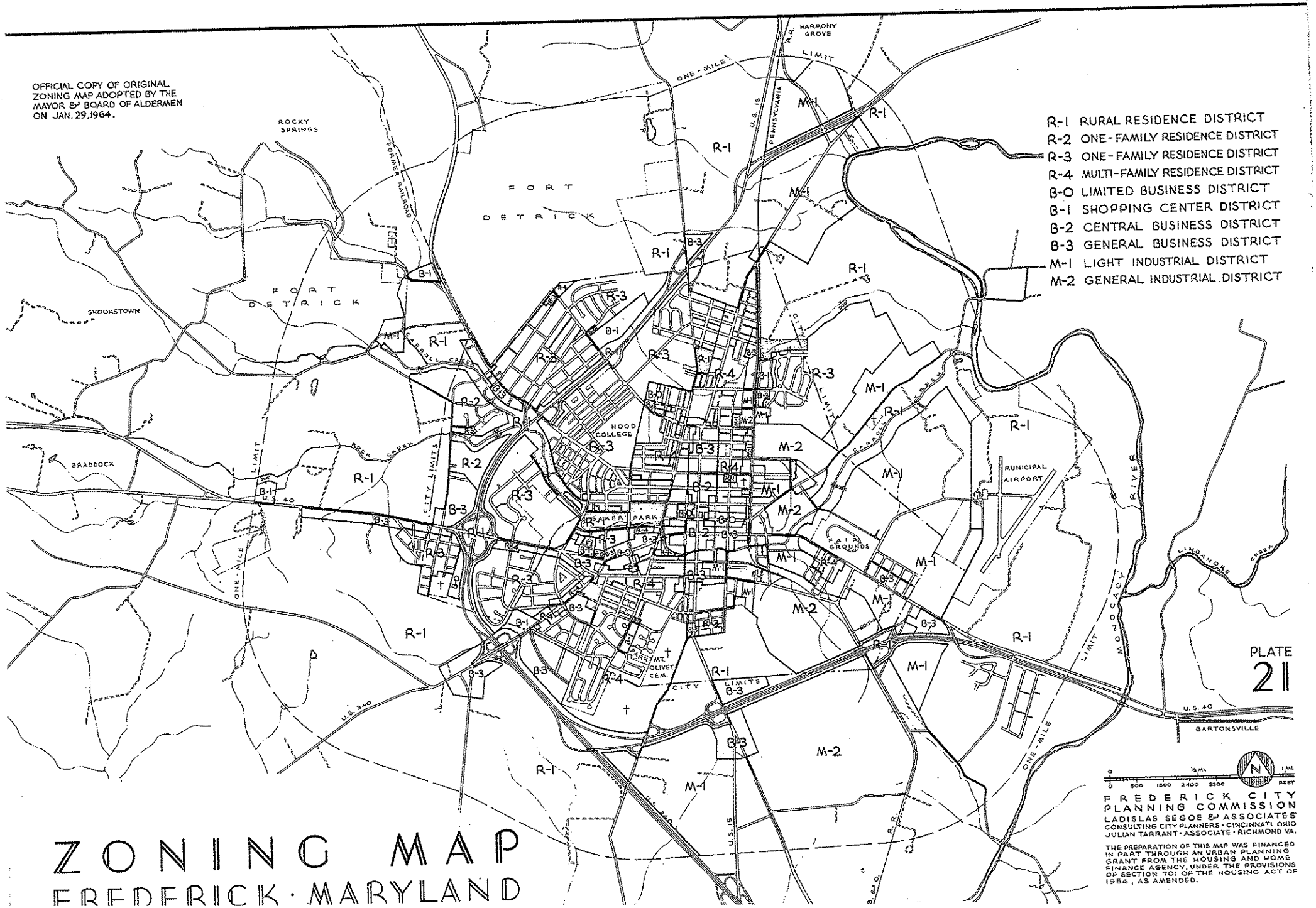
The Comprehensive City Plan is a generalized picture of the city and its environs, many years hence, when all will have been accomplished that is envisioned by the Master Plan. It shows where the residential areas will be, as well as the commercial, industrial, educational, recreational, institutional, and others - as a simplified version of the Land Use Plan depicted on Plate 11. The structural framework is provided by the major street and highway system. Various public facilities are shown in relation to this framework, so as to produce, in all, an orderly, efficient, and functionally harmonious city. Not all the details in each of the component plans have been transferred to this composite plan, but only in the more significant and inter-related aspects. A full description of each component will be found in a preceding chapter of this report.

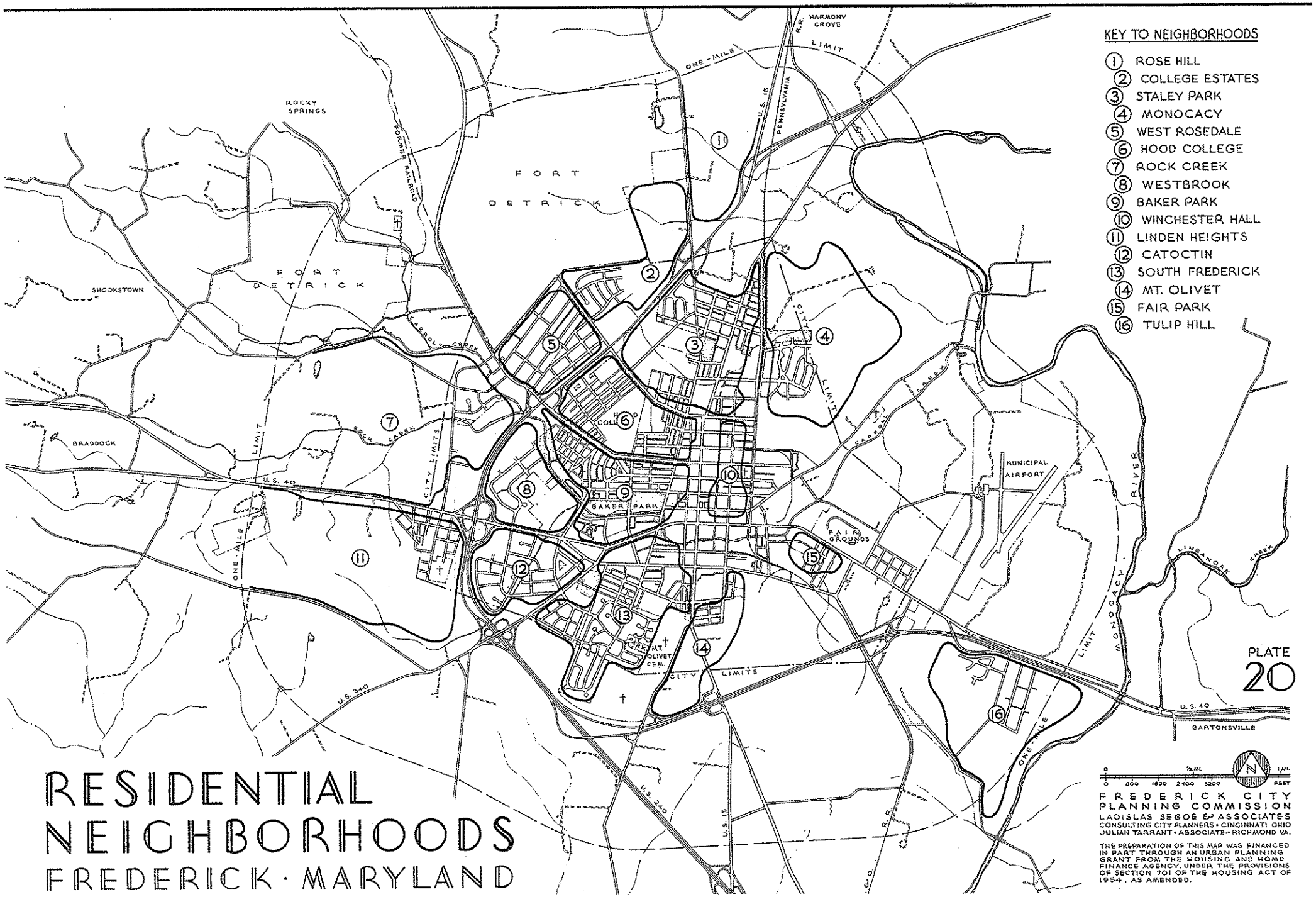
One feature of this plan, not previously explained, requires some discussion at this point. It will be noted that the residential areas have been organized into a series of neighborhoods, centering in each case around an elementary school or a neighborhood park-playground. Each of these neighborhoods forms a reasonably cohesive residential area bounded by the principal trafficways or by non-residential developments such as commercial or industrial. If these residential sections are to be preserved as desirable areas in which to live, relatively free from the dangers and annoyances of heavy traffic or incompatible uses of property, then they must be guarded in the future against proposals contrary to the plan. (See Plate 20 for further identification of the neighborhood units).

This plan was designed, as previously noted, with the view of furthering urban expansion and development in the most logical and feasible directions and in keeping with considerations of the natural suitability of land for various kinds of development, harmonious relationships between the different types of development, the requirements of the future city for modern transportation, education, recreation, and other needs, the relative feasibility and economy of extending city improvements, and the probable overall growth potential of the City of Frederick during the next two decades. Under this plan more than twice the present population of Frederick can be housed and served within the present city and its most feasible extensions. The space provided for urban expansion is more than enough to accommodate all the urban development that can reasonably be anticipated during the next 20 years or more.

COMPREHENSIVE

By following this plan, both the developer and the city may be expected to benefit; the former because of stabilizing property values due to greater confidence in the good character, soundness and sustained desirability of the development; the latter through the protection of the tax base and the economies possible in the provision and operation of municipal facilities and services. The development of usable but still vacant lands within the city should be encouraged in order to help create a reasonably compact and continuous urban pattern which can be served efficiently and economically.


OFFICIAL COPY OF ORIGINAL ZONING MAP ADOPTED BY THE MAYOR & BOARD OF ALDERMEN ON JAN. 29, 1964.
R-1 RURAL RESIDENCE DISTRICT
R-2 ONE-FAMILY RESIDENCE DISTRICT
R-3 ONE-FAMILY RESIDENCE DISTRICT
R-4 MULTI-FAMILY RESIDENCE DISTRICT
B-0 LIMITED BUSINESS DISTRICT
B-1 SHOPPING CENTER DISTRICT
B-2 CENTRAL BUSINESS DISTRICT
B-3 GENERAL BUSINESS DISTRICT
M-1 LIGHT INDUSTRIAL DISTRICT
M-2 GENERAL INDUSTRIAL DISTRICT
ROCKY SPRINGS
FORT DETRICK
SHOOKSTOWN
BRADDOCK
HARMONY GROVE
HOOD COLLEGE
BAKER PARK
MT. OLIVET CEM.
FAIR GROUNDS
MUNICIPAL AIRPORT
BARTONSVILLE
ONE-MILE LIMIT
CITY LIMITS
FORMER RAILROAD
PENNSYLVANIA R.R.
MONOCACY RIVER
LINGANORE CREEK
CARROLL CREEK
ROCK CREEK
U.S. 15
U.S. 40
U.S. 340
PLATE 21
FREDERICK CITY PLANNING COMMISSION
LADISLAS SEGOE & ASSOCIATES
CONSULTING CITY PLANNERS • CINCINNATI OHIO
JULIAN TARRANT • ASSOCIATE • RICHMOND VA.
THE PREPARATION OF THIS MAP WAS FINANCED IN PART THROUGH AN URBAN PLANNING GRANT FROM THE HOUSING AND HOME FINANCE AGENCY, UNDER THE PROVISIONS OF SECTION 701 OF THE HOUSING ACT OF 1954, AS AMENDED.
ZONING MAP
FREDERICK · MARYLAND



RESIDENTIAL NEIGHBORHOODS
FREDERICK · MARYLAND

IMPLEMENTATION OF THE PLAN

Zoning

Frederick has had a zoning ordinance since 1929. The original ordinance adopted at that time was revised and re-ordained in 1938, and again in 1948. All of these, together with numerous changes and amendments, were replaced by the adoption of the present ordinance, No. G-183, on January 29, 1964. There is also an Airport Zoning Ordinance, adopted October 18, 1951, and an Historic Frederick District Ordinance, adopted April 21, 1955, both of which are still in force. The Airport Zoning Ordinance restricts the heights of structures in the vicinity of the Frederick Municipal Airport and establishes special use regulations in that area. The Historic Frederick District Ordinance applies to certain parts of the city in the old central area, along Second Street, Church Street, Bentz Street, Record Street, Council Street, Court Street, Market Space, and West Patrick Street. Within these areas there are special restrictions against the unauthorized removal or exterior alteration of buildings, for the purpose of conserving the unusual character and appearance of Old Frederick.

Because of the city's accelerated rate of growth and change during the last decade, and the advances made in urban development forms and zoning techniques, it was found by the City that its zoning ordinance needed modernization. There was also the practical need of coordinating the City's zoning more closely with the new Frederick County Zoning Ordinance, especially in the one-mile belt surrounding the City and along the boundary line between city and county jurisdictions. By authority of a special provision in its City Charter (Section 184), Frederick has zoning jurisdiction not only within the city but for a distance of one mile beyond. The old zoning provisions applying to this one-mile belt, especially as to administration, had proved to be largely ineffective. Accordingly, one of the main reasons for preparing a long-range comprehensive city plan, especially the Land Use Plan, was to lay the groundwork for a thorough-going and basically sound revision of the zoning ordinance and district map. The laws of Maryland require that zoning be done in accordance with a comprehensive plan.

A zoning ordinance used to be thought of as a set of regulations something like a building code, governing the use and development of private property quite independent of any more comprehensive or long-range planning. Many zoning ordinances were adopted without benefit of master plans. Actually it is the Master Plan that is important, and the zoning ordinance is but one of the instruments for giving it some effect. Zoning implements that part of the Master Plan which is concerned with the use of land and buildings, reflecting and giving legal application to the general policies, objectives, and standards of development broadly outlined by the Land Use Plan. Some of the more important relationships between Zoning and the Land Use Plan are as follows:

> The Land Use Plan represents long-range objectives, some of which may not be realizable for 20 years or more, while the zoning plan and ordinance are scaled to the more immediate needs which can be accomplished in a relatively short time.

The Land Use Plan is generalized and flexible in many respects, especially as to future developments, while the zoning plan is more precise in its district boundaries.

The Land Use Plan deals with all kinds of developments, both private and public, while zoning regulates mainly the use of private property. This is not to say that zoning does not also apply to publicly-owned property which it must do if the integrity of the Master Plan is to be preserved.

In revising the Frederick Zoning Ordinance, the main objectives were:

To incorporate provisions consistent as nearly as possible with the new County Zoning Ordinance.

To retain the desirable parts of the existing zoning ordinance.

To add new provisions such as are being used by other cities having similar characteristics, and

To revise the zoning maps in accordance with the objectives of the Land Use Plan that was adopted by the Planning Commission on March 26, 1962.

Many of the improvements incorporated in this ordinance are designed to upgrade and provide more protection for the private residential sections of Frederick. There are improvements in such matters as the side yard and setback requirements, location of apartment houses and other multi-family dwellings, limitations on so-called home occupations and other accessory uses, the use of trailers as living quarters, the gradual elimination of certain non-conforming uses, and the like. Special treatment is given to the Central Business District to distinguish it from other business centers and encourage it as the dominant regional shopping center of Frederick County. Greater attention is given to the attraction of inoffensive light industry into the Frederick area, by the creation of the new "M-1" Light Industrial District classification, while the more objectionable types of heavy industry are relegated to locations more removed from the residential and business sections. There are new restrictions on billboards, designed to improve the city's appearance to protect existing properties generally. Other new provisions deal with fallout shelters, transitional uses between residential and business districts, sign projections, rear dwellings, accessory buildings, fences, hedges, and other matters - many of these being for the purpose of tightening up and raising the standards of development in keeping with modern practice. More flexibility in the design of residential developments will now be possible through the inclusion of new provisions authorizing garden housing projects and planned unit developments. New administrative provisions are also included, to provide for more effective enforcement, particularly in the one-mile belt where there has been a division of responsibility between the City and County authorities.

One of the changes affecting residential areas is the new restriction on doctors' offices and other semi-commercial or professional activities. Some of these have been a source of complaints in recent years. The new ordinance protects the residential districts from the intrusion of various trades, services, or occupations that are of a type normally conducted as a business.

Doctors' offices and certain other professions are permitted as accessory uses in the "R-4" Multi-family Residence District, but not in the single-family districts. Some very modest provisions requiring the discontinuance after a time of certain classes of non-conforming uses and structures have been incorporated in the new ordinance in an effort to arrest the spread of blight by removing potential blighting conditions.

The new Zoning Ordinance provides for ten zoning districts, one more than previously. Four districts are primarily for residential development, the same number as before; four are for business or semi-business development, corresponding roughly with the four prior business classifications but with greater differentiations; and two are for industrial development, distinguishing between "light" and "heavy" industries, in place of the single industrial district previously in effect.

The new zoning classifications may be described briefly as follows:

"R-1" Rural Residence District. This is similar to the County's "R-1" Suburban Residence District in that it is designed primarily to permit farming and low-density residential development in the outlying parts of the one-mile belt not served as yet by the city's water and sewer facilities. Like the County's regulations, it requires a basic lot of at least 20,000 square feet and 100-foot width for residential use.

"R-2" One-family Residence District. This corresponds generally with the County's "R-2" District, where water and sewer facilities are available. It permits individual dwellings on lots of 10,000 square feet area and 70-foot width. The "R-2" areas are located mostly in the western part of the city, between the Frederick By-pass and Baughman's Lane.

"R-3" One-family Residence District. This is the classification applying to most of the old Residence "B" or Residence "C" areas of the city, outside the old central district. It permits individual homes on lots of 6,000 square feet and up, and 60 feet or more width, which is characteristic of much of the built-up portion of Frederick. There is also a provision in this district for "garden apartment projects" not exceeding twelve families per acre on large sites, in specially approved locations and meeting special design standards. These would be allowed only on a conditional permit after public hearing. The Stuart Manor and Detrick Plaza Apartments are examples of such developments.

"R-4" Multi-family Residence District. This classification applies mostly to the older sections of the city where town houses, row houses, apartments, and the like are already concentrated. It is the only district under the new Zoning Ordinance where apartments are permitted outright. Under the old Zoning Ordinance, apartments could be located in any Residence District. The new regulation affords protection to the vast majority of home owners located in predominantly single-family sections of the city. In the "R-4" District, apartment developments are permitted at densities of up to about 22 dwellings per acre. Single houses, row houses, and the like may be located on new lots of at least 50-foot width or on existing lots of any usable width.

"B-O" Limited Business District. This replaces the old "Service District" which was designed originally to preserve some of the historic areas of Frederick. The new regulations expand on this idea so as to apply to additional areas such as the medical area centering on Toll House Avenue, and some of the property along West Patrick Street near Jefferson Street. In addition to homes and apartments, this district allows professional and business offices, studios, small shops for retail sales, pharmacies, inns, cafes, and similar establishments, provided they do not have the usual commercial store fronts and signs.

"B-1" Shopping Center District. This is an extension of the old district of the same name. Seven Shopping Center locations are shown on the new zoning map - the Frederick Shopping Center on West Seventh St., the new shopping center on South Jefferson, the Monocacy Village Center, an area on Center Street in Carrollton, an area on West Patrick St. near West College Terrace, a suggested location at Rocky Springs Road and Rosemont Avenue, and a proposed location on West Patrick Street at the one-mile limit. Site plan approval is required for each shopping center.

"B-2" Central Business District. This is similar to the old Business "A" District in that it applies to downtown Frederick, but the regulations have been sharpened so as to emphasize this area as the dominant regional shopping center of Frederick County. It permits all the types of retail stores, shops, and services normally found in a high-value downtown shopping district, including theaters, hotels, banks, public buildings, and others. Parking lots and structures are permitted to serve these business buildings, but gasoline stations are prohibited and there are new restrictions on projecting signs limiting their overhang to 2½ feet from the building. The "B-2" classification applies mainly to the property along Market Street from Carroll Creek to Fourth Street, and with some exceptions from Court Street to Middle Alley.

"B-3" General Business District. This is very similar to the old Business "B" District. It provides for the miscellaneous types of business not ordinarily requiring a shopping center location, such as automobile sales and service, garages, printing shops, building supply places, drive-in eating places, farm equipment places, and many others. This zoning is provided along certain main thoroughfares including portions of East and West Patrick Street, East Street, Market Street, West Seventh Street, Rosemont Avenue beyond the by-pass, and U.S. 40 West. Several highway service areas are provided also at interchanges along the by-pass including those at Motter Avenue, West Patrick Street, South Jefferson Street, South Market Street, and East Patrick Street.

"M-1" Light Industrial District. This new classification provides a protected place for the "clean", inoffensive types of manufacturing, warehousing, distributing, and the like, in fairly close proximity to the residential developments or where an "industrial park" atmosphere is desirable such as in the vicinity of the airport. Set-backs and buffer strips are required to protect adjacent residential areas. The "M-1" zoning applies to much of the closer-in industrial areas as well as a large area between the city and the airport and another large area north of the city in the vicinity of U.S. 15, Maryland 26, and the Pennsylvania Railroad. Another large "M-1" District is provided in the Buckeyestown Road area south of the by-pass.

"M-2" General Industrial District. This classification is provided for the more objectionable types of industry, in areas more remote from residential developments and the downtown center. Set-backs, buffer strips, distance requirements, and other safeguards are included for the protection of other industries and residential areas. Special permits are required for the most offensive types of industry such as stockyards, glue works, soap works, asphalt plants, and the like. The "M-2" areas on the new zoning map include mainly the present heavy industrial areas east of East Street and along the B. & O. Railroad to and beyond the Grove Lime Company quarries.

Building height regulations under the new ordinance allow for structures varying from 2½ stories in the single-family residence districts to 8 stories in the Central Business District. Extra heights are permitted for necessary towers, steeples, smokestacks, etc., and for customary industrial or farm structures.

Front, side, and rear yards are required in all residence districts, except side yards for rowhouses where permitted. Setbacks are required in the business and industrial districts except in the Central Business District, and side or rear yards are required in the business and industrial districts where adjacent to residence districts. In the residence districts the side yard requirements are significantly improved so as to insure more adequate spacing between buildings, for light, air, access, and flexibility of design. The old Front Yard Map, a part of the previous zoning ordinance, will no longer be needed.

Off-street parking areas must be provided for all future buildings, except for the smaller structures in the Central Business District where public parking areas are being provided. Off-street loading spaces are required for buildings receiving truck deliveries.

Commercial or municipal parking lots are allowed in all business districts, and non-commercial lots may be allowed by special permit on the fringes of the "R-4" apartment district adjoining the Central Business District. Private parking compounds are also allowable under certain conditions in the "R-4" District. All parking areas must be improved and landscaped where located within or adjoining a residence district.

The use of trailers as living quarters is prohibited under the new ordinance, anywhere in the zoned area except in existing trailer parks or on a farm. No additional trailer parks are allowed. Business trailers may be occupied temporarily for up to six months in one location.

There are new restrictions on billboards designed to improve the appearance of the city and protect existing properties generally. Billboards are permitted only in the "M-1" and "M-2" industrial districts, and are subject to size limitations, setback requirements, and the like.

In general form and arrangement the new zoning ordinance corresponds very closely to the new Frederick County Ordinance and to other modern zoning ordinances generally. Related subject matter is gathered together under appropriate headings. All the yard, lot size, and density regulations are presented in a separate table for each district, for greater convenience and

ease of reference. This is a "permissive" type of ordinance in which the uses permitted in each district are listed together with the applicable conditions and only a few prohibitions. Certain unnecessary and unworkable provisions in the old ordinance, such as the "population density" regulations, are omitted.

Map changes consisted primarily in reclassification of properties to fit the new zoning categories, adjustments in district boundaries to accord more closely with actual development or with desirable future development as indicated by the Land Use Plan, and extensions of the business and industrial districts to provide greater opportunities for economic growth. The accompanying tables show the land allocations under both the old and new zoning ordinances, within the city and in the one-mile belt. Within the city, the major change is an increase of about 120 acres for business development. In the one-mile belt, the industrial areas have been increased by about 1,000 acres and there has been some increase also in the residential areas. After allowing for major public and semi-public developments such as schools, colleges, institutions, military preservations, parks, expressways, and the like, both existing and as proposed by the Land Use Plan, the total area zoned for urban uses (excluding the "rural" or "rural-residential") is increased 24%, the industrial areas are 94% greater, and the business areas are increased 12%. The urban residential areas are 15% less extensive than formerly, due to reclassification of some undeveloped portions for business or industrial use. However, there is more than twice as much additional land within the one-mile limit that is held in reserve for future rezoning as needed and in accordance with an orderly program of utility extensions. This reserve, classified "R-1" Rural Residential, may be utilized for low-density housing development without change of zoning.

Single-family urban residential development has been allocated 36% of the total general-use area within the city. The areas for apartments amount to 18%, for business use 14%, and for industrial development 25%. The rural residence classification accounts for the remaining 7%. If the entire urban area is considered, within the city and the one-mile belt, then 19% of the total general-use area has been allocated to urban residence development, 7% to business, and 27% to industries, with 47% held in reserve under the "R-1" classification. None of these figures include the areas allocated to major public or semi-public uses, such as the airport, Ft. Detrick, and others.

A comparison is made in Table 33 between the areas allocated by the new Zoning Ordinance and the areas occupied by existing development, as found by the 1960 Land Use Survey. Within the present city, after allowance for existing and proposed parks, public and semi-public uses, and the like, in accordance with the Land Use Plan, provision is made on the zoning map for a growth of 43% in total urban development of all kinds. The largest increase is for industrial uses (376 acres), followed by residential uses (210 acres) and by business uses (181 acres). For the total urban area, including the city and the one-mile belt, there is provision for an overall increase of 65%. Here again the largest allocation of new land is for industrial development (1,684 acres), followed by business expansion (326 acres) and residential (210 acres). Proportionately, the largest increases are for industrial and business uses. Zoning for urban residential development outside the city limits has been made deliberately conservative at this time, in order that such expansion may be coordinated with the city's utility extension policy. As water and sewer extensions become practicable in the outlying areas, additional land can be rezoned from the R-1

Table 31

COMPARISON BETWEEN OLD AND NEW ZONED AREAS - IN ACRES

January 29, 1964

Old Zoning Areas (April, 1962)				New Zoning Areas			
District	In City (acres)	1-mile Belt (acres)	Total (acres)	District	In City (acres)	1-mile Belt (acres)	Total (acres)
Rural	0	4,470	4,470	R-1 Rural Residence	170	3,558	3,728
Residence "C"	868	160	1,028	R-2 1-fam. Residence	70	15	85
Residence "G"	2	0	2	R-3 1-fam. Residence	817	148	965
Residence "B"	800	4	804	R-4 Multi-fam. Residence	454	55	509
Total Urban Residence	1,670	164	1,834	Total Urban Residence	1,341	218	1,559
Service	20	0	20	B-0 Limited Business	42	0	42
Shopping Center	15	0	15	B-1 Shopping Center	52	19	71
Business "A"	50	0	50	B-2 Central Business	37	0	37
Business "B"	150	220	370	B-3 General Business	222	146	368
Total Business	235	220	455	Total Business	353	165	518
Industrial	600	500	1,100	M-1 Light Industrial	289	910	1,199
				M-2 General Industrial	320	620	940
				Total Industrial	609	1,530	2,139
Total General Use Areas	2,505	5,354	7,859	Total General Use Areas	2,473	5,471	7,944
Major Public and Semi-public areas (existing and proposed)	695	2,302	2,997	Major Public and Semi-public areas (existing and proposed)	727	2,185	2,912
Total Land Areas	3,200	7,656	10,856	Total Land Area	3,200	7,656	10,856

Note: All areas are gross measurements, including adjacent streets.

Table 32

COMPARISON BETWEEN OLD AND NEW ZONING AREAS - IN PERCENTAGES

January 29, 1964

Old Zoning Areas (April, 1962)			New Zoning Areas		
District	City Only %	Total Area %	District	City Only %	Total Area %
Rural	0	41	R-1 Rural Residence	5	34
Residence "C"	30	10	R-2 1-fam. Residence	2	1
Residence "G"	--	--	R-3 1-fam. Residence	26	9
Residence "B"	25	7	R-4 Multi-fam. Residence	14	4
Total Urban Residence	52	17	Total Urban Residence	42	14
Service	--	--	B-0 Limited Business	1	1
Shopping Center	--	--	B-1 Shopping Center	2	1
Business "A"	2	1	B-2 Central Business	1	--
Business "B"	5	3	B-3 General Business	7	3
Total Business	7	4	Total Business	11	5
Industrial	19	10	M-1 Light Industrial	9	11
			M-2 General Industrial	10	9
			Total Industrial	19	20
Total General Use Areas	78	72	Total General Use Areas	77	73
Major Public and Semi-public areas (existing and proposed)	22	28	Major Public and Semi-public areas (existing and proposed)	23	27
Total Land Area	100	100	Total Land Area	100	100

Note: All areas are gross measurements, including adjacent streets.

Table 33

NEW ZONING COMPARED WITH EXISTING DEVELOPMENT

Type of Area	Present City Area				City Plus Mile Belt			
	Existing Use 1960		New Zoning		Existing Use 1960		New Zoning	
	Acres*	%	Acres*	%	Acres*	%	Acres	%
Single-Family Residential	831	39.2%	887	29.3%	1,030	23.8%	1,050	14.7%
General Residential	299	14.2	454	15.0	319	7.4	509	7.2
Special Business-Professional	11	0.5	42	1.4	11	0.3	42	0.6
Shopping Center Business	80	3.8	89	2.9	90	2.1	108	1.5
General Business	81	3.8	222	7.3	91	2.1	368	5.2
Industry, Transp., Utilities	233	11.0	609	20.1	455	10.5	2,139	30.0
Parks, Public, Semi-pub., Cemeteries, Expressways	583	27.5	727	24.0	2,317	53.8	2,912	40.8
Total Urban Uses	2,118	100.0%	3,030	100.0%	4,313	100.0%	7,128	100.0%
Rural or Vacant	1,082		170(1)		6,543		3,728(1)	
Total Area	3,200		3,200		10,856		10,856	

* Gross acres including adjacent streets.
(1) R-1 Zone.

reserve to the more intensive R-2, R-3, or R-4 classifications, in accordance with the Land Use Plan. Most of this future residential growth will be desirably to the west and north, where water and sewer extensions will be most feasible. Zoning for industrial growth is quite extensive, in contrast with residential expansion, because the industrial areas lie mostly to the east of town where they can be served by existing sewer and water installations or where, especially to the southeast, there are suitable locations for the more extensive types of industries that require large acreages without dependence on city water and sewer services.

Administration of the new Zoning Ordinance is by the Zoning Inspector, as under the old ordinance, with additional provisions for handling applications in the one-mile belt. Arrangements were made with the County authorities for coordination of city zoning permits in this area with the necessary county building and other permits. Upon the completion of a building, whether in the city or outside, a Certificate of Occupancy will be issued as evidence that the completed building has been inspected and found to be in compliance with the zoning regulations. The City Engineer serves as the City Zoning inspector.

Normally, a person who wishes to build or to occupy existing property for some new or different use, will need only to apply to the Zoning Inspector for the necessary zoning and other permits, which he will receive usually in a day or so.

For certain kinds of buildings and uses, however, the ordinance requires special approval by the Board of Appeals. These include the Conditional Uses listed under the various district headings, and certain other special exceptions. Applications for these uses and buildings must go to the Board of Appeals and be approved, after public hearing, before the Zoning Inspector can issue the necessary permits. In other cases an applicant may find, on conferring with the Zoning Inspector, that he has an unusual situation where the strict enforcement of the zoning ordinance would involve some practical difficulty or cause unnecessary hardship. The Board of Appeals is empowered by law to consider his problem and authorize a variance, after a public hearing, sufficient to relieve the difficulty or hardship without damaging adjacent properties or sacrificing the general zoning purposes. The Zoning Inspector has no power himself to modify, vary, alter, or adjust in any way whatsoever the provisions and requirements of the Zoning Ordinance. He must deny an application that does not meet the zoning requirements, and the applicant may then take an appeal to the Board of Appeals.

There are other types of cases that may be appealed also. In case there is any uncertainity or disagreement as to the intended meaning or applicability of any provision in the Zoning Ordinance or in respect to the exact location of a district boundary line as shown on the zoning map, the matter can be decided by the Board of Appeals. A request for such an interpretation may be submitted by anyone, including the Zoning Inspector. Or it may be that a dispute will arise in regard to some other decision of the Zoning Inspector, in which case the applicant may appeal his decision to the Board of Appeals. Further appeal from a decision of the Board of Appeals may be taken by either party concerned to the Circuit Court of Frederick County, and to higher courts if necessary.

No zoning ordinance would be effective for long if it did not have some teeth in it. A part of the Zoning Inspector's duties, therefore, include the investigation of complaints and the correction of any violations that he may find. If a violation is not corrected within a reasonable time after notification, the Zoning Inspector is authorized to initiate appropriate legal action. The law provides for appropriate court remedies and punishment if necessary.

The purpose of zoning is to promote sound development and give stability to the community. Once the zoning pattern is set, by the adoption of carefully drawn long-range plans and a comprehensive zoning ordinance and maps, the people have a right to depend on it for protection against undesirable or speculative changes. Investments are made, frequently the life-savings of a family, in reliance upon the insurance of zoning; and these investments must be considered whenever a change is proposed. Frequent changes, spot rezonings, the accommodation of special interests, all tend to break down public confidence in zoning and impair its effectiveness. Changes in the zoning map should be made only when they are substantially in accordance with the long-range Land Use Plan, or when necessary to correct some mistake. If there are changing conditions in the community or if unforeseen needs should materialize, then the Land Use Plan should be amended first, after thoughtful consideration and public hearings, before the zoning map is changed. These principles have very properly been recognized by the courts of Maryland which have invalidated many attempts to rezone on an arbitrary or piece-meal basis. The power to rezone, therefore, should be used sparingly and with discrimination.

Subdivision Administration

Usually the first step in transforming farmland or other acreage into city blocks and lots is the process of subdividing or platting. This consists of laying out the necessary streets and lots, the installation of street and sanitary improvements to provide for traffic access and for water, sewer, and other utility services, the setting of markers from which the locations and boundaries of all the lots and parcels can be determined, and the recording of property engineered plats for record.

Every real estate subdivision laid out within or adjacent to the city becomes a physical part of the community, and its effects, good or bad, are reflected on the community for a long time thereafter. The ground plans of our cities, with very few exceptions, are simply a composite of the plans of the individual subdivisions. The subdivider, naturally enough, is interested chiefly in realizing as much as he can from the sale of his land in the shortest possible time; but the community, on the other hand, acquires an urban addition the character of which will affect not only its future physical pattern but also the cost of municipal services and general living conditions as well. In recognition of the community's vital interest in the practices and standards of subdivision platting, the power has been given to each of them to regulate and control these activities in the public interest. In the case of Frederick such power has been granted both by State Law and by City Charter.

The power to control the platting of subdivisions is one of the means available to the City for effectuating its Master Plan. Only through this process can certain aspects of the Land Use Plan, the Major Streets Plan, the Community Facilities Plan, and the Neighborhood Units Plan be transferred from paper to actuality. It is quite appropriate, therefore, to have the subdivision control function placed in the Planning Commission. This Commission, under the law and charter, has the responsibility of controlling subdivisions both within the city and for one mile beyond, and of coordinating these subdivisions with each other and with the Comprehensive City Plan. Certain responsibilities are also conferred upon the State Department of Health in the case of subdivisions not connected with the city water and sewer systems, and if the County of Frederick should adopt its own subdivision regulations then there will be a one-mile belt of joint jurisdiction around the city.

To exercise its powers of subdivision control, the City Planning Commission must adopt subdivision regulations. Such regulations have been in effect in Frederick since 1945. These have now been reviewed and revised to some extent for the purpose of coordinating them more closely with the new Comprehensive Plan, of bringing them into agreement with the current provisions of the State Code, the present City Charter, and the newly adopted Regulations of the State Board of Health, and of correcting certain deficiencies and otherwise strengthening the regulations and standards generally.

It should be apparent that the subdivision regulations, if effectively administered, are an important tool in the hands of the Planning Commission. In those areas that are not yet developed, the right-of-ways needed for future thoroughfares or highways, or the strips necessary for the widening of existing ones, can be secured generally without cost to the public, and usually at little cost, if any, to the subdivider. Necessary parks, playgrounds, school sites, and other public needs can be provided for in the right locations and their ultimate cost to the public can be minimized. The streets and other public improvements can be secured at the proper standards and at comparatively little cost, if any, to the taxpayer. The local street pattern, arrangement of lots, and character of deed restrictions, are all matters of concern through which the Planning Commission can influence the quality, desirability, and permanence of development.

The principles and standards of subdivision design, contained in the subdivision regulations, are not intended to be applied mechanically. In the hands of a trained and experienced land planner they should be applied with understanding and imagination. Subdivision design is an art that is taught in the schools of planning, landscape architecture, and architecture, and the people who have received such training and are otherwise qualified by experience should be encouraged to do the subdivision designing whenever possible. The final engineering and surveying work must be done, of course, by registered surveyors, but the character and quality of the future city can be advanced materially through the contributions of qualified land planners.

Urban Renewal

Part of the effort to create a more orderly, efficient, attractive, and desirable community through city planning relates to the older parts of the city where growth has practically ceased and decay has started to set in. Measures required in these areas are of a corrective nature and call for a positive approach. Frederick has already made a good start in this direction.

Several years ago Frederick created a Housing Authority which has built some 230 units of public housing and cleared out an equivalent number of substandard dwelling units. According to the 1960 Census, however, the city still has 169 dilapidated housing units and another 603 units that are deteriorating. Of the dilapidated units 139 are occupied by renters.

In 1951 the city adopted a Hygiene of Housing Ordinance (Chapter 8, Article II, of the City Code), which established among other things a Committee for Hygiene of Housing. This committee has been functioning and is said to have been very effective in some cases, while not so effective in others. Several buildings have been condemned and removed and others have been improved or are not being occupied as dwellings. This ordinance could be even more effective and perhaps should be strengthened.

In its Zoning Ordinance, Frederick has included a "B-O" Limited Business District in which special provisions are designed to preserve the outward appearance of buildings and the general atmosphere in certain historic areas. In 1955 a special ordinance was adopted (Sections 22.48 - 22.51, City Code) defining a "Historic Frederick" District in which the alteration, reconstruction, or razing of any building is prohibited except on recommendation by an Architectural Commission as to its architectural features. The Architectural Commission first appointed in 1955 now appears to have expired and is presumed to be inactive.

Frederick likewise has the usual city building, plumbing, electrical, and other codes but the 1960 Census reported 820 dwelling units, other than dilapidated units, that were lacking some or all plumbing facilities, including 637 without bath, and 58 without flush toilets. There were 15 dwelling units without heating equipment.

Obviously there is much yet to be done in weeding out or correcting undesirable and depreciating conditions in Frederick. Being cognizant of this need, the City Officials succeeded in 1961 in obtaining a charter amendment (Chapter 632, Laws of 1961) which gives it such powers as it needs to fully utilize and benefit from the Federal Housing Act including the latest amendments. The provisions in this amendment conform rather closely to those which by now have become well established elsewhere. Frederick, therefore, is no longer limited to public housing projects, or to housing per se. It can now undertake a full program of community renewal projects including conservation, reconditioning, and redevelopment where needed. Not only the dwelling areas may be treated, but also certain commercial or industrial areas where renovation is required in order to arrest the spread of blight and deterioration. Special attention can be given to the preservation and renewal of historic structures and areas, such as has been done in Washington, Philadelphia, York, Pennsylvania, and other cities. In the "Treatment Areas Plan", Plate 12, six areas of the city have been outlined for one or another form of urban renewal.

To undertake a program of urban renewal, the City would first apply for Federal funds for Advance Planning and Surveys. It has already been certified as to its Workable Program for Community Improvement, a prerequisite for such funds, and is in the process of making a preliminary survey of possible project sites. During these phases of work, including the Advance Planning and Surveys stage, it is not necessary for the City to have an official urban renewal agency, since all the required approvals and submissions can be performed by the Planning Commission and Board of Aldermen.

When the plans and surveys are completed, and before a project can actually be started, it will be necessary for the City to establish an urban renewal agency. Under its Charter Amendment, this could be the present Housing Authority, reconstituted, or a separate renewal agency; or it could be the Board of Aldermen acting as the renewal agency. There may be some advantages as well as economics in the last alternative. In such event, the necessary work can be done by a department of the city administration headed by an executive director. Many smaller cities have followed this procedure.

The urban renewal procedures and requirements are quite detailed and are frequently changed, so that close attention to both the Charter requirements and those of the Urban Renewal Administration will be essential.

Public Improvements Program

The Frederick City Plan, as already noted in the previous chapters of this report, is designed for the expected population of 20 to 25 years or more ahead and includes those public improvements likely to be needed to serve this population adequately. If a reasonable and systematic procedure is pursued in building such improvements, in accordance with a program based on this plan, the desirable development of each section of the city will be promoted and the community as a whole will benefit from an economical and efficient use of public funds. The anticipated ability of the city to carry out each proposal, with its own funds and with funds of state and federal agencies, was considered in making the recommendations contained in the plan.

The Public Improvements Program presented hereinafter consists of city plan improvements of three relative priorities. In addition to these there will be of course other capital expenditures for the more-or-less routine water and sewer extensions, minor street improvements, street lighting, and the like, all of which should be considered and adequately provided for in a more detailed capital expenditure budget from year to year. By so doing, neither will essential public improvements be neglected nor will the financial resources of the city be badly over-taxed.

The three priority groups into which the Public Improvements Program is divided are (1) those considered of high priority, (2) those which are less urgent, (3) and those which are desirable but not essential and, consequently, classified as deferrable. Within each group the projects are listed but not necessarily in the order of relative priority. All of the projects in each category should be undertaken if possible within the periods designated: High Priority Projects within the first 5 to 10 years; Less Urgent Projects during the second 5 to 10 year period; and Deferrable Projects either thereafter or whenever the community feels that it has sufficient funds or discovers an opportunity to proceed with one project or another.

The Public Improvements Program as well as the Plan itself should be adjusted from time to time to changes and developments which may justify, or even necessitate, undertaking certain projects sooner or accelerating the entire program; or on the other hand, deferring some improvements to await conditions more favorable for their financing or for other reasons. An official public improvements program is usually set up for a period of 5 to 6 years (although the Frederick Charter specifies 4 years), of which the first year is firm and the succeeding years are tentative. As the first year is completed the remaining program is reviewed and readjusted as necessary in the light of conditions at that time. New projects may be added to the list and the program extended another year, so that it will always look 4 or 5 years ahead. The long-range program outlined herein is based of course on present conditions and discernable trends, but these will change from year to year.

Because of the budgeting and accounting methods used by the City of Frederick, no complete record is available as to the extent of its public improvement programs in recent years. Some projects are buried in the salary and materials accounts while others are covered by general bond issues. A good indication of the nature and extent of major public improvements during the last 40 years can be obtained , however, from the list of bond issues in Table 34.

Even this does not tell the full story, since it does not include the funds received from state and federal agencies, as matching funds or other grants-in-aid, nor does it include the school facilities, built by the County School Board, or the principal highways which are entirely state projects. On certain local street, bridge, and airport projects, the state and federal assistance will amount to as much as 50% or more of the total cost, and the amounts of such aids are on the increase. New federal funds, for example, and possibly new state funds, will soon be available for the acquisition and development of public recreation areas, and should be utilized by the City to the greatest possible advantage.

Bonds have been used to finance the City's share of its major public improvements in the past, and there is no reason to assume that this practice will not be continued. Most of this work is done under contract while the smaller jobs are done as a rule by City forces. Subdivision improvements are installec usually by the developer, under contracts having City approval. Since 1924 there have been 20 bond issues for a total of $6,370,000 of which $1,070,000 have been paid off entirely and $3,202,000 will remain outstanding at the end of 1964. Bond issues have ranged in size from $25,000 for parks in 1926 to $2,000,000 for water and general improvements in 1959. In the last few years the number and size of bond issues has been increasing, 77% of the total amount having been issued in the last 20 years. This increasing rate of borrowing would seem to be in keeping with the City's accelerated growth.

The present bonded indebtedness of the City is being paid off at the rate of about $227,000 per year. After 1968, these payments will rise to about $237,000 annually but will drop rapidly after 1973. The entire bonded debt will be liquidated by 1985, as shown by Table 35. New bonds can be issued as the present debt is retired, and in increasing amounts as the City's assessed valuations increase.

Municipal bonds are of two kinds: General Obligation Bonds which are repaid out of the City's general funds, and Revenue Bonds which are repaid from the income derived from specific revenue-producing facilities. Under the Frederick Charter, revenue bonds may be used only for water facilities. General Obligation Bonds now account for $2,064,000 of the City's total bonded indebtedness, while Revenue Bonds make up the remaining $1,138,000.

Bonds offer a practical and convenient method of financing major public improvements by spreading the cost over a period of years in deferred payments, but they are more costly in the end than a pay-as-you-go policy because of the interest charges that must be added to the principal. Interest payments on the City's bonded debt are running currently at about $95,000 per year but this amount is declining steadily each year as more bonds are paid off. Interest payments after 1970 will be less than $60,000 per year, and by 1980 they will be down to $16,000 provided, of course, that no new bonds are issued.

Legally there is no limit to the amount of Revenue Bonds the City can issue, the main considerations being the earning capacity of the facilities to be financed and the requirements of normal prudence. Revenue Bonds are customarily backed up and guaranteed by the general credit of the City. There is a limit, however, on the amount of General Obligation Bonds at any one time. Section 115 of the City Charter sets this limit at 8% of the "total assessed value of all taxable property" in the city. This limit apparently has never been

Table 34

PUBLIC IMPROVEMENT BONDS ISSUED BY CITY, 1924-1962

Frederick, Maryland

Year	Purpose	General Obligation	Revenue
1924	Reservoir & general improvements	$ 225,000*	
1926	Park	25,000*	
1927	Public improvements	175,000*	
1929	Water works & other improvements		$ 250,000*
1931	Linganore Creek		200,000*
1931	Airport	35,000*	
1935	Sewers, Series "A"	250,000	
1936	Sewers, Series "B"	250,000	
1937	Sewers, Series "C"	50,000	
1946	Airport	60,000*	
1947	Airport	100,000*	
1947	Public improvements	250,000	
1947	Water system		300,000
1947	Sewers	150,000	
1949	Public improvements	450,000	
1949	Water system		150,000
1951	Sewers, paving & improvements	900,000	
1953	Sewers, paving & improvements	550,000	
1959	Water system		990,000
1959	General improvements	1,010,000	
	Total issues, 39 years	$ 4,480,000	$ 1,890,000

* Retired

Table 35

BONDING CAPACITY OF CITY - PAST & PROJECTED

Frederick, Maryland, 1951-1985

Year	Assessed Value Base*	Bonding Limit (8% of A.V.B.)	Genl. Oblig. Bonds Outstanding Jan. 1	Bonding Margin Jan. 1	Revenue Bonds Outstanding Jan. 1
1951	$ 36,880,427	$ 2,950,000	$ 1,599,000	$ 1,351,000	$ 612,000
1952	36,120,262	2,890,000	2,421,000	469,000	597,000
1953	37,666,013	3,100,000	2,302,000	798,000	581,000
1954	44,877,897	3,590,000	2,734,000	856,000	565,000
1955	45,201,849	3,610,000	2,588,000	1,022,000	549,000
1956	46,814,794	3,740,000	2,443,000	1,297,000	532,000
1957	48,741,507	3,900,000	2,298,000	1,602,000	515,000
1958	52,796,583	4,220,000	2,156,000	2,064,000	496,000
1959	53,833,956	4,300,000	2,013,000	2,287,000	477,000
1960	55,547,430	4,440,000	2,878,000	1,562,000	1,448,000
1961	59,377,977	4,740,000	2,717,000	2,023,000	1,388,000
1962	59,991,848	4,790,000	2,556,000	2,234,000	1,318,000
1963	63,550,000	5,080,000	2,394,000	2,686,000	1,258,000
1964	66,000,000	5,270,000	2,232,000	3,038,000	1,198,000
1965	70,000,000	5,600,000	2,064,000	3,536,000	1,138,000
1966	74,000,000	5,900,000	1,897,000	4,003,000	1,078,000
1967	78,000,000	6,200,000	1,745,000	4,455,000	1,003,000
1968	82,000,000	6,500,000	1,593,000	4,907,000	928,000
1969	86,000,000	6,900,000	1,442,000	5,458,000	853,000
1970	90,000,000	7,200,000	1,280,000	5,920,000	778,000
1971	95,000,000	7,600,000	1,117,000	6,483,000	703,000
1972	100,000,000	8,000,000	954,000	7,046,000	628,000
1973	105,000,000	8,400,000	810,000	7,590,000	553,000
1974	110,000,000	8,800,000	665,000	8,135,000	478,000
1975	115,000,000	9,200,000	560,000	8,640,000	415,000
1976	120,000,000	9,600,000	460,000	9,140,000	360,000
1977	126,000,000	10,100,000	400,000	9,700,000	320,000
1978	132,000,000	10,500,000	350,000	10,150,000	280,000
1979	138,000,000	11,000,000	300,000	10,700,000	240,000
1980	144,000,000	11,500,000	250,000	11,250,000	200,000

Table 35 (Cont'd)

Year	Assessed Value Base*	Bonding Limit (8% of A.V.B.)	Genl. Oblig. Bonds Outstanding Jan. 1	Bonding Margin Jan. 1	Revenue Bonds Outstanding Jan. 1
1981	$ 150,000,000	$ 12,000,000	$ 200,000	$ 11,800,000	$ 160,000
1982	156,000,000	12,500,000	150,000	12,350,000	120,000
1983	162,000,000	13,000,000	100,000	12,900,000	80,000
1984	169,000,000	13,500,000	50,000	13,450,000	40,000
1985	176,000,000	14,100,000	0	14,100,000	0

* Total Assessed Valuation less Bank Shares

reached. At the end of 1964 the bonds outstanding will represent only 3.1% of the total assessed value, leaving a bonding margin for 1965 of over $3,500,000. Table 35 shows the past and projected schedule of assessed values, bonding limits, bonds outstanding, and available bonding margin, from 1951 through 1985 when all the existing bonds will have been paid off.

In 1962 the total assessed values in the city were approximately $66,000,000, an increase of 61% in 10 years or an average of $2,250,000 per year. About two-thirds of this total value is in real estate. The rate of growth has been fairly steady and is expected to continue substantially as indicated in the first column of Table 35. These projections assume a 60% increase in the next ten years, and 58% in the following ten years, so that by 1985 the City should have a legal bonding capacity for General Obligation Bonds of over $14,000,000, even if there is no territory annexed to the city.

The future bonding capacity in any year will be determined of course by the bonding limit less the bonds outstanding. This bonding margin, as previously noted, will amount to $3,500,000 at the start of 1965 (column 4 in Table 35) and will be increasing thereafter at the rate of over $500,000 per year. City revenues from taxes and all other sources, from which all bonds must be paid, are now running close to $2,000,000 per year and are rising steadily.

The City appears to be in excellent financial shape for undertaking a substanti program of public improvements spread over the next several years. The major elements of such a program are set forth in Table 36. This list includes only those projects specifically recommended in the City Plan, and others of a more routine nature will have to be added, as previously explained, to round out a final program. Cost estimates are approximations only, based in most cases on assumed unit costs derived from similar projects constructed recently in Frederick. Where land acquisition is involved, no attempt has been made to fix a definite value, inasmuch as this might affect the negotiations for purchase while on the other hand there might even be some gifts or bequests of property. The acquisition of street right-of-ways through subdivision control, at no cost to the taxpayer, can be an important factor in some project

The agencies of government that may be expected to participate in the financing of each project are indicated in the program. New schools, for example, will continue to be financed by the County of Frederick and constructed by the County Board of Education. State or federal aid may be expected for many of the major thoroughfare projects, and some of these ought to be entirely State projects. Agreements between the City, the County, and the State, as to the planning, financing, and initiating of these projects, will be essential to the program which in itself should be a valuable guide to all these governments in the scheduling of their activities. All parties should of cours be acquainted with the City Plan; the details of construction and financing to be worked out on the basis of general divisions of responsibility and cost.

The program outlined in Table 36 is not intended to be, and cannot be, a rigid schedule to be followed strictly in carrying out the various improvements recommended in the City Plan. As pointed out hereinbefore, an annual review will be necessary to keep such a program at all times realistic and up to date in the light of previous progress and new conditions or developments. What is important is that it be considered a general guide for all capital expenditures, so that both the City Plan projects as well as other needed public improvements may be carried out systematically and in the order of relative

Table 36

PROPOSED PUBLIC IMPROVEMENTS PROGRAM

Frederick, Maryland

I - HIGH-PRIORITY PROJECTS
(First 5 to 10 years)

Project	Approx. Cost	Financed by
Thoroughfares		
West Patrick St. widening, Baughman's Lane to Braddock	$ 600,000	State
7th St. ramps, Frederick By-pass	400,000	State
By-pass ramp, Jefferson St.	100,000	State
Baughman's Lane widening	240,000	City-State
East St. extension southward	500,000	City-State
4th St. extension, Pine to Monroe	250,000	City-State
Parking Facilities		
Addition to City Hall lot	40,000	City
Lot in block west of Market St. between Church & 2nd Sts.	40,000	City
Recreation Facilities		
College Estates park	10,000	City
Peters Lane park	15,000	City-State-Fed.
Rose Hill park	150,000	City-State-Fed.
Schools		
Monocacy Village	900,000	County
Community College	2,000,000	County
Public Utilities		
Sanitary Landfill project	(no est.)	City-County

II - LESS URGENT PROJECTS
(Second 5 to 10 years)

Thoroughfares		
East St. widening and rail removal, Patrick to 8th St.	$ 400,000	City-State
Bentz St. widening, 4th to South St.	300,000	City-State
South St. widening, East St. to city line	300,000	City-State
Outer Loop, E. Patrick to Rt. 26	900,000	State

Table 36 (Cont'd)

Project	Approx. Cost	Financed by
Parking Facilities		
Lot in block west of Market, between 2nd & 3rd Sts.	$ 30,000	City
Lot in block west of Market, between 3rd & 4th Sts.	30,000	City
Purchase necessary parts of Winchester lot	25,000	City
Recreation Facilities		
Brigadoon park	15,000	City-State-Fed.
Elm St. School addition	20,000	City-State-Fed.
Baker Park extensions	300,000	City-State-Fed.
Schools		
New southwest elementary	800,000	County
New southwest junior high	2,000,000	County
Public Utilities		
Maintenance yard improvements, Hamilton Ave.	20,000	City

III - DEFERRABLE PROJECTS
(when needed)

Thoroughfares		
Military Road extension, 7th St. to Possumtown Pike	$ 220,000	City-Fed.
7th St. extension, East St. to Monroe	400,000	City-State
Monroe Ave. extension, Patrick to South St.	100,000	City-State
Pine Ave. extensions	150,000	City-State
Parking Facilities		
Lot in block east of Market, between 2nd & 3rd	30,000	City
Lot in block east of Market, between 3rd & 4th	30,000	City
Winchester lot addition	20,000	City
Purchase necessary parts of E. Patrick St. lot	20,000	City

Table 36 (Cont'd)

Project	Approx. Cost	Financed by
Recreation Facilities		
Mullinex Park addition	$ -	Urban Renewal
East Third St. park	-	Urban Renewal
Monocacy Village park extension	80,000	City-State-Fed.
E. Carroll Creek parkway	180,000	City-State-Fed.
Schools		
New West side elementary	800,000	County
Public Utilities		
(None at this time)		

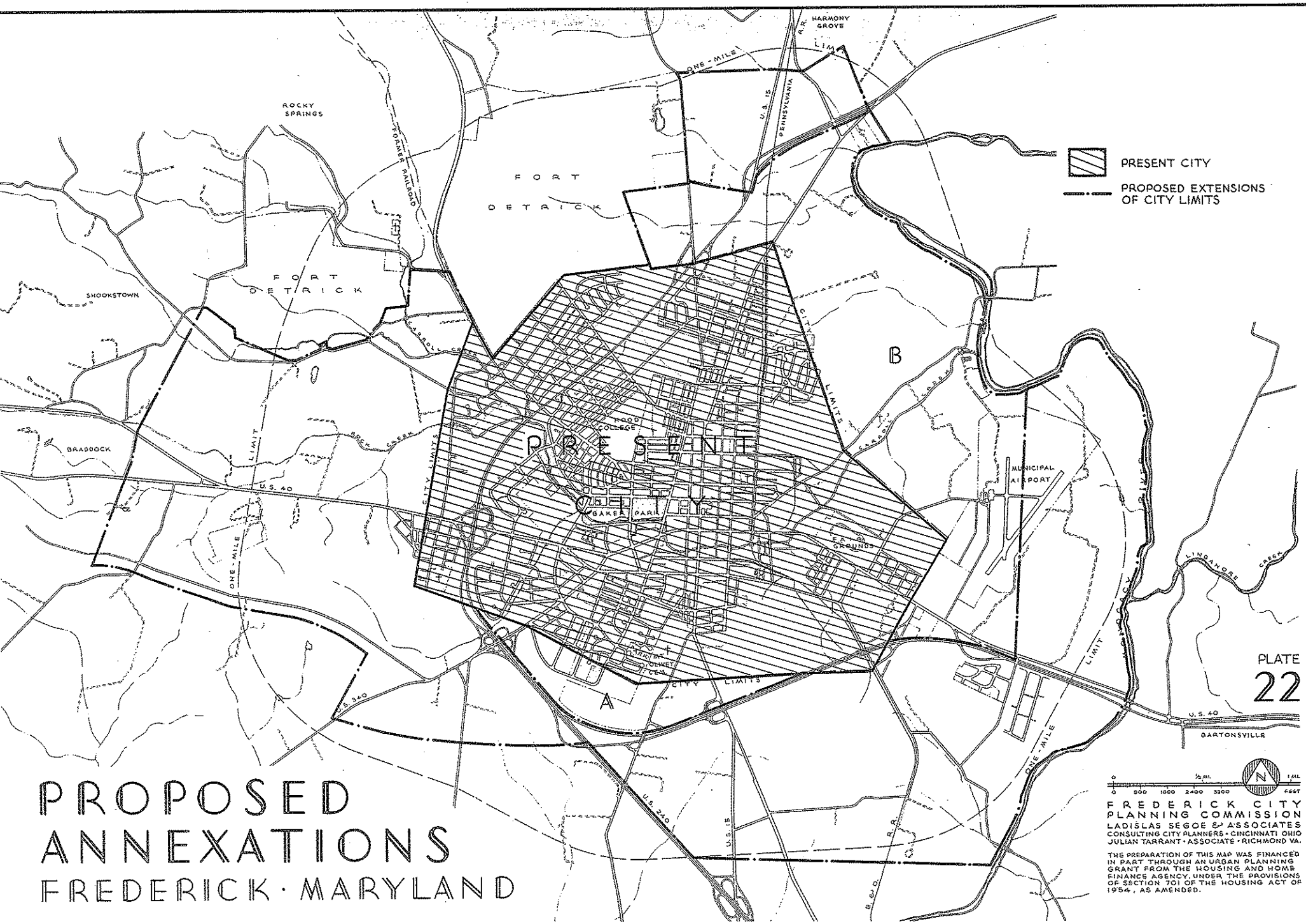
urgency of need or priority. The City Planning Commission, with the aid of the City Engineer, is the logical agency to initiate and to act as coordinator in the formulation and effectuation of such a program.

Annexation Program

Unlike many other thriving cities, Frederick has done relatively little annexing in the past. Its history in this respect will be found at the beginning of this report and on Plate 3. Within its gross area of just over 5 square miles, the city is substantially built up or otherwise developed for urban purposes and new urban growth of various types - residential, commercial, industrial, and others - is now spilling over into unincorporated territory. Within one mile of the present city limits the City has jurisdiction over both zoning and subdivision layouts but lacks authority over other important aspects of urban growth and development. Furthermore, under the divided authority of both City and County the administration of zoning and other controls lacks something in effectiveness.

In order to overcome these deficiencies and to pave the way for a fully coordinated, efficient, and orderly expansion of the city, it is recommended that the city limits be extended progressively, in several stages, to include insofar as possible all of the area contemplated for potential urban growth and requiring urban services during the next ten to twenty years or so. These are the areas designated on the Land Use Plan for residential, commercial, industrial and other types of urban expansion, covering much of the territory now lying within the one-mile belt. They would include all the land eastward to the Monocacy River, one mile from the present limits; southward about one and one-half miles to the Washington Expressway; southwestward about one-half mile to the future Interstate Highway 70; westward up the valley of Rock Creek, between Butterfly Lane and Shookstown Road, to the base of the foothills, a distance of approximately one and three-quarter miles; and northward about one mile to Harmony Grove. Within these areas will be found such urban service facilities as the new Monocacy River Water Plant, the existing sewage disposal plant, the Municipal Airport, the East Frederick Elementary School, part of Mount Olivet Cemetery, the Catholic High School, and the Montevue Home, as well as substantial industrial, commercial and residential developments. The westward expansion in particular includes fine potential residential land along both sides of Rock Creek and along the ridge between Butterfly Lane and West Patrick Street. Expansion to the northwest is effectively blocked by the two large units of Fort Detrick and Montevue Home

Considerations entering into the determination of this proposed boundary, in addition to the future land use pattern, include such factors as the ease and practicability of providing water and sewer extensions, the current trends of growth, and the suitability of land for urban development. Most of the area proposed for annexation can be sewered by gravity into the present system. The southeast portion, beyond the Frederick By-pass, would require separate sewering for limited portions, the majority being earmarked for large-scale industrial developments which probably can be served by private treatment plants but will require City water. The residential section south of the airport is being developed at a density not presently requiring sewers, and because of its vulnerable position with respect to the airport approach zones this density ought not to be increased although a sanitary sewer system may become necessary as more houses (and septic tanks) are built. City water and other services can be extended into this area.



PROPOSED ANNEXATIONS

FREDERICK · MARYLAND

The total area proposed for annexation amounts to approximately 9-3/4 square miles, while the present city area is a little over 5 square miles. The present population of the area is estimated at approximately 1,000 persons. Most of the area is undeveloped or farm land, but some of this is understood to be on the market for development purposes. The preferred time to annex is prior to development.

While the annexations thus recommended would nearly triple the size of the present city, this is by no means an unusual or impracticable proposition. Information collected by the International City Managers' Association and published by the Federal Housing Administration reveals many examples of substantial annexations in all parts of the country. Baytown, Texas, for example, a city of 23,000 people, annexed 7.47 square miles to double its size between 1954 and 1957; Dothan, Alaska, (population 21,584 in 1950) added 36 square miles in 1956 to increase its size by nearly 4 times; Harlington, Texas, (population 23,000) annexed 22 square miles for a 3-1/2 times increase; Midland, Michigan, (14,285), added 14.8 sq. mi.; Palm Springs, California, (7,660) added 15.5 square miles; Roswell, N. M., (25,738) added 8.61 square miles; and Thomasville, Georgia, (14,424) added 8.79 square miles. In neighboring Virginia, some of the smaller cities and towns have more than doubled their areas in recent years. Among these were Leesburg (five-fold increase), Warrenton (4½ times), Harrisonburg, and Bedford. Hampton (1950 population 5,966) merged its one square mile with Elizabeth City County to form a city of 57 square miles, while Newport News (4 square miles) joined with Warwick County to produce a city of 75 square miles, and Virginia Beach (8,091) with 2 square miles has merged with Princess Anne County to become a city of 255 square miles.

Cities in many localities and of all sizes are becoming increasingly aware of the need to keep ahead of unprecedented urban growth by undertaking major annexations. Recently there have been several really spectacular examples of this. Oklahoma City annexed a total of 42 square miles between 1948 and 1958, Tampa 46, Mobile 76, San Antonio 89, El Paso 119, Dallas 130, and Houston 272.

The annexation proposed for Frederick would give the city a total area of between 14 and 15 square miles. A quick check of American cities and towns of 30,000 or less population in 1960 shows at least 130 of these, scattered through 30 States, as having areas of 14 square miles or more. Some of these are truly astonishing. Seminole, Oklahoma, (population 11,464) has 62.5 square miles; Flagstaff, Arizona, (18,214) has 63.1 square miles; Concord, N. H., (28,991) has 64.1 square miles; Ellsworth, Mo., (4,444) has 84.8 square miles; and Babbitt, Minn., (2,587) has 108.0 square miles. Size does not seem to be a limiting factor in city government, in spite of the fact that all these cities include considerable farm land. Indeed, nearly every city in the country contains some farm land, Frederick included. Even within New York City it is reported, where property values are exceptionally high, there are some 150 farms occupying 1,436 acres of land, the largest being 650 acres in area.

The Maryland Code makes provision in Articles 23A, Section 19 (m), for the special treatment of farms or other property in an area to be annexed, as to the rates of municipal taxation and as to municipal services and facilities. Tax differentials can be applied to those properties not to be provided immediately with any or all of the contemplated municipal services

and facilities. Under this arrangement it would seem to be feasible to annex substantial areas well in advance of actual development without subjecting the properties and their owners to unreasonable taxation for services not received. This arrangement will make it possible for Frederick to catch up with the annexations it should have made in past years, and to move well ahead of the present situation in anticipation of growth yet to come.

Procedure: The procedure for enlarging the corporate boundaries of the city is set forth in Section 19 of Article 23A, the Maryland Code. Annexation proceedings may be initiated either by the legislative body of the city or by the petition of resident voters and land owners in the area to be annexed. When initiated by the legislative body, it must first obtain the consent of 25% or more of the registered voters living in the area to be annexed and from the owners of at least 25% of the assessed valuation of real property in the area. Notice of the proposed annexation must be published, and a public hearing held thereon, following which the legislative body may proceed to enact the resolution of annexation. Within the next 45 days, and before the resolution becomes effective, a referendum may be requested by 20% or more of the registered voters living in the area to be annexed, or by 20% or more of the qualified voters living in the existing city. The annexation can be vetoed by a majority vote of the voters in either the existing city or the annexation area.

Obviously it is necessary that careful groundwork be laid in preparation for annexation. Unless a complete set of true facts and figures is assembled and adequately presented, the public is almost certain to be misinformed and misled by unfounded claims, irresponsible speculation, and outright misrepresentation. A large amount of detailed preparation will be required and an organized information campaign conducted.

Reasons for Annexing: Why should Frederick undertake a substantial annexation program? There are many good reasons, both from the standpoint of the community at large and of the property owners individually.

A. Advantages to the City

1. More adequate and effective control over new development. The City now has zoning and subdivision control over the territory extending one mile from the present city limits, but due to its lack of other administrative controls these powers are much less effective than they ought to be. Building permits are issued by the County which also has jurisdiction over streets and other matters, and there is no building code, housing code, etc. Development of the area in accordance with the Master City Plan can be achieved most effectively if it is within the single authority of the City rather than under the present divided authority.

2. Avoidance of satellite towns. Unless annexed to the city, some of the smaller outlying sections might be tempted to incorporate as separate towns thus complicating the job of producing an orderly, economic, and efficient community. The unhappy situations that have developed around other cities because of their failure to annex territory ahead of actual development can be avoided here in Frederick.

3. Avoidance of special sanitary districts. Where cities have failed to annex and extend their water and sewer systems, there has been a tendency to create special water and sanitation districts. These not only produce a wasteful duplication of existing administrative organizations and facilities but usually result in a higher cost to the users because of the limited tax base that is served. Furthermore, these agencies are not a substitute for city government because they are limited to only one or two functions and cannot provide other necessary and desirable urban services.

4. Extension of tax base. The additional taxable values accruing to the City through annexation will materially increase its ability to finance major public improvements and services, whether paid for on a current revenue basis or by bond issues. The bonding ability of the City is related of course to the total assessed value of all real estate in the city. There may be advantages also in respect to State-collected and distributed taxes.

5. Broader economic base. By incorporating within the city limits all of the existing and prospective urban developments that make up the Frederick economic community, whether residential, commercial, industrial or otherwise, the city will achieve a more fully balanced and adequate economic base, all within a single entity.

6. Industrial development inducements. If the prospective industrial areas shown on the Land Use Plan are brought within the city limits, any new industry interested in locating in the area can be offered the inducement of city services and utilities, which are important to most of them. Furthermore, these industries would be contributing their fair share of taxes to amortize the capital investments necessary to serve them, as well as to serve their employees with adequate community facilities.

7. Civic unity and strength. "In Unity there is Strength." The united community would be financially, politically, and socially stronger and more effective in its efforts to grow and improve itself, to achieve public objectives, gain recognition, etc. People with leadership qualifications would be available for participation in governmental and civic affairs no matter where they may reside in the Frederick Urban Area, and no doubt they will also have a greater interest in such affairs as well as the economic and cultural programs if they are residents and voters of the city.

8. Increased pulling power. A city which obviously is growing, as evidenced by annexations, population increases, etc., will attract greater attention than otherwise from prospective industries and other investment interests.

B. Advantages to Property Owners

1. City services. The people who live in outlying developments or have business and industries in the annexed area can expect to enjoy the early benefits of extended municipal services such as police protection, refuse collection, street cleaning, street lighting, health and welfare services, city mail deliveries, etc., wherever the density of development justifies them

2. Utilities. Annexation will also pave the way for the extension of city water and sewers as rapidly as possible, to those properties requiring them.

3. Insurance savings. Annexation will immediately reduce insurance rates by as much as 30%.

4. Increased saleability of property. Because of the fact that properties within the city are eligible to receive city services and utilities they would become more in demand for development purposes and be more readily saleable at higher prices.

5. Utility rates. It is possible that some public utility rates are higher in unincorporated territory than in the city and these differentials would be wiped out by annexation.

6. City improvements. Residential subdivisions, commercial areas, industrial developments, and the like, would all enjoy the benefits of city standards for public improvements, including streets, curbs and gutters, sidewalks, street trees, street signs, street lights, drains, etc.

7. Others. There are many other tangible and intangible benefits in belonging to a larger, stronger city and in being part of a united community.

First Stages. As already noted, it is recommended that the annexation of the areas proposed herein to accommodate the city's over-all growth during the next 20 to 30 years or more be undertaken not all at once but in progressive stages. This is advisable in order to make it possible for the city to guard effectively against fiscal difficulties. The sizes and extent of areas to be annexed by stages will be affected by a number of practical considerations. For example, will the discretionary powers that the city would have respecting the provision of municipal facilities and services for areas of different degrees of development be sufficiently flexible to avoid fiscal difficulties? Is it reasonable to expect that the city government will be able to resist the pressures to which it will undoubtedly be subjected for supplying facilities and services in uneconomically or otherwise unwarranted cases? Official adoption of firm policies expressed in terms of specific criteria and standards, plus consistent adherence to them, will be necessary with respect to any sizeable annexation. An investigation of the experiences that other Maryland communities have had with differential tax rates would certainly be helpful.

In any event it is recommended as a First Stage that consideration be given to a very modest annexation of something less than one-half square mile, extending the city limits southward to the Frederick By-pass. This area is currently under development for residential and commercial purposes tied to developments inside the city limits and served by city utilities. Requests for annexation of properties within this area have been received by the city. The by-pass expressway forms a logical boundary for the city's expansion in this direction for the time being.

As the Second Stage of annexation, it is recommended that consideration be given to an expansion eastward to the Municipal Airport and possibly the Monocacy River, and northward about one-half mile to the Route 26 leg of the Frederick By-pass. This area would include the new industrial developments and prospective industrial sites between the city and the airport, would provide for expansion of Monocacy Village as contemplated by the developers, would encourage growth to the north where it can be served by the new water plant and feeder line, and would include the property in the vicinity of the Motter Street Interchange. All these areas are in a favorable position to be served economically by the city's existing water and sewer systems. This annexation would have an area of approximately two and one-half square miles.

Recommendations on additional annexations should await further development trends as a guide. It is also possible, of course, to subdivide at least the second stage into two or more units if smaller increments are found after careful fiscal analysis to be more practicable.

Civic Appearance

"Civic beauty is good business." So said Mr. Harold Quinton, Chairman of the Board of Southern California Edison Co., when contributing to a gift of some $200,000 worth of trees to the City of Los Angeles. More than 400 civic and business leaders have invested time, energy, and money in a citizens' group known as Los Angeles Beautiful, organized to help stem the rising tide of ugliness. After twelve years of hard work, many industrial plants, business offices, and public buildings have landscaped their grounds, approximately 200,000 new trees have been planted, freeways are without billboards, and miles of landscaped center islands have been developed. Insurance rates have dropped as rubbish fires have been cut 55 percent. Businessmen have found that good landscaping improves employee morale, increases the value of their investments, attracts customers, creates sound community relations. All across the country the same thing is happening, as more and more people become aware of the value of good civic appearance.

Frederick is one of the cities in which some organized effort is being made to beautify the city. Flower boxes have been installed in the downtown area and building fronts have been improved. Many other things could be done in addition, to enhance the general appearance of both the business and residential areas.

Street Trees. Frederick has many fine avenues of street trees, expecially in the older, more mature residential sections. Such trees are invaluable additions to the good appearance of the city, many communities priding themselves in this respect. Properly designed street tree plantings contribute more than almost anything else to the comfort, attractiveness, and economic stability of neighborhoods and the value of property. The monetary value of its street trees to the City of Beverly Hills has been estimated at $18,000,000, the most valuable of all its public assets. Trees relieve the otherwise bleak appearance of streets, absorb heat and noise, and add to the privacy of homes. Street trees are almost universally recommended as an important means of creating good neighborhoods. A standard requirement of the Federal Housing Administration, for example, for their approval of subdivisions and other developments, reads as follows:

"The streets shall be provided with long-lived shade trees as necessary and appropriate for the comfort of the residents and the appeal of the development. Street trees shall be of species suitable for local soil and climatic conditions and adapted to street use. They shall be properly spaced and located, and planted so as to have continued growth under the contemplated maintenance."

Frederick in recent years has practically abandoned any policy of street tree planting. A 1957 ordinance (Section 18.11.1, City Code) makes it unlawful for a person to plant trees in the public streets, such as between the sidewalk and curb. Existing trees may be replaced, under the direction of the Superintendent of Parks, and in addition the Board of Aldermen may grant permission for new plantings as part of a general neighborhood landscape plan, if the type and location of trees is such that no damage will result to any utility lines or installations. Little if any use of this provision has been made. The city encourages the planting of trees on private property, back of the sidewalk, but almost no consistent plantings of this type have materialized. Most of the newer residential sections present a generally barren appearance, the most prominent features of which are the light poles, fire hydrants, and garbage cans.

The city's current position on street trees can readily be understood. In the older sections, where trees have matured, there has been considerable damage to sidewalks and curbing by root upheaval, sewers and drains have been clogged by root infiltration, there has been interference with utility lines, and certain types of trees create considerable trash. These difficulties have been due to easily discernible causes - inappropriate species, inadequate planning space, and inadequate trimming and maintenance. The city does not plant or maintain these trees itself, but makes the adjacent property owner responsible for trimming and maintenance.

Successful tree programs are operated in many cities throughout the country. Most of these cities plant and maintain the trees themselves, through the park or forestry department. Careful attention is given to the selection of species used, and numerous cities maintain their own tree nurseries for the growing of street tree stock. There are many types of trees quite suitable for street use, under conditions prevailing in Frederick. One typical list is given in Table 37.

It is recommended that the City re-examine its policy on street trees with a view toward the establishment of a tree-planting agency within the city government, probably under the City Forester. Appropriate types of trees should be chosen, with variations from one street to another, planting stock should be established, and a consistent program of planting, trimming, and maintenance be pursued. Trees should be of like size when planted, and replacements should conform as nearly as possible to the established trees. They should be planted with uniform and adequate spacing to allow for their full development and the admission of light and air when mature. The usual spacing is about 50 feet apart for most species. The desirable features should include hardiness, straightness, symmetry, immunity from insects and fungus diseases, cleanliness, and longevity. Planting spaces of 6 to 8 feet or more in width should be provided between the sidewalk and curb, in accordance with the recommended street cross-section standards previously described.

Table 37

Trees Suitable for Street Planting

(Middle Atlantic States)

Principal shade trees

Male Ginkgo
Winged Elm
Augustine Elm (ascending)
Red Maple
Sugar Maple
Norway Maple (pyramidal and small globe)
Pin Oak
Linden
Ash
Katsura Tree
Thornless Honey Locust (podless)
Tulip Tree
Southern Magnolia
Amur Cork Tree
London Plane Tree
Oriental Plane Tree
Northern Red Oak
Willow Oak
Scarlet Oak

Smaller shade and ornamental trees

Small conventional maples
Redbud
Hornbeam
Beech
Crape Myrtle (tree form)
Sourwood
Golden Rain Tree
Hawthorne
Dogwood (tree form)
Flowering Crab

Trees to be avoided on city streets

Female Ginkgo
Silver Maple
Fruit trees such as Wild Cherry, Mulberry
Sweet Gum
Chinaberry
Ailanthus
Cottonwood
Black Locust
Elm (large varieties) - Chinese and Siberian

Poles and Wires. The appearance of the city is marred by utility poles and wires in the streets. Not only do these interfere with the growth of street trees, but they also detract, especially in business districts and along the prominent avenues, from the architectural merit of buildings and the aesthetic view of the street scene. Frederick has done well in this respect. Many of its residential streets have been kept free of poles and wires, but the business district is still badly cluttered. All wiring in the residential areas is now required to be placed in the rear, in 10 foot easements, a requirement in the subdivision regulations. Some gas lines are also placed in these easements. In the business district, most of the telephone lines are now underground and the city hopes to place its street lighting and signal circuits underground also, whenever this can be done along with the electric utility lines. There is as yet no definite pole-and-wire removal program, however, and in the meantime these utilities constitute one of the most unattractive features of the downtown district. A program to accomplish the removal of all utility poles and wires gradually over a period of years should be worked out jointly by the city and utility companies.

Street Lighting. Frederick has instituted an attractive and effective system of street lighting throughout the city. In the newer residential districts, ornamental electroliers are installed at intervals of about 200 feet along each side of the street, at alternate intervals, with the wiring underground, In new subdivisions, the subdivider is required to install these at his expense. In older sections, the lighting units were attached to utility poles but these are gradually being replaced.

Along the major streets and in the business areas, mercury vapor or fluorescent luminaires are used. Along Market and Patrick Streets in the downtown district, the latest model high-intensity lights of this type are used, mounted about 28 feet high on special steel poles, which also carry the light circuits. Lights are at regular intervals along the streets, alternating from side to side. These poles are in addition to the wooden utility poles which carry a variety of electric and telephone lines, from which there is a maze of drop lines to the various buildings criss-crossing the streets.

The type, intensity, and placement of street lights is determined, of course, by the requirements of illumination on the different thoroughfares and local streets. By general standards, Frederick may be said to be well lighted. From the aesthetic standpoint, however, there is still room for improvement. Replacement of wooden light poles with ornamental electroliers, the painting of metallic units in agreeable colors, additional underground wiring, and the reduction of glare, especially in the business districts, all would add to rather than detract from the general appearance of the city. Electroliers can also be made to serve as fixtures for letter boxes, fire alarm signals, traffic signals, and other appurtenances. In the business district, for example, there is no excuse for two or three sets of poles along a single street.

State Name Signs. The general quality of municipal administration is often judged by the appearance and effectiveness of street name signs. Modern traffic requires that these signs be legible to drivers traveling at the permitted speeds, that they be located consistently at each intersection and be placed at a sufficient height to be visible over parked vehicles. These signs can often be attached to the light poles, but where these are not advantageously located, a separate standard is required. The signs should be of durable material, simply but attractively designed, and should be well maintained and promptly replaced when necessary.

Frederick has a uniform program of street name signs generally throughout the city. All signs are installed by the city, including those in new subdivisions.

Trash and Garbage Collection. The placing of trash and garbage along the curbs two or three times a week, for collection by City trucks, creates one of the more unsightly aspects of the community. This is especially bad in the downtown district. Collection from the front is necessary, of course, where there are no alleys, as in most of the residential areas, but there are ways to minimize the ill effects. Some cities, for example, make it a practice for the trash collectors to go into the rear yards and get the trash, while others have strict requirements about the prompt removal of empty containers. Street trees in the residential areas would help materially in screening such trash and containers while at the curb. In the business district, the alleys should be used for trash collection where available, and new service courts should be created for this purpose wherever possible as part of a downtown renewal program. In other cases it may be necessary for property owners to construct small trash bins set into the building frames back of the sidewalk. The least that should be done is to restrict the placing of trash on the sidewalks until after a certain hour at night preceding the collection, and removal of empty containers before the opening of business the next morning.

A number of metal trash receptacles have been installed in the downtown section by the city, for the convenience of pedestrians. These are generally of good design and appearance, but the removal of advertising signs from them would improve the appearance and dignity of the street.

Advertising Signs. Billboards are prohibited in the residential districts and the more restricted business districts. Where permitted elsewhere, their size and locations should be strictly regulated to prevent abuses. Signs attached to business buildings are necessary, of course, in order to identify them and their products or services, but these too must be regulated in the interest of safety and civic appearance. In the downtown business district, and in a few other locations as well, the multiplicity of overhanging and projecting signs detracts seriously from the street scene. Such signs, except when placed back of the property line, occupy public property as a special privilege, and are subject to the authority of the city administration. The size and projection of these signs should be strictly regulated to prevent the disfiguring of business streets, and all offending signs should be removed within a reasonable time. It is interesting to note the difference in appearance between the east side of Market Street between Patrick Street and Second Street, where all the signs are flat against the buildings, and the west side of the same street where this is not so. Such limitations on size and projection are contained in the new Zoning Ordinance, while suitable regulations as to the type of material used, weight, mounting, electrical equipment, and the like belong in the building code or in a special sign ordinance.

Traffic Signs and Signals. Traffic signals and directional or regulatory signs are needed for the proper handling of traffic, particularly on thoroughfares. These should be located, of course, where they are easily visible to the motorist. Wherever possible, however, they should be attached to existing poles or light standards instead of adding to the number of separate standards along the street, and their locations should be coordinated with other street appurtenances so as to minimize confusion and promote good appearance. Traffic signs and signals, however necessary, should not be permitted to destroy the good appearance of the street through overpowering installations, unattractive design, or poor maintenance.

The Use of Color. The judicious use of color can be invaluable in producing an attractive city. Unfortunately there has been a trend in recent years towards the use of unpainted metal or of metallic paint for street equipment. Attention might be given to the touching up of fire hydrants, lighting standards, signs, signals, waste receptacles, police and fire alarm boxes, and the like with a variety of appropriate colors carefully selected to harmonize with the general street scene. The advice of local artists and architects should be obtained in this connection.

Cooperation Required. The appearance of the city can be made increasingly attractive and more appealing through the cooperation and collaboration of private citizens, civic groups, and public officials. A program of community betterment, designed to improve it in appearance as well as in the utilitarian and functional sense, should properly be made a part of the city planning program. Such a program should include: (1) well-designed and maintained parks, playgrounds, and other public open spaces and buildings; (2) adherence to the principles of good design in subdivision and street improvements; (3) enforcement of the zoning regulations and the elimination wherever possible of inappropriate structures and non-conforming uses; (4) an active program of street tree planting, replanting, and maintenance; (5) careful selection of the design and proper location of various street appurtenances; (6) effective control over the type, size, location, and construction of advertising signs; (7) an expanded program in the downtown district of building restorations and improvements; (8) annual "clean-up, paint-up, and beautify" campaigns sponsored by the City or by civic organizations.

The responsibility for awakening and coordinating the multiplicity of interests involved in creating a truly beautiful and orderly city is very properly that of the Planning Commission. By utilizing the designs, measures, and procedures outlined in the City Plan, by working for higher standards and greater harmony of building and community development, and by other means, it can help to guide these developments so as to enhance and improve the city as a whole. Good appearance can contribute much to the well-being of Frederick's citizens, economically as well as otherwise. It will help to attract business and industry, make life more satisfactory, and help to create a feeling not only of civic consciousness but also of civic pride. To this end the Planning Commission, as the custodian of the Plan and the agency entrusted with guiding the future development of Frederick, should make every effort to enlist the full cooperation of public officials, business interests, and citizens in general in applying the different methods and procedures outlined herein.

Planning Administration

On adoption by the Planning Commission of the different parts of the Master Plan and their approval by the Board of Aldermen, Frederick will have accomplished the first major step essential for an effective planning program. From then on the task will consist of the continuous process of administering the Plan and putting it ineffect, so as to help bring into being the increasingly better, more efficient, and more attractive community envisioned therein. The day-to-day application of sound city planning principles to all public and private projects, using the Master Plan as a guide, will ensure the rational, orderly, and otherwise desirable future development of the community.

Under the Maryland Code and the City Charter, the Planning Commission is the agency responsible for advising and assisting the Mayor, Board of Aldermen, and various other public officials and agencies, as well as private developers, in all matters having to do with the physical development of the city. This is no mean task. Not only must the members of the Planning Commission give generously of their time and effort in attending meetings and helping to promote the realization of the Master Plan, but they also have to combat the pressures of special interests and the skepticism of doubters who may claim that the Plan is over-ambitious or impractical, or that proposals for specific improvements, such as a street extension or a new park or playground, while desirable, will cost too much - and so on. Despite these and other obstacles, however, steadfast administration of the Plan on the part of the Planning Commission - when supported by the Board of Aldermen, the Mayor, and other public officials, and especially by the citizens of Frederick - will bring about, as in other cities, gradual realization over the years of a majority of the Master Plan proposals.

The Planning Commission has no legislative powers and only limited administrative functions. It serves primarily, as previously indicated, as advisor to the Board of Aldermen, the Mayor, and other city officials and public agencies on matters pertaining to the physical development of the community. To perform these duties effectively, the Planning Commission must continue to have a place in the local government commensurate with this important function; and should be consulted by legislative and administrative officials on all matters within its jurisdiction. The Commission should be granted appropriations adequate to do this job, including the making of investigations and studies whenever necessary, with the same competence as other departments of the local government. Good communication and understanding between the Planning Commission and the Board of Aldermen is fostered at present by the arrangement whereby one Alderman serves also as a Planning Commissioner.

The functions and duties of the City Planning Commission in guiding the future development of the City and the legal basis and limits of its jurisdiction are set forth in Article XV of the City Code and in Article 66-B of the Code of Maryland. These functions and duties may be summarized as follows:

1. To make and adopt a Master Plan for the physical development of Frederick and adjacent territory, and to amend, extend, or add to such plan when deemed advisable.

2. After adoption of the Master Plan and its approval by the Board of Aldermen, to pass upon the location, character, and extent of proposed public buildings or structures, streets, parks, and other public grounds, of publicly or private-owned utilities, and the acquisition of real estate by the City, either within the city itself or for one mile beyond, all as they relate to the Master Plan.

3. To advise the Board of Aldermen with respect to any proposed deviation from, modification of, or amendment to the Master Plan that may be involved in any such construction or acquisition as indicated above.

4. To control the subdividing of land in the City and one mile beyond, in accordance with the Subdivision Regulations.

5. To advise the Board of Aldermen regarding all proposals for amending the Zoning Ordinance or Map.

6. To acquire real estate or easements therein for parks, streets, or other purposes.

7. To promote public interest in and understanding of the Plan.

8. To recommend programs for public structures and improvements and for their financing.

While the functions of the City Planning Commission are mainly advisory, as noted above, its advice concerning both public and private developments carries considerable weight under both the Code and the Charter. In the case of any proposed deviation from, modification of, or amendment to the Master Plan, which is disapproved by the Planning Commission, such recommendation may be over-ruled only by a three-fourths vote of the Board of Aldermen. This places a serious responsibility on the Planning Commission. It must investigate and study thoroughly any proposal or recommendation which it may be required to make to the Board of Aldermen. Prior to making this recommendation the Planning Commission should assure itself that the proposed improvement or measure: (1) will promote the best interest of the City as a whole; (2) will be in scale with the community's present and probable future needs; and (3) will not impair or be in conflict with other features of the community's desirable development under the Master Plan.

Land subdivision control is a very important instrument in effectuating the Master Plan. In exercising this control, the Planning Commission has the responsibility of seeing that each subdivision is made to conform to the Master Plan with respect to the layout of streets and other public open spaces, the provision for necessary thoroughfare widenings or extensions, and the sites that will be required for schools, parks, and other needed public improvements. In this connection it should be remembered that the Master Plan is intended to have some flexibility as to details, but the Planning Commission must continually guard against such deviations as will upset or nullify the basic planning objectives. The Commission must always insist upon adherence to basic principles and standards of good city planning and subdivision design.

All proposals to amend, supplement, or change the zoning regulations or the boundaries of districts shown on the zoning map must be referred to the Planning Commission for investigation and recommendation before final action by the Board of Aldermen. These proposals should be examined, of course, in the light of the desirable development of the community, and any change recommended should be in accord with the long-range Land Use Plan.

Even the best Master Plan and all the legal authority needed to carry it out will not alone assure that it will be effective in guiding the future development of the City. This will depend mainly on the quality of planning administration by the City Planning Commission, the respect which its recommendations will command, the cooperation it receives from other public officials and agencies (city, county, and otherwise), and on the interest and support of the citizens of Frederick. Obviously, the members of the Planning Commission should be citizens who command public respect, who have a genuine interest in community betterment, as well as a thorough understanding of the City's problems and requirements, and who have vision. They should not be appointed to represent special interests but should be able to submerge their personal loyalties in favor of the public good. They should familiarize themselves with the planning laws and ordinances, the proposals and provisions of the Master Plan and Zoning Ordinance, and understand the reasons therefor, and should be acquainted with the objectives, principles, and methods of city planning.

The processing by the Planning Commission of matters of (1) original jurisdiction - such as land subdivision, or (2) reference - such as proposed zoning changes, street improvements, public buildings, parks, and other proposed public improvements - will require the assistance of certain City departments. This is necessary because in a city of Frederick's size the services of a full-time city planner cannot ordinarily be justified. However, since the City Engineer already serves as the Planning Commission Secretary and is in constant touch with its activities, the present arrangement by which his office, with occasional assistance from other offices, makes investigations and prepares information for the Planning Commission, can very logically be continued. Lacking an experienced planning technician, however, it may be desirable for the City to make arrangements, as has often been done in the smaller communities, for the limited services of a professional planning consultant to supplement the talents already available in the City Engineer's office. In order to have the benefit of expert advice on matters of unusual importance or complexity, as well as information on up-to-date planning practices and experiences in other communities, the Commission might wish to make such an arrangement including monthly or bi-monthly visits of a qualified planning consultant.

The Planning Commission should continue to hold its regularly scheduled meetings, at least once a month, and to establish a definite agenda to be followed at each meeting. The City Engineer now brings to the attention of the Commission all improvement proposals or plans under consideration over which the Planning Commission has jurisdiction; and the Board of Aldermen should always make prompt referral to the Planning Commission of matters before it which require study and report by the Commission. This should be done while such matters are still in the formative stage, in order to give the Planning Commission time to make adequate studies and to develop carefully considered recommendations.

In its dealings with the Board of Aldermen or with administrative departments, other commissions or boards, the Planning Commission will be acting as an advisor on planning matters and should therefore address itself to the community planning aspects of the proposals, problems and solutions and not to the legislative, engineering, administrative, or political aspects. By this means the distinctive nature of the Commission's function will be understood and accepted, its recommendations will carry more weight, and the dangers of encroaching on the rightful provinces of other bodies and officials will be avoided.

Since there are some parts of the Master Plan that pertain to areas or projects located outside the present city limits, every effort should be made to acquaint the County authorities and those of the State and other governmental agencies with such plans and proposals, and to secure their cooperation.

While the Master Plan must be adopted by the Planning Commission and approved by the Board of Aldermen, as required by law, the Plan should not be regarded as the exclusive possession of the Planning Commission and public officials. One of the most necessary and effective ways of securing continual recognition for planning and adherence to the Master Plan is to make all the citizens feel that this is their plan and to draw as many citizens as possible into its discussions and study. As previously implied, the preparation of the Master Plan is only a part of the job; the greater and more difficult task of making it effective lies ahead. As a general rule, those cities in which the Master Plan has had the most influence are those where well-organized citizen support for planning has been developed and maintained. To this end a strong and active citizens planning association has proved of great value in many communities. Such an organization should be representative as much as possible of all sections and groups in the city. Representatives from the Chamber of Commerce, the service clubs, and similar organizations, could well be the nucleus of a citizens planning association. The assistance this could extend to the Planning Commission and city officials in carrying out the recommendations of the Plan would be directed primarily to the wide public support and understanding of its aims and proposals. The means would include newspaper articles, exhibits and discussions before service clubs and other groups, study courses in secondary schools concerning the Master Plan, assistance in securing the approval of public improvement proposals placed before the voters from time to time, and similar activities.