

CITY OF BLUEFIELD

MASTER PLAN

BLUEFIELD CITY PLANNING COMMISSION

BLUEFIELD, WEST VIRGINIA

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Economic Development Agency

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CITY OF BLUEFIELD, WEST VIRGINIA

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I - INTRODUCTION

WHAT IS A MASTER PLAN?

In presenting this final report on the City of Bluefield Master Plan, it is perhaps appropriate to begin with what a Master Plan is, and what it is expected to accomplish.

A Master Plan is several things:

- It is a comprehensive survey of the physical development of the community - its housing, commercial and industrial areas, its schools, parks and playgrounds, its streets and traffic - and an analysis of their interrelationships, their problems and deficiencies, and opportunities for improvement.
- It is a projection of future growth trends: population, business, industry, and public activities, and the implications of this growth for the development of the City.
- It is a recommended future development pattern for the City ten to twenty years in the future based on realistic objectives.
- It is a series of proposals for public and private improvements needed to meet present deficiencies and to support the City's future development goals.
- It includes, in support of the plan recommendations, both an analysis of improvement financing and also recommendations on zoning and subdivision regulations.

In addition, the Master Plan for Bluefield has several kinds of official status, as follows:

- It is the "general plan," according to the Federal definition, which is required in order for the City to qualify for urban renewal grant funds.
- It is the "comprehensive plan" referred to in the West Virginia Planning Enabling Act.
- As the official "comprehensive plan," it may be adopted by the Planning Commission and also by the City's Board of Directors, and must be so adopted before the City can establish subdivision regulations governing the platting of new streets and building lots.

At the same time, there are several things which the Master Plan is not:

- It is not a mandate, but rather a guide or statement of policy. This is true even after its adoption by the City

Board of Directors. In some states, but not West Virginia, the City Planning Commission receives certain review powers over public improvements after the Master Plan is adopted.

- It is not a set of engineering plans or construction drawings. Its recommendations are general; that is, for example, it will recommend a road for a particular section but not its exact location or engineering design.
- It is not all there is to the planning process, but rather the over-all guide within which day-to-day planning decisions concerning the development of the City are made.
- It is never really completed. Conditions constantly change, and the entire Master Plan should be reviewed and revised probably at least every 2 or 2-1/2 years. In addition, continuing study on various aspects of the Plan is required for maximum effectiveness. (See Chapter IX below.)

THE CHALLENGE FOR BLUEFIELD

The Bluefield Master Plan must meet a particular challenge: the economic situation of the City and the surrounding area. Bluefield originated as a distribution center for the extensive bituminous coal mining region of southeastern West Virginia, and had its most vigorous period of growth in the golden age of the mining industry in the 1920's. In recent years a dwindling market for coal and automation in the mines has cut deeply into mining employment. Although Bluefield has suffered less than much of the surrounding region, its economic situation is reflected in a high unemployment rate and a substantial loss of population.

Under these circumstances, the impetus for a comprehensive program of development and public improvement is naturally less than in a period of exuberant growth such as took place in Bluefield in the 1920's. In addition, there is a progressive loss of new leadership as the community's younger people are forced to find employment in other areas. Yet, there is actually a stronger need for leadership and new undertakings today to improve the community's attractiveness for growth and to provide for the expanded employment opportunities of tomorrow.

In the development of this Master Plan (itself carried out with a 50 percent Federal matching grant), emphasis has been placed on the development of programs utilizing available Federal and State aid in

addition to local funds. At the same time, there is a clear necessity for local action and financial support. The most effective form this support can take will be in the approval of urban renewal projects and bond issues resuming the local improvement program carried out so successfully in the 1920's. As indicated in the financial analysis below, it is considered that bond issues for carefully programmed improvements can be supported without undue hardship and are essential to maintain the City's sound development as a progressive community.

ABOUT THIS REPORT

The material presented in this report (which includes, among other items, condensations of the previous reports*) is necessarily rather lengthy and detailed. It is intended for City officials and other readers to regard the report as a kind of "Dr. Spock" of municipal development, not necessarily to be digested at one sitting but rather providing a reference for the different kinds of City development problems. For a quick over-all view of the report and its proposals, it is suggested that the reader leaf through the maps and illustrations and the introduction to each chapter.

ACKNOWLEDGEMENTS

Particular appreciation is expressed in the preparation of this Plan for the assistance and encouragement of City Manager Randolph G. Whittle, Jr. His knowledgeable interpretation both of local problems and opportunities, as well as his invaluable guidance in finding sources of survey information have greatly aided in the study.

Appreciation is also expressed for the assistance and cooperation of City Engineer Elmer Barton, Sanitary Sewer Commission Director Thomas Bruce, County School Superintendent W. R. Cooke, Assistant County School Superintendent Mac G. Bowles, Urban Renewal Authority Director George McCulloch, Jr., City Recreation Director Anthony Lotito, and many other City officials and civic leaders.

The Planning and Research Division of the West Virginia Department of Commerce, under Director L. E. Ward and City Planner

* Plan for Arterial Roads and People, Jobs, Business, and Industry, November 1960.

Robert H. Paslay, has been helpful in offering suggestions and conducting detailed reviews of the planning work accomplished.

II - POPULATION AND BASIC ECONOMY *

A - INTRODUCTION

The City of Bluefield has experienced a substantial recent loss of population amounting to 10.5 percent between 1950 and 1960. This decline is related mainly to the severe losses in mining and railroad employment which have occurred especially since 1957. Some of the loss, however, has been due only to moves from the City to its suburbs rather than to moves entirely out of the region. The heavy loss in the younger age groups is a particular problem for the City.

For the foreseeable future, it does not appear that more than a part of the lost mining and railroad employment in the Bluefield area will be recovered. The market for the area's Pocahontas Smokeless Coal will improve as steel production, the major user of this high-grade coal, returns to higher levels, and proposed mergers with other lines may increase the volume of freight carried on the Norfolk & Western Railway, but increased mechanization has drastically reduced the number of workers needed in both mining and railroad operations.

In order to eliminate unemployment and stimulate new growth, therefore, Bluefield must look to its two other basic sources of economic strength: manufacturing, which is still in its early stages of development in the area; and retail, wholesale, and service trade, for which Bluefield serves as the center for a wide surrounding region.

Manufacturing can be stimulated through such agencies as the Bluefield Area Development Corporation, which can utilize local and perhaps State and Federal capital in constructing factories for sale or lease to new firms coming into the area. The encouragement of retail, wholesale, and service trade is related largely to the General Neighborhood Renewal Plan program in the central area, which can improve traffic circulation and provide new sites for building expansion, parking, loading, and over-all modernization. Urban renewal will also bring substantial Federal grants and construction activity which will themselves help the local economy.

* This section is a condensation of a previous Master Plan report, People, Jobs, Business and Industry - January 1961, with certain later data added.

The recommendations for future development made in this Master Plan are based on a steady or moderately increasing future population. This is on the assumption that present opportunities for economic improvement are used to the fullest.

B - POPULATION

Bluefield's earliest significant growth took place in 1888, when the Norfolk & Western Railway established repair shops and a marshalling yard in the City's central valley to serve the nearby Pocahontas mine field. The City was incorporated in 1890.

1. The U. S. Census recorded a continuous increase in the City's population from 1890 to 1950. Between 1950 and 1960, however, a sharp loss was shown, as in Mercer County and the State of West Virginia as a whole.

Table 1
POPULATION, CITY OF BLUEFIELD, 1890-1960

<u>Year</u>	<u>Population</u>	<u>Percent Change</u>
1890	1,775	
1900	4,644	+ 161.6
1910	11,188	+ 140.9
1920	15,282	+ 36.6
1930	19,339	+ 26.5
1940	20,641	+ 6.7
1950	21,506	+ 4.2
1960	19,256	- 11.0

Table 2
COMPARATIVE POPULATION CHANGE, 1950-1960

	<u>Population</u>		<u>Percent Change</u>
	<u>1950</u>	<u>1960</u>	
Bluefield, W. Va.	21,506	19,256	- 11.0
Mercer County	75,013	68,206	- 9.1
West Virginia	2,005,552	1,860,421	- 7.2
United States	150,697,361	189,323,175	+ 19.0

Source: U. S. Census of Population

The actual loss of population in terms of moves from the City was even greater than indicated by the population totals. This is because the City also lost its natural increase, the excess of births over deaths, which amounted in Bluefield to approximately 3,000 persons between 1950 and 1960. Thus the total number of people who moved out of the City amounted to the loss of total population plus the loss of natural increase or a total of 5,250.

Some of these moves were only from the City to its suburbs, and so do not represent an actual loss to the area's economy. It is estimated, from population increases in nearby areas such as Cumberland Heights, that such moves involved between 1,500 and 2,000 persons. The remainder of the loss, however, was due to moves entirely out of the Bluefield region as a result of declines in mining and railroad employment and of lack of job opportunities for younger people.

The age breakdown recently published by the Census for 1960 shows clearly the heavy loss of younger age groups in the City as compared with 1950 (Table 3). The heaviest loss, over 50 percent, was shown in 1960 by the 25- through 29-year age group. This is partly a reflection of the previous 1940-1950 decline in the 10- through 19-year age group shown in Table 3 but also indicates that many young people have been moving out of the City as soon as they finish high school or college. There is a serious implication for the future of the City in the loss of its future leadership and what one writer has called "mental capital."*

The older and very young age groups, on the other hand, showed an actual increase between 1950 and 1960 in spite of the City's over-all decline. The increase in children between 5 and 14 years of age reflects the postwar baby boom before 1950, and points to an added load in the near future on the City's junior high and high school facilities as discussed later in this report. The sharp rise in the 60-year and older age groups, which reflects the national trend toward longer life spans, indicates a need for City action in its urban renewal programs to provide special housing for the elderly.

* Byron, William J., "Needed: Local Leadership in Depressed Areas",

Harvard Business Review, July-August 1960.

The City's loss of population has not reduced the amount of occupied housing, contrary to what might be expected. The construction of 655 new housing units since 1950 has more than offset an increase of 165 in housing vacancies and the demolition of 40 housing units, so that there are actually more occupied housing units (about 6,250) now than in 1950. The explanation for this paradox is that average family size declined from 3.6 in 1950 to about 3.1 in 1960. This again reflects the loss of younger families in the City.

The Negro population in Bluefield declined less between 1950 and 1960 than the white population, according to the Census. As of 1960 a nonwhite population of 4,889 was reported vs. 5,169 in 1950, or a decrease of only 5.5 percent. This is less than the decline in the total population, which was 10.5 percent, and is also less than the estimated proportion of moves among the white population entirely out of the region vs. moves to the suburbs.

C - FUTURE POPULATION

In projecting the future population of the City as a basis for planning, the first limiting factor is the amount of land available for building new houses. Bluefield's postwar construction boom has taken up the larger tracts of available land, and it is estimated that now there is suitable land in the City for only about 450 new houses and apartments (exclusive of replacement of existing housing). This is less than the amount of housebuilding that took place between 1950 and 1960. At an average family size of 3.5 per new unit, the construction of all 450 units would add 1,750 persons to the City's population or less than the 1950-1960 population loss. The limitation imposed by lack of buildable land is an artificial one, however, and could be overcome by the annexation of suburban areas which have more available land for new building.

A more basic limitation is imposed by the City's economic situation. The following is a projection of alternative possibilities based on whether or not new employment is developed in the Bluefield area:

- 1) To prevent further loss of population by moves out of the region, it will be necessary both to reduce present unemployment to a normal level and to provide enough new jobs to support the annual natural increase in population. This

Table 3
POPULATION CHANGE BY AGE GROUP,
CITY OF BLUEFIELD, 1950-1960

	<u>1950</u>	<u>1960</u>	<u>Percent Change</u>
<u>Total</u>	<u>21,506</u>	<u>19,256</u>	<u>-10.5</u>
Under 5 Years	2,049	1,779	-13.2
5 - 9	1,587	1,826	+15.1
10 - 14	1,466	1,805	+23.1
15 - 19	1,650	1,415	-14.2
20 - 24	2,029	1,080	-46.7
25 - 29	1,919	885	-53.8
30 - 34	1,622	1,164	-28.2
35 - 39	1,553	1,289	-17.0
40 - 44	1,551	1,294	-16.6
45 - 49	1,462	1,248	-14.6
50 - 54	1,275	1,208	- 5.3
55 - 59	1,050	1,132	+ 7.8
60 - 64	839	1,026	+22.3
65 - 69	656	840	+26.5
70 - 74	423	611	+43.4
75 - 79	332	363	+ 9.4
80 and over	43	281	+ 553

	<u>1940</u>	<u>1950</u>	<u>Percent Change</u>
<u>Total</u>	<u>20,641</u>	<u>21,506</u>	<u>+ 4.2</u>
Under 10 Years	2,970	3,636	+18.3
10 - 19	4,212	3,116	-35.4
20 - 29	3,880	3,948	+ 1.7
30 - 39	3,352	3,175	- 5.6
40 - 49	2,839	3,013	+ 5.9
50 - 59	1,873	2,325	+19.3
60 - 69	1,060	1,495	+29.0
70 and over	450	798	+43.5

Source: U. S. Census of Population. 1960 age group figures are preliminary and subject to possible revision prior to official publication.

means, for Mercer County, which forms Bluefield's labor market area, roughly 3,000 new jobs to relieve current unemployment and 300 new jobs per year to support the County's natural increase (assuming that the County's natural increase is at the same ratio to present population as the City's, and that one job supports three people).

To produce these needed total jobs, assuming that one basic job (industrial, mining, railroad, etc., bringing in outside money) supports two secondary jobs (retail, service, etc., supported by local money), the new basic employment required would be 1,000 to relieve unemployment and 100 per year to support the area's natural increase.

- 2) The provision of this number of new jobs is a reasonable goal for an intensive drive for industrial and other development in the Bluefield area. The accomplishment of more than such a goal is unlikely.

It is considered, therefore, that Bluefield's maximum projected 1980 population, disregarding moves to the suburbs, would be the present population plus the amount of future natural increase, projected at 250 persons per year, or a total of 24,000 persons.

- 3) If new jobs are not developed, the City will continue to lose population. Out-migration at the 1950-1960 rate of 350 persons per year, projected with the County assumed to be subject to out-migration at the same rate, would remove the present unemployment backlog in a period of 10 years. This means that the City's present rate of population loss would continue to 1970 and would stabilize after that, for a total loss of 3,500 persons.

The minimum projected 1980 population would thus be about 15,500 persons. This figure could be further reduced if present employment sources decline. However, these appear to be reasonably well stabilized as discussed in the sections below.

- 4) Thus, it is seen that Bluefield's future population can fluctuate widely according to the City's success, or lack of success, in creating new basic employment. For the purposes of the Bluefield Master Plan, it appears reasonable as a middle-ground estimate to assume a continuation of the present population level of 19,000 to 1970 and a rise to roughly 21,000 by 1980.

D - BASIC ECONOMY

① While to the casual visitor Bluefield has little appearance of being a mining center, its basic economy is closely tied to ^{there} the great Pocahontas Coal Field, which begins 10 miles northwest of the City. The local economy is also heavily dependent on the Norfolk & Western Railway, which gave the City its original reason for existence ~~when it established repair shops and a marshalling yard in Bluefield's central valley.~~

Bluefield's present high unemployment rate (see Table 4) can be traced directly to the sharp drop in mining and railroad employment which took place in the 1958 recession (Table 5).

The total decline in mining and transportation, communication, and public utility employment in Mercer County (Bluefield's labor market area) amounted to 5,180, as compared with a total increase in unemployment and decrease in the labor force of 6,275. At present, with an unemployment rate of over 17 percent, Bluefield is classified by the U. S. Department of Commerce as an area of "chronic" and "very substantial" labor surplus, and is thus in the highest priority class for Federal aid to depressed areas.

② The City's main sources of employment come less from direct mining and railroad employment than from retail, wholesale, and service trade. Mining and transportation accounted for 2,910 jobs in Mercer County in June 1960 as opposed to 6,280 jobs in trade and service occupations. This reflects Bluefield's position as a regional shopping and distribution center serving a wide area of southeast West Virginia. Basically, however, retail and service trade in Bluefield depend on other kinds of employment that bring in money from outside the region, and the ~~extent to which the area's economy can recover~~ depends largely on future trends in mining, railroading, and manufacturing.

1 - Coal Mining

Bluefield is related to the Pocahontas or Smokeless Mine Field which begins 10 miles northwest of the City (see Map 1). As suggested by its name, the Smokeless District produces a particularly low-volatile, high-quality grade of bituminous coal. This coal has special properties which make it indispensable, in combination with other coals, for most kinds of steel manufacturing in the United States and in some foreign countries.

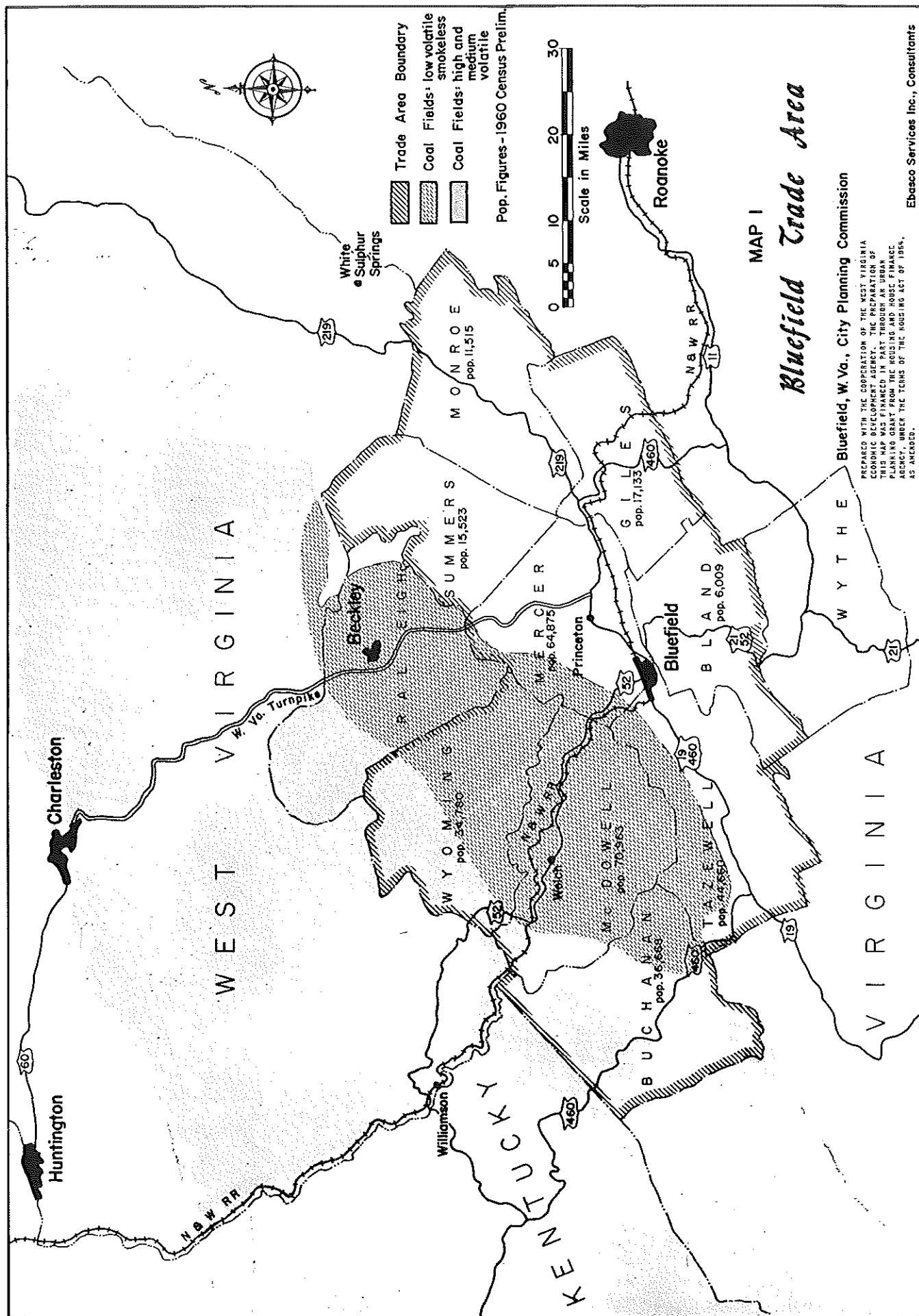


Table 4
EMPLOYMENT AND UNEMPLOYMENT,
MERCER COUNTY *, 1953-1960

<u>Year</u>	<u>Size of Labor Force</u>	<u>Number Employed</u>	<u>Number Unemployed</u>	<u>Percent Unemployed</u>
1953 (average)	23,750	22,710	1,040	4.4
1954 (average)	24,200	21,500	2,700	11.7
1955 (average)	23,950	21,920	2,030	8.5
1956 (June)	24,940	23,450	1,490	6.0
1958 (average)	23,090	18,450	4,640	20.0
1959 (average)	21,820	17,420	4,400	20.2
1960 (June)	20,905	17,220	3,730	17.8

* Mercer County is the Bluefield labor market area.

Source: Bureau of Employment Security, State of West Virginia

Table 5
COMPOSITION OF THE LABOR FORCE,
MERCER COUNTY, 1956-1960

<u>Source</u>	<u>June 1956</u>	<u>June 1960</u>
<u>Nonagricultural</u>		
Wage and Salary	20,200	13,970
Manufacturing	2,110	1,880
Nonmanufacturing	18,090	12,090
Mining	2,190	560
Construction	1,000	640
Transportation Commission		
Public Utilities	5,900	2,350
Trade	4,550	4,120
Finance Insurance		
Real Estate	700	710
Service	3,000	2,160
Government	750	1,550
All Other Nonagricultural	1,950	1,950
<u>Agricultural</u>	<u>1,300</u>	<u>1,300</u>
Total Employed	23,450	17,220

Source: U.S. Bureau of Labor Statistics; and Bureau of Employment Security, State of West Virginia

It is also relatively expensive, which reduces its usability for electric power plants, the largest users of bituminous coal in general. About three-fourths of the Pocahontas Smokeless Coal Mine's output is used for steel production, with the remainder used for domestic heating and scattered industrial uses which have a smoke problem.

Coal production in the Smokeless District followed a rising trend up to the 1958 recession (Table 6). The recession and its attendant cut-back in steel production sharply reduced the volume of coal produced from nearly 51 million tons in 1957 to 35 million tons in 1959. Employment in the Smokeless District Mines began to decline after 1951, even in the face of rising production. This was due to the increasing use of machinery in the mines, as shown by the man-day production of 5.32 tons in 1951 as against 11.0 tons in 1959. The increase in productivity was a benefit for the miners who kept their jobs as the average pay rate rose from \$ 16.35 per man-day in 1951 to \$ 24.25 per man-day in 1959.

For the future, the indications are that there will be a moderate increase in mining employment but not approaching former levels. Domestic steel production is now increasing and new foreign markets may be developed for metallurgical coal (a recent news report indicates that Pocahontas coal may be sold cheaper in England than similar coal produced in the British Isles). Apparently reflecting these present trends, coal producers recently interviewed by the State Department of Employment Security reported an anticipated increase of 6 percent in employment over the next 5 years. Large-scale future increases seem to be precluded, however, by the increasing mechanization of the mines. The 1959 average productivity of 11.0 tons per man-day may well increase to 20 tons by 1980, since the most efficient deep mines in the area are already producing at this rate.

2 - Railroading

The Norfolk & Western Railway is the most important single employer in Bluefield. Its 1,260 workers in the Bluefield area operate extensive classification yards for coal trains bound east and west, a locomotive maintenance shop, freight and passenger terminals, and offices for the district headquarters.

Table 6
DISTRICT 7 (SMOKELESS)* COAL PRODUCTION BY YEARS

<u>Year</u>	<u>Net Tons</u>	<u>Employment</u>	<u>Tons Per Man-Day</u>	<u>Total Payroll (Millions of Dollars)</u>	<u>Base Pay in Dollars Per Man-Day (As of End of Year)</u>
1950	48,563,000	43,500	5.02	170	14.75
1951	54,628,000	45,000	5.32	209	16.35
1952	48,234,000	43,000	5.41	190	18.25
1953	44,645,000	38,000	6.00	170	18.25
1954	38,458,000	29,500	6.85	140	18.25
1955	46,398,000	27,700	7.49	160	19.45
1956	50,947,000	28,000	8.02	179	21.45
1957	50,826,000	27,900	9.63	181	22.25
1958	37,264,000	25,800	10.0	130	22.25
1959 (Prel.)	35,000,000	24,000	11.0	127	24.25

* Includes mines in Mercer, McDowell, Wyoming, Fayette,
 Greenbrier, and Raleigh counties in West Virginia; and
 Buchanan and Tazewell counties in Virginia.

Source: Smokeless Operators Association.

Employment on the railway began a sharp decline after 1957, when the combination of the decline in coal production noted above and the start of a 2-year change-over from steam to diesel locomotives cut heavily into the number of jobs in the Bluefield division. Between 1956 and 1960 railroad employment in the Bluefield area declined by about 35 percent, as shown by the following estimated figures furnished by the Railroad Retirement Board:

Railroad Employment, Bluefield Area

1945	1,478
1950	1,563
1955	1,731
1956	1,755
1957	1,612
1958	1,483
1959	1,332
1960	1,151

The actual decline may have been larger than these figures indicate, since the Bureau of Labor Statistics - State Department of Employment Security figures in Table 5 above report a drop from 5,900 workers in the transportation, communication, and public utilities category in 1956 in Mercer County, to 2,350 workers in this category in 1960.

Railway officials indicate that local employment by the Norfolk & Western has reached stability. This would be encouraged by future increases in coal production as the steel industry picks up. Also the proposed merger with the Nickel Plate Railway would give the Norfolk & Western a trunk route to the Great Lakes. However, the Norfolk & Western's recent merger with the nearby Virginian Railway may reduce the collective employment of the two railroads. In addition there is said to be some danger that Bluefield may be eliminated as the division headquarters, thus reducing office employment and also workers required for the inspections and overhauls now required at each division point. There is also a possibility that the Bluefield locomotive shops, already cut back since the change-over to diesels, may be moved entirely to Roanoke. Thus, it appears that the railway will continue as the major employer in Bluefield but that little, if any, future expansion will take place.

3 - Manufacturing

Although manufacturing has always been largely incidental to the main activities of mining and railroading in the Bluefield area, its importance has been increasing as mining has declined. As of June 1960, manufacturing employment in Mercer County amounted to 1,880 or 13.4 percent of the total employed labor force of 13,970. The major categories of manufacturing in the Bluefield area at present include mining equipment and service, with about 500 employees, lumber and wood products with 425, textiles and textile products with about 250, and stone products with 120. Two additional plants farther away from Bluefield but within commuting range are the Micamold Corporation in Tazewell, Virginia, an electronic component producer with reportedly 700 employees; and the Maidenform Brassiere Company in Princeton with an employment of about 350.

An important start has been made in the development of additional industries through the construction of a new factory by local financing for sale or rent to new firms coming in from the outside. As has been done in some 1,600 other communities over the nation (according to the U. S. Department of Commerce), a special corporation was organized in late 1953 under the name of the Bluefield Area Development Corporation to finance new industrial construction. A 160,000-square foot factory was built on the site in Falls Mills, below Bluefield, Virginia, and is now occupied by the United Piece Dye Works, Inc. This company is expected to have an ultimate employment in the new plant of about 200.

For the future, the development of added manufacturing industry is probably Bluefield's best hope for economic recovery. It is doubtful, however, that this will happen without special local, State, and Federal programs to encourage new industry. Except for mining equipment, in which some expansion is in prospect, the Bluefield area has disadvantages for unaided industrial growth including location away from metropolitan centers, scarcity of level industrial sites and industrial water, and a largely undeserved reputation for difficult labor relations. These factors tend to offset its natural advantages of low State and local taxes and a large supply of available male and female

labor.* It is strongly recommended that the Bluefield Area Development Corporation's program of new plant construction be continued. Experience in industrial development nationwide has shown that local financing of plant construction, even before a tenant is found, is by far the most powerful attraction for the type of industry which has a wide choice of location.

At the same time, it is important that Countywide action be taken to plan and develop desirable industrial sites. One of the most important opportunities is the 150-acre area immediately outside Princeton which will be made available for development by the Brush Fork drainage project. The North American Aviation Company is now locating a plant with 300 workers in the area. This area, however, like other potential sites in the County, is not now subject to zoning or other development controls, and will not be until such time as Mercer County adopts planning and zoning regulations. The present County planning program is a desirable step in this direction.

The recent Federal Area Redevelopment Act will be valuable in providing technical assistance for the local industrial program and in making financing available for water and other facilities to serve industrial sites. It would be desirable also to have a State program to provide or insure loans for the financing of new plant construction.

4 - Retail Trade

Bluefield's retail stores have long served as a strong attraction for the residents of southern West Virginia and the western tip of Virginia. The City's effective trade area as defined by the Audit Bureau of Circulation includes the 11 counties shown on Map 1 less the northern portion of Raleigh County around Beckley.

* A recent West Virginia Department of Employment Security survey found that of 1,011 male unemployed workers in Mercer County, 686 or about two-thirds were under 45 years of age and 492 or nearly half were in the managerial, skilled or semiskilled categories. Thus, a high-quality labor pool is available for immediate use by new industries.

Also, only 28 percent of the area's present labor force was found to be made up by women as against a national average of 33 percent, indicating an untapped pool of female labor.

As shown in Table 7, Bluefield's retail trade volume adjusted for price inflation has fallen slightly (5.7 percent) since 1948, as a reflection of the depressed condition of the coal mining area. The City's per capita sales nevertheless have remained high in comparison with the surrounding region, reflecting its strong market position. Bluefield's 242 establishments employed a substantial work force of 1,665 persons as of 1958, according to the U. S. Census of Business.

Four types of retail stores in Bluefield (food stores, eating and drinking establishments, general merchandise, and furniture stores) have experienced either greater sales increases or smaller decreases since 1948 (Table 7) than have comparable stores in the outlying counties. In the critical fields of general merchandise and furniture and household appliances, the relative gain for Bluefield stores apparently has resulted from the closing of numerous smaller outlets and "company stores" in the coal-mining counties. Bluefield's general merchandise establishments account for 21 percent of all sales in this category throughout the 10-county area, in contrast to only 10 percent in 1948. This increase is reflected in downtown Bluefield's six junior department stores, two of which J. C. Penney and Leggett's are in new or remodeled quarters (Map 2).

While large-scale future increases in retail trade are unlikely, it is important that action be taken to maintain the strength of the present central shopping district. Redevelopment of the fringes of the business district and provision for added parking, as proposed in the Urban Renewal Authority's General Neighborhood Renewal Plan, are important in this respect. Also, the development of outlying shopping centers for anything but food stores and neighborhood convenience shops should be strongly discouraged. These could seriously harm the central area without themselves having a solid base.

5 - Wholesale Trade

Wholesale trade has long been and still is one of the most important economic functions of the City of Bluefield. In 1958, the City's wholesale sales amounted to twice the volume of its retail trade. Bluefield's wholesale sales per capita are extremely high (\$ 4,037 in 1958), which is a reflection of the wide area served by its wholesalers. The Bluefield wholesale houses employed about 1,000 workers as of 1958.

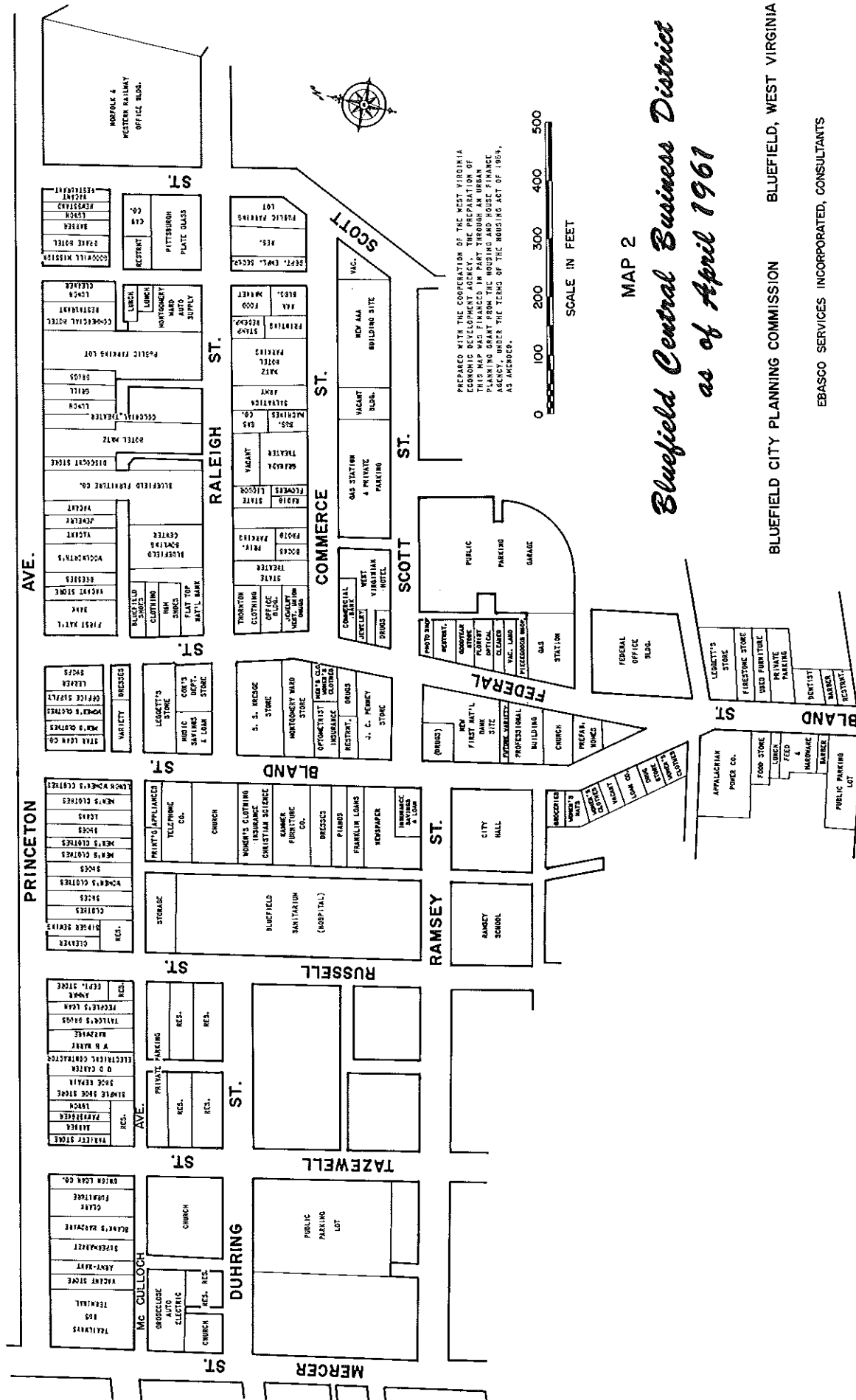


Table 7
RETAIL SALES IN BLUEFIELD AREA BY TYPE OF STORE, 1948-1958

<u>Locality</u>	<u>Type of Store</u>	<u>1948</u> <u>(\$ 1,000)</u>	<u>1954</u> <u>(\$ 1,000)</u>	<u>1958</u> <u>(\$ 1,000)</u>	<u>1948-1958</u> <u>(% Change) a/</u>
Bluefield, W. Va.	All Stores	<u>30,867</u>	<u>34,586</u>	<u>34,948</u>	<u>-5.7</u>
	Food	4,744	7,217	6,949	+26.7
	Eating and Drinking	1,177	1,279	1,281	-5.9
	General Merchandise	5,224	5,557+	6,260	+15.9
	Apparel	4,374	3,310	3,478	-23.1
	Furniture and Appliances	2,106	2,133	2,523	+18.9
	Automotive	NA	6,416	6,924	NA
	Gas Stations	1,086	1,961	1,461	+5.0
	Building Supplies	853	1,418	463	-56.7
	Drug and Proprietary	NA	919	1,315	NA
	Other Stores	4,428	NA	4,294	-23.4
	(Withheld to Avoid Disclosure)	(+6,875)	(+4,376)	(-)	
Outside Bluefield b/	All Stores	<u>184,215</u>	<u>183,516</u>	<u>210,541</u>	<u>-4.8</u>
	Food	43,305	51,207	61,408	+22.7
	Eating and Drinking	8,977	7,826+	9,122	-12.1
	General Merchandise	47,968	34,112	30,374	-38.8
	Apparel	7,830	6,257	8,420	+4.0
	Furniture and Appliances	10,677+	7,449	8,375	-22.1
	Automotive	34,538-	37,064	40,246	-9.1
	Gas Stations	9,135	14,631	20,151	+72.1
	Building Supplies	8,827	7,522	8,503+	-23.3
	Drug and Proprietary	5,182-	4,179+	5,335+	-28.2
	Other Stores	13,905	16,863-	16,180+	-8.1
	(Withheld to Avoid Disclosure)	(-6,129)	(-3,594)	(+2,427)	

a/ In constant dollars (1958 figures were deflated in proportion to the increases in each item in the Consumer Price Index since 1948).

b/ Other portions of Mercer County, and all of McDowell, Monroe, Summers and Wyoming counties in West Virginia; and Bland, Buchanan, Giles, Tazewell and Wythe counties in Virginia.

NA: Not Available.

Source: U. S. Census of Business.

Bluefield's share of wholesale sales within the area has fallen, however, from 60 percent in 1948 to only 40 percent in 1958. While Bluefield's sales volume fell 33 percent during that period, several of the outer counties (Tazewell, Buchanan and Wythe) as well as the City of Princeton registered substantial gains.

Much of the decline since 1948 undoubtedly stems from reductions in coal-mining operations, both in purchases of mining equipment by the coal companies and in wholesale distribution to stores directly serving the mining centers. However, part may have come from the growth of outlying distributors with better highway access (such as the Fairmont Supply Company) as distribution operations have shifted from rail to truck transportation.

Table 8

WHOLESALE SALES IN BLUEFIELD AREA, 1948-1958

<u>Locality</u>	<u>1949</u> <u>(\$1,000)</u>	<u>1954</u> <u>(\$1,000)</u>	<u>1958</u> <u>(\$1,000)</u>	<u>1948-1958</u> <u>(% Change) a/</u>	<u>1958</u> <u>(\$ Per</u> <u>Capita)</u>
Cities:					
Bluefield, W. Va.	101,050	77,484	77,309	- 32.9	4,037
Bluefield, Va.	5,885	NA	NA	NA	NA
Princeton, W. Va. a/	2,850	NA	7,611	+ 134.0	925
Counties:					
Mercer	105,058	79,676	93,387	- 11.1	1,376
Others b/	<u>63,961</u>	<u>66,047</u>	<u>98,390</u>	<u>+ 34.8</u>	<u>380</u>
10-County Area	169,019	145,723	191,777	- 0.6	587

a/ In constant dollars (using 1958 figures deflated in proportion to the 14.1 percent increase in the wholesale price index since 1948).

b/ McDowell, Monroe, Summers and Wyoming counties in West Virginia, and Bland, Buchanan, Giles, Tazewell and Wythe counties in Virginia.

NA: Not Available

Source: U. S. Census of Business

The proposed first urban renewal project on Bluefield Avenue will have an important effect in strengthening the Bluefield wholesale district which is concentrated in this section. Greatly improved highway access will be provided as well as new land, now unavailable, for parking, loading, and building expansion. The scheduled new Interstate Route 77 will also help Bluefield's position as a wholesale center.

6 - Services

Service trades and facilities, defined by the U. S. Census of Business as "personal, business, and repair services, amusements, hotels and motels," have an important place in Bluefield's economy as a regional center. A healthy 8 percent increase was shown in these services between 1948 and 1958 (Table 9), although outlying areas showed a higher proportional increase.

Among other activities not formally listed by the Census as services but which have an important part in the City's regional economy, Bluefield's two general hospitals, the Bluefield Sanitarium and St. Luke's, serve a wide regional area with a concentration of medical services normally found only in much larger cities. The two hospitals have a total of 290 beds. The Bluefield Sanitarium is one of the largest completely privately supported hospitals in the nation. The importance of these facilities to the local economy is indicated by their annual payrolls, which are spent very largely in Bluefield: \$ 778,500 for the Bluefield Sanitarium and \$ 383,400 for St. Luke's. While further expansion of these facilities is not now indicated, their continued support is important for the City.

Table 9

RECEIPTS OF SELECTED SERVICES IN BLUEFIELD AREA, 1948-1958 a/

<u>Locality</u>	<u>1948</u> <u>(\$1,000)</u>	<u>1954</u> <u>(\$1,000)</u>	<u>1958</u> <u>(\$1,000)</u>	<u>1948-1958</u> <u>(% Change) b/</u>	<u>1958</u> <u>(\$ Per</u> <u>Capita)</u>
Cities:					
Bluefield, W. Va.	3,427	5,915	4,457	+ 8.3	233
Bluefield, Va.	263	625	962	+ 204.6	227
Princeton, W. Va.	1,127	966	1,593	+ 17.7	194
Counties:					
Mercer	4,757	7,411	7,185	+ 25.8	106
Others c/	<u>7,798</u>	<u>9,188</u>	<u>12,474</u>	<u>+ 33.2</u>	<u>48</u>
10-County Area	12,555	16,599	19,659	+ 30.4	60

a/ Personal, business and repair services, amusements, hotels and motels.

b/ In constant dollars (using 1958 figures deflated in proportion to the 20.1 percent increase in the Consumer Price Index since 1948).

c/ McDowell, Monroe, Summers and Wyoming counties in West Virginia; Bland, Buchanan, Giles, Tazewell and Wythe counties in Virginia.

Source: U. S. Census of Business

Two colleges are located in the Bluefield area; one a 4-year college, Bluefield State, and the other a 2-year junior college, Bluefield College. Both attract students from other sections of West Virginia and, for Bluefield College, parts of Virginia. Bluefield State College was originally a Negro teachers' college but is now a full 4-year general college with both Negro and white students. The present enrollment, made up of resident students and commuters, is about 650, a substantial increase over the 1958 level of 400. Further expansion is anticipated, and a special nonacademic program for the retraining of unemployed workers is being initiated. Bluefield College, located over the State line in Bluefield, Virginia, is a well-established Baptist institution with a present enrollment of about 450 students.

The contribution the two colleges make to the City's economy is indicated by Bluefield State College's annual budget of \$ 590,000 plus estimated student expenditures while living in Bluefield of \$ 220,000, and Bluefield College's budget of \$ 300,000 plus student expenditures of \$ 155,000. The total of these amounts is \$ 1,265,000 per year, and shows potential for future expansion.

E - CONCLUSIONS

Some suggested directions for local action to strengthen Bluefield's economy are as follows:

- 1) New manufacturing employment is the most basic means of economic improvement. Bluefield and Princeton should pool their resources and renew the work begun by the Bluefield Area Development Corporation for the financing of new industrial buildings and the attraction of occupants for them. Immediate steps should be taken to obtain control of the 150-acre tract outside Princeton being made usable for industrial development by the Brush Fork flood control project. Development plans should be prepared for this tract, the remainder of the present Falls Mills site, and other potential industrial sites in the Bluefield region. County zoning should be developed and put into effect to preserve potential industrial sites, based on master planning studies by the new County Planning Commission. Full use should be made of Federal assistance through the Area Redevelopment Act.
- 2) The Bluefield Urban Renewal Authority's program of improvement for the City's wholesale district

and central retail business area should be vigorously supported and carried through. The substantial Federal and State aid involved in this program will itself have a stimulating effect, in addition to the strengthening of Bluefield's position as a regional retail and wholesale center. Over a million dollars in Federal urban renewal grants and several hundred thousand dollars in State highway aid are anticipated for the initial Bluefield Avenue Project, with additional aid to follow in subsequent projects under the General Neighborhood Renewal Plan.

- 3) Efforts should be continued to assure the western route for the new Interstate Highway 77, and also to assure that there will be maximum accessibility to this route when the final design is made, preferably by a four-lane access road from the center of Bluefield. Modern industry makes extensive use of truck transportation, and location close to this major north-south industrial highway will be an important factor in attracting new plants.
- 4) There are presently no major Federal installations in the Bluefield area other than post office facilities. Two factors might bring success for a campaign to attract new Federal installations: the State's depressed economy, which has attracted nationwide attention, and Bluefield's favorable mountain location from the standpoint of defense. This latter point is emphasized in a recent State publication, "A Site Selection Security Study for West Virginia," * and could be important for defense-oriented industry as well as Federal installations such as missile-launching stations and atomic test plants.
- 5) Programs for the retraining of unemployed workers are important both in helping the workers themselves and in attracting new industries. Such a program has begun on a small scale with three classes of about 25 each at the Mercer County Vocational School, with State financial support. In a recent program started locally in Welch, it is reported that about half the trainees found employment soon after they finished the course, some in the area and some outside the State.
- 6) Although Bluefield is located in an ideal summer climate belt and has mountain scenery unsurpassed in most areas of the country, tourism is now a negligible factor in the local economy. The new Interstate Route 77, which will carry a substantial amount of tourist traffic between the Midwest and Florida, offers an important opportunity to develop the local tourist potential. A resort or motel and restaurant on East River Mountain appears to have excellent possibilities.

* West Virginia Economic Development Agency, 1960

- 7) Maximum encouragement should be given to the development of Bluefield's two hospitals, Bluefield College, and Bluefield State College. As well as facilitating higher education for Bluefield area people, the State College also shows promise as a center for retraining unemployed workers in skills needed for new industries in the Bluefield area. This program should be encouraged under other auspices as well.
- 8) The Bluefield area can attract sound new growth only if it is prepared to direct this growth into a sound development pattern, both inside and outside the City. Under present conditions only the County can exercise zoning and subdivision controls and provide street maintenance and other facilities outside the City limits. It is vitally important that the County and its new Planning Commission act to provide these controls and facilities, not only to preserve industrial sites but also to assure attractive residential areas and sound commercial development. A present example of wasteful, uncontrolled misuse of land is Green Valley, between Bluefield and Princeton. Land use control will also be important around the interchanges on the new Interstate Route 77.

III - LAND USE AND DEVELOPMENT

A - INTRODUCTION

Bluefield's present land use pattern reflects the two stages of the City's development, the original growth in the northern valley along the railroad followed by later suburban-type development across Valley Ridge in South Bluefield. The land use pattern also shows the constructive effects, especially in South Bluefield, of the City's zoning ordinance adopted in 1938.

Today the City's principal development problems are not those of opening up new areas for growth as was done in the past, although control of the developing areas outside the City's south and southeast boundaries by annexation or other means is an immediate problem. Instead, the main concern is the redevelopment and renewal of various older commercial and residential areas which are in a blighted condition and no longer adequate for modern use.

The Future Land Use Plan shows the same over-all pattern as at present, with the central business district in a compact T-shaped form along Princeton Avenue and Federal and Bland Streets. Wholesaling, general commercial, and industrial uses extend along the railroad in the northern valley, and residential neighborhoods on the upper slopes of the northern valley and throughout South Bluefield. However, a number of changes are proposed to make this over-all pattern work more effectively and encourage the renewal of its outworn parts:

- 1) clearance and redevelopment at the three ends of the T-shaped central business district to provide more parking, better traffic circulation, and new store sites (the principal commercial development, it is proposed, would be in the central area instead of South Bluefield),
- 2) expansion of the heavy commercial and industrial areas in the northern valley through urban renewal to meet the needs of modern one-story operation,
- 3) enlargement of park areas and other community facilities to improve neighborhood service,
- 4) rounding out and consolidation of residential areas with space provided for apartments as well as houses.

B - PRESENT LAND USE AND TOPOGRAPHY

Map 3 indicates the present use of land in the City as determined from a field survey carried out during the summer and fall of 1960. The map is drawn with property lines obtained from the recent Mercer County Reassessment Survey. The outlines of buildings are also shown (these appear more clearly on the full-size map on file with the Planning Commission in the City Hall) as determined by aerial photographs supplemented by field checks.

This pattern of land development was shaped by the City's economic history and its mountainous topography. Development took place in two stages: first in the northern valley along the railroad, with the central business district at the center of the marshalling yards and residential areas going up the steep slopes on both sides; later, with the advent of transit lines and automobile transportation, across Valley Ridge in South Bluefield. Most development occurred on relatively level land with an occasional building on extreme slopes. This can be seen by comparing Map 3 and Map 4, Slope Map, and Tables 10 and 11 below (slopes of over 17 percent are normally considered unbuildable unless there is extreme pressure for development).

Table 10

EXISTING LAND USE, CITY OF BLUEFIELD, FROM 1960 SURVEY

	<u>Acres</u>	<u>Percent</u>	<u>Percent of Total</u>
Single-Family Housing	372.1	28.1	
Two-Family Housing	12.5	0.9	
Multifamily (Three-Family and Over)	5.2	0.4	
Retail Commercial	17.9	1.4	
General Commercial	79.2	6.0	
Industrial	9.0	0.7	
Railroad	147.1	11.1	
Public	95.3	7.2	
Semipublic	111.9	8.4	
Trailer Park	2.8	0.2	
Streets	471.4	35.6	
Subtotal	1,324.4	100.0	46.6
Vacant	1,512.6		53.4
Total Area	2,837.0		100.0

Table 11
SLOPE AREA DISTRIBUTION, CITY OF BLUEFIELD
CALCULATED FROM CITY TOPOGRAPHIC MAP

<u>Slope</u>	<u>Acres</u>	<u>Percent of Total</u>
0% - 8%	1,076	36.4
9% - 16%	613	20.7
17% - 24%	537	18.4
24% and over	<u>722</u>	<u>24.5</u>
	2,948	100.0

Another influence on land development has been the City's zoning ordinance which was adopted in 1938. This has had an especially constructive effect in South Bluefield, where the zoning restrictions on nonresidential and multifamily building have protected the development of single-family homes and have prevented the mixed-use pattern in some of the City's older sections.

C - NEIGHBORHOOD ANALYSIS AND URBAN RENEWAL

Map 5, Neighborhood Analysis, indicates the division of the City into neighborhood areas, a useful concept for three main purposes:

- 1) in planning community facilities, to make sure that each facility serves a logical area,
- 2) in planning urban renewal programs, to assure that individual projects will relate to the improvement of entire sections of the City,
- 3) in traffic planning to attempt to route heavy traffic around neighborhood areas instead of through them.

As Map 5 indicates, five neighborhood areas, two subneighborhoods and the central business district are defined. This is based on natural boundaries, type of development, elementary school districts, and the theoretical requirement that a "neighborhood" should have a population of approximately 5,000 people.

Map 5 also indicates the results of an exterior survey made of the structures in the City for their state of repair. The three categories used by the U. S. Census of Housing were used: sound; deteriorating (needs minor repair); and dilapidated (needs major repair).

The pattern of structures dilapidated by block shows strikingly both the extent of the City's problem of blight and deterioration, and its localization in particular sections of the City. The principal sections include the central business district, the Bluefield Avenue section to the west, and the North Side area, all of which are in the General Neighborhood Renewal Area being studied by the Bluefield Urban Renewal Authority. Street widening and improvement, provision of added parking areas, encouragement of repairs and refurbishing of existing buildings, and limited amounts of clearance and redevelopment for commercial, industrial, and housing use are recommended urban renewal activities in this area.

Additional areas of a size requiring urban renewal include only the central Valley Ridge area on both sides of Bland Street, the eastern extension of the North Side area, and a small section of the North Side at the far west boundary by the City. The Valley Ridge area suffers from a steep narrow street pattern and lack of playground space as well as structural deterioration, and is proposed partially for clearance and partially for rehabilitation. The North Side sections are proposed for clearance for industrial use.

It is encouraging that Bluefield's problem of blight and deterioration, although serious, is sharply limited to certain areas of the City. Unlike many larger cities, especially in the East, where existing areas of blight are large and spreading faster than renewal can take place, Bluefield can set a realistic 10- to 15-year goal for complete renewal of all its blighted sections.

D - FUTURE LAND USE PLAN

The Future Land Use Plan (Map 6), the projected future development pattern of the City as of approximately 1980, proposes no basic change in the City's present over-all pattern. Within this over-all pattern, however, a number of changes are indicated especially in the renewal of the City's older sections.

1 - Retail Commercial Areas

The central business district is proposed to be retained in very nearly its present size and shape. This compact pattern, dictated by the steep slopes surrounding the area on three sides and the railroad on the fourth,

has advantages for shopper convenience and in encouraging the development of larger commercial buildings. At the three ends of the T-shaped pattern formed by Princeton Avenue and Federal and Bland Streets, the City's urban renewal program should include clearance and redevelopment to provide additional parking facilities, improve traffic circulation, and some sites for new store and office construction.

The present South Bluefield shopping area is restricted to the area it now occupies plus the small amount of expansion room allowed by the present zoning. It is considered that more extensive development in this area would detract from the central business district and be of a less desirable character, as well as adversely affecting the surrounding residential areas. It is proposed, in particular, that the present commercial zoning which extends to College Avenue along Jefferson Street be cut back. It is considered that commercial development should not be allowed on College Avenue because of the extra traffic it would create and its adverse effect on the desirable residential character of this street.

Small neighborhood shopping areas consisting of food stores and small convenience shops are proposed for expansion and development at several locations around the City. These include:

- a) the North Side at the Mercer Street Bridge and at the Grant Street Bridge,
- b) in the East End at Lee Street,
- c) on the Cherry Street — Maryland Avenue Cutoff at Stadium Drive,
- d) on Cumberland Road at Washington Street (in the future as demand develops; zoning not to be changed until later).

2 - Wholesaling and General Commercial Areas

Areas for these uses are proposed largely as at present along Bluefield Avenue and on Roanoke Street on the North Side. Expansion and consolidation can take place within these areas as old buildings are replaced and housing and other incompatible uses removed.

The Bluefield Avenue Urban Renewal Project is especially important in the future development of the City's wholesale district. This section, a major source of economic support for the City, is presently endangered by

heavy traffic and lack of adequate sites. The project will make available more space for parking, loading, and building expansion and also will make a major traffic improvement in the widening of Bluefield Avenue.

3 - Industrial Areas

The continuation and expansion of the present industrial area on Bluefield Avenue is proposed, again aided by the Bluefield Avenue Project. Also, the development of extensive new areas for industry is proposed on the North Side along and east of Wayne Street, and at the extreme west boundary of the City near Bramwell Road. These proposed new areas require new street extensions to open them up for truck access, as well as grading to provide level sites and new utility extensions. Such improvements can be provided with the Government bearing two-thirds of the cost involved through urban renewal project procedures. Only portions of the areas shown on Map 6 would actually be usable for industrial purposes due to the steep topography, but it is considered that sites for substantial factory buildings can be provided.

The plan indicates both light and heavy industrial areas. This is on the basis that the light industrial areas are close to residential sections and therefore the amount of smoke, fumes, noise, and other adverse effects should be limited. In the heavy industrial sections, there are no housing areas nearby and such restrictions would not be necessary.

Some surplus water and sewer capacity is now available to serve the proposed industrial areas. Special study will be needed to see if this will be adequate.

4 - Residential Areas

The residential areas shown in the Future Land Use Plan are all completely or partly developed for residential use. The plan proposes cutting back on the areas where two-family and multifamily housing is allowed in the central section of the City, because the steep topography and narrow streets there make such development undesirable. Areas for apartment use are extended in South Bluefield to include sites on Bland Street west of Lake Street and on the Cherry Street - Maryland Avenue Cutoff at Frederick Street (the present site of the trailer park).

The designation "higher density residential" indicates areas in which two-family houses and garden apartments would be allowed, with a maximum density of not over 25 families per net acre as recommended by the American Public Health Association.* It is not contemplated that all or many of the single-family houses in these areas would be replaced by multifamily units, but only that such units would be allowed where desired by developers within the sections.

A potential new residential section is indicated on the North Side between the Armory and the west end of Hill Avenue. Access could be provided for this area by a westerly extension of Hill Avenue and, although the topography is steep in some places, the area could be developed much as is the rest of the North Side area. As an alternative, this area could be used wholly or partially for campus expansion by the Bluefield State College, which has already constructed new facilities on the west side of Route 52.

5 - Community Facilities

The additions to the City Park and to schools and playgrounds shown on the Future Land Use Plan are discussed in detail in Chapters V and VI.

6 - Restricted Development Areas

As part of the Future Land Use Plan it is proposed that the now largely undeveloped and mountainous section of Valley Ridge and Stony Ridge be kept from development by City controls. Although there is no urgency in this respect because of the impracticability of development of most of these areas, there is now a scattering of substandard housing and shack-type development which indicates a possible future danger in permitting new development in these areas. It is considered that the City's subdivision regulations (see Chapter VIII below) and building code should allow construction only where adequate street access and utility service has been or will be provided. This will effectively prohibit development in these sections.

* American Public Health Association, Planning the Neighborhood, Public Administration Service, 1960

7 - Areas Outside the City

In addition to Bluefield's primary problem of the redevelopment and renewal of its older central areas, a problem of immediate importance is the control of development outside the City's boundaries, especially on the south and southeast. Much of the building now taking place in these sections is on substandard streets with inadequate utilities, on sites which do not take full advantage of the natural beauty of Bluefield's southern valley. This area could, on the other hand, become extremely desirable in the future and could do much to encourage industrial firms and other types of businesses to come into the City in making desirable new housing areas available.

Among the immediate development problems facing this area, in addition to the establishment of adequate subdivision controls which would require streets of a certain minimum width and type of construction and adequate building sites and utilities, is provision for east-west traffic circulation (this would be aided by the recommendation in the Arterial Streets Plan for widening of Cumberland Road) and the development of adequate areas for neighborhood shopping. In addition, the question should be given careful study as to the best form of street system for the southern valley. At present, all streets run straight up the side of the mountain with limited or no cross-connections. The development of either a loop system to connect these streets or a new continuous east-west connector south of Cumberland Road (not to be developed for through traffic or truck traffic) should be considered.

As a first step, a complete planning study should be made of this outlying area beginning with an existing land use and topographic survey and finishing with a projected design for the development of the area. This can be undertaken by the City Planning Commission, as it has in the City of Princeton under its planning program, or the County Planning Commission could undertake the study. Either annexation by the City or the institution of strict development controls by the County would be necessary for the implementation of the plan.

8 - Amount of Land in Proposed Uses

It is estimated that under the Future Land Use Plan land would be available for an estimated 450 new housing units in both houses and apartments, exclusive of the replacement of existing units. This is based on the

TABLE 13

ARTERIAL ROADS, CITY OF BLUEFIELD, WEST VIRGINIA

	Pavement Width	Right-of-Way Width	Assumed Conditions*	Hourly Capacity**	Capacity, Average Daily Traffic***	1960 Average Daily Traffic****	Improvement Proposed	Average Daily Capacity With Improvement	1980 Volume: 12.5% Expansion Factor
<u>Bluefield Avenue</u>									
City Limit - Spruce	36	60	Intermed. -55 green-pk. perm.	720	10,100	13,200 ^{3/}	Remove parking	16,800	18,100
Spruce - Chestnut	36	60	Intermed. -55 green-pk. perm.	720	10,100	17,900 ^{1/}	Remove pk., widen pave. to 48'	27,300	24,600
Chestnut - Mercer	34	50	Downtown -55 green-pk. perm.	660	9,300	17,900 ^{1/}	Remove Pk., widen pave. to 48'	27,300	24,600
<u>Princeton Avenue</u>									
Mercer - Bland	35	50	Downtown -45 green-pk. one side	760	10,700	14,200 ^{2/}	Remove pk., widen pave. to 48'	22,500	19,500
Bland - Grant	35	50	Downtown -55 green-pk. one side	900	12,800	10,000 ^{1/}	Remove pk., widen pave. to 48'	22,500	13,700
Grant - Lee	31	50	Intermed. -65 green-pk. one side	800	11,200	10,000 ^{1/}	Remove pk., widen pave. to 48'	21,000	13,700
Lee - City Limit	36	Irreg.	Intermed. -65 green-pk. one side	1,100	15,800	10,000 ^{1/}	Remove pk., widen pave. to 48'	21,000	13,700
<u>Federal Street</u>									
Princeton - Bland	34	50	One-Way Downtown -45 green-pk. perm.	600	8,500	5,400 ^{4/}		8,500	7,400
<u>Bland Street (and Road)</u>									
Princeton - Federal	34	50	One-Way Downtown -45 green-pk. perm.	600	8,500	5,000 ^{4/}		8,500	6,900
Federal - Union	42+	60+	Intermed. -55 green-pk. perm.	910	12,900	13,000 ^{2/}	Remove pk., widen pave. to 48'	21,000	17,900
Union - College	34	50	Intermed. -45 green-pk. perm.	550	7,700	8,500 ^{2/}	Remove parking	12,600	11,800
College - Oakhurst	24	50	Intermed. -45 green-pk. prohib.	490	8,500	7,100 ^{2/}	Widen pavement to 28'	8,500	9,800
Oakhurst - Parkway	31	50	Intermed. -45 green-pk. prohib.	740	10,400	6,500 ^{4/}		10,400	9,000
Parkway - Turnpike	40	60	Intermed. -45 green-pk. perm.	700	9,900	6,000 ^{4/}		9,900	8,300
<u>College Avenue</u>									
City Limit - Jefferson	30	50	Intermed. -45 green-pk. perm.	450	6,300	5,000 ^{4/}	Remove parking	10,700	5,900
Jefferson - Bland	20	50	Intermed. -45 green-pk. prohib.	320	4,500	4,900 ^{2/}	Widen to 30', regrade intersection	10,700	5,800
<u>Route 52</u>									
City Limit - Highland Avenue	21	Irreg.	Outlying - 55 green	450	6,300	8,500 ^{1/}	Widen pavement to 28'	9,600	9,000
Highland Ave. Connectr.	24	50	Intermed. -45 green-pk. one side	400	6,300	8,300 ^{2/}	Build new Cherry St. Connector -- Will reduce volume.		
Spruce St. Connector	28	50	Intermed. -45 green-pk. one side	600	8,500	4,400 ^{2/}		8,500	5,000
Cherry Ave. - Maryland St.									
<u>Cutoff</u>									
Highland - Frederick	20	Irreg.	Outlying -65 green	300	4,200	5,900 ^{2/}	Widen pavement to 24'	9,300	8,100
Frederick - College			Intermed. -45 green-pk. perm.						
<u>Cumberland Road</u>									
City Limit - Washington	20+	Irreg.	Outlying -45 green	300	4,200	2,100 ^{2/}	Widen pavement to 24'	6,400	2,900
Washington - Bland	20+		Outlying -45 green			4,500 ^{4/}	Widen pavement to 24'		6,300
Bland - City Limit	20+	Irreg.	Outlying -45 green	300	4,200	3,500 ^{1/}	Widen pavement to 24'	6,400	4,900

* Whether street is downtown, intermed., or outlying; percent of time traffic light is green; whether or not curb parking is permitted.

** National Committee on Urban Transportation, Standards for Street Facilities and Services (Chicago: Public Administration Service, 1948).

*** Hourly capacity is assumed to be 7.1% of average daily capacity, from ratio between peak hour and average daily traffic counted at the Bluefield Avenue-Spruce St. intersection.

**** Estimated from State counts: ^{1/} average of full week counts; ^{2/} single day count; ^{3/} combination estimate; ^{4/} estimated from counts on other streets and 1950 volumes.

scheduled new Interstate Route 77 (not the highway itself but the southern West Virginia areas it traverses). This projection factor checks generally with the 10 percent middle-range population projection for the City described in Chapter II.

A more detailed projection of traffic volumes for the individual roads would be desirable but complex, expensive, and uncertain. A future land use pattern would have to be projected in detail not only for the City but also the surrounding suburban areas, which would be difficult because of the wide variation in future population according to whether or not basic employment increases (discussed in Chapter II). Then, trip generation factors would have to be determined for each land use and tied in with vehicle registration trends. Finally, a complex systems analysis would have to be applied to estimate the distribution of trips on the local roads.

In general, there is no strong reason why there should be a differential rate of increase on the various routes. For example, most of the future population increase will be in South Bluefield, increasing north-south traffic to the central business district; but the new Interstate Route 77, which will be approached from Princeton Avenue, will increase east-west traffic on Bluefield and Princeton Avenues.

4 - Street Capacity

Estimated street capacities are shown in Table 13 as derived from a National Committee on Urban Transportation manual. * These represent the volumes at street intersections which can be accommodated without congestion, or a situation in which a driver will not have to wait longer than one traffic light change. Some sections of Bluefield's arterial roads have no traffic lights but involve equivalent delays at intersections for turning and waiting for cross traffic.

The capacities in the manual are given as hourly figures. These are converted in Table 13 to equivalent average daily flow by applying a conversion factor of 7.1 percent, derived from the actual ratio at a typical intersection (Bluefield Avenue and Spruce Street) between the traffic during the hour of heaviest flow (the peak hour) and average daily traffic.

* Standards for Street Facilities and Services (Chicago: Public Administration Service, 1958).

The comparison in Table 13 between street capacity and traffic volume gives a general indication of congested conditions. Bluefield Avenue between Spruce and Mercer Streets is shown as most seriously over its rated capacity of 9,300. The remainder of Bluefield Avenue is overcapacity to a somewhat lesser extent, as is Princeton Avenue from Mercer to Bland Streets and Highland Avenue at Route 52.* Route 52 north of Highland Avenue and Bland Street from Federal Street to Union Avenue are slightly overcapacity. The remaining streets are within their rated capacities.

Also indicated in Table 13 are street capacities with widenings and improvements as recommended in this Master Plan and with certain added parking restrictions. These improvements are all sufficient to bring the capacities over both present and projected 1980 traffic volumes.

It should be pointed out that the analysis of intersection capacity versus volume is only one part of the planning of the road system. A number of other factors such as travel time, physical characteristics of the roads, access to major land use areas, and relation to neighborhood patterns have been incorporated in the plan recommendations.

5 - Travel Time

Travel time was surveyed by Bluefield Police Department cars on a typical September afternoon. This gives a general idea of differences between the various sections of the City, although not comprising the detailed stop watch survey at the peak rush hour recommended by the Committee on Urban Transportation.

Street sections surveyed and average travel time and speed are indicated on the following page.

* The capacity of Bluefield Avenue between the City limits and Spruce Street is somewhat underrated as little parking actually takes place on this street section.

<u>Street</u>	<u>From</u>	<u>To</u>	<u>Distance (Miles)</u>	<u>Time (Hours)</u>	<u>Average Speed (Miles Per Hour)</u>
Bluefield Avenue	City Limit	Spruce	1.30	0.060	21
Bluefield Avenue	Spruce	Mercer	0.58	0.036	16
Princeton Avenue and Federal Street	Mercer	Bland	0.45	0.033	13
Bland Street	Federal	College	0.66	0.057	11
Bland Road	College	Cumberland	0.70	0.033	21
College Road	Bland	City Limit	1.6	0.081	19
Route 52	Spruce and Bluefield	N. City Limit	0.61	0.050	12
Cherry Street Cutoff and Connections	Spruce and Bluefield	College	1.20	0.077	16
Cumberland Road	W. City Limit	Bland	1.69	0.075	23
Cumberland Road and Grassy Branch Cutoff	Bland	Route 19-460	2.70	0.083	32

As would be expected, Bluefield Avenue and Princeton Avenue in and near the central business district cause travel delays, with average speeds well under the recommended national standard of 25 miles per hour for arterial roads in off-peak hours (20 mph for the peak or rush hour). The travel times also show heavy congestion on Bland Street, as well as delays on Route 52 and the Cherry Street Cutoff which are attributable to the Spruce Street — Highland Avenue connection.

Travel times would be substantially increased with the improvements proposed in this Master Plan, although not perhaps reaching the national standards in all instances. For example, improvement of the Highland Avenue — Cherry Avenue intersection would not reduce travel time by a large amount; but would require a major new bridge and interchange with a cost out of keeping with the benefits produced.

6 - Accident Studies, Parking and Control Devices


The City keeps annual records of the location of traffic accidents. These are clustered almost exclusively along Bluefield Avenue, Princeton Avenue, Bland Street, and Route 52, and appear to reflect the heavy relative traffic volumes on these streets rather than any particular street

changes needed. No particular pattern of accidents in relation to street conditions or traffic congestion is evident.

In regard to parking, the Bluefield Parking Authority has operated a garage and off-street lots for a number of years. Added facilities for the Bluefield Avenue wholesale district and for the central shopping district are proposed in the Bluefield Urban Renewal Authority's General Neighborhood Renewal Plan. Present plans are to develop new off-street lots on the south side of the widened Bluefield Avenue near Spruce Street and between Duhring Street and Princeton Avenue near Russell Street. The latter facility will divert traffic coming east on Bluefield Avenue bound for the central business district to Duhring Street, thus relieving Princeton Avenue and the other central streets. In addition, the present Parking Authority lot on Princeton Avenue west of Scott Street is to be enlarged.

In regard to control devices, the City has already taken steps toward improvement by installing red and green lane lights to control directional flow on the three-lane sections of Bland Street. Further such steps may be desirable but are beyond the scope of the present study.

7 - Transit Service



Bus service is provided in Bluefield by the Tri-City Traction Company of Bluefield, West Virginia; Bluefield, Virginia; and Princeton, West Virginia. Coverage of the City is good, with lines operating within a quarter of a mile of all substantially built-up areas of the City and in most instances operating at least once an hour in the daytime. The only apparent exception to this City-wide coverage is the east end of Union Street. The lines converge to provide 10-minute service between the centers of North and South Bluefield on Bland Street.

The various bus lines terminate principally on Federal Street near Commerce Street. Space is reserved at the curb for up to three buses, which is adequate, according to Traction Company officials, except when trucks or cars use this space illegally. This on-street bus loading does not appear to interfere unduly with traffic on Federal Street.

From an examination of the bus routes, no special traffic planning is required for bus service routes, ~~other than the over-all arterial~~

~~improvements as recommended in this report.~~ An incidental problem cited by Company officials is the blocking of narrow streets under winter snow conditions; they suggest that certain residential streets used by the buses be made one way temporarily while snow is on the ground.

The main concern for the City will be to keep the present level of service. In common with many transit companies over the nation, the Tri-City Traction Company is operating at a deficit, according to Company officials. It is recommended that the City explore means for relieving some of the taxes on the Company if this situation continues. ~~At present operating levels it appears that the deficit would be made up by removing about one-third of the total City, County, State, and Federal taxes the Company pays.~~

8 - Physical Street System

As indicated by Table 13, several roads - the north branch of Route 52, the Cherry Street Cutoff, the Cumberland Turnpike, and the Grassy Branch Cutoff - are under the minimum pavement width of 24 feet set by modern standards for two-lane highways.

There are a number of intersections in the present arterial roads which present special hazards and points of congestion. As indicated by the accompanying Arterial Road Plan map, these include the Bluefield Avenue -- Mercer Street -- Princeton Avenue jog, the Bland Street -- College Avenue intersection, the Route 52 -- Highland Avenue -- Cherry Street -- Spruce Street connection, the Route 52 -- Washington Street intersection, the Bland Road -- Oakhurst Avenue intersection, the Frederick Street -- Cherry Street Cutoff intersection, and the intersection of Cumberland Road and Walton Avenue.

In addition, the railroad underpass on Bramwell Road (State Secondary Route 11) near Bluefield Avenue, known as Hale's Culvert, is a low, narrow, one-lane culvert causing a serious hazard and delays. This underpass forms the only direct access to the rest of the City for the residential area on Bramwell Road north of the railroad. The underpass structure itself shows signs of structural deterioration.

In regard to maintenance of the street system, the City is badly handicapped in maintaining the local streets not under State jurisdiction

by the legal requirement that paving and resurfacing cost must be assessed against adjoining property owners.

C - PLAN PROPOSALS

Plan proposals as shown on the accompanying map are intended to provide an adequate level of service both for present traffic volumes and those expected in the future to 1980. The individual proposals are discussed in the following paragraphs.

1 - Widening of Bluefield and Princeton Avenues

The City's most urgently needed traffic improvement is to break the bottleneck formed by Bluefield Avenue east of Spruce Street, the Mercer Street dogleg intersection, and Princeton Avenue in the central business district. The City's present urban renewal program provides an extremely fortunate opportunity to utilize State and Federal aid to provide a widened right-of-way and four moving lanes of traffic for this entire section. According to present plans, the south side of Bluefield Avenue is to be cleared and part of the land used for highway widening; Bluefield Avenue is to be extended east of Mercer Street in a curve to join Princeton Avenue; and a strip of land on the north side of Princeton Avenue is to be acquired from the railroad for further widening. A particular advantage to the State in this procedure is that the City's Urban Renewal Authority will arrange for all property acquisition and clearance and the land for the new right-of-way will be sold to the State on a square-foot basis with no severance damages.

A later urban renewal project is intended to carry the widening of Princeton Avenue east to Scott Street. The State is expected to continue the widening east to the City limits.

2 - Cherry Street Connector and Route 52 Improvement

The construction of a direct connection between Route 52 at Highland Avenue and the Cherry Street — Maryland Avenue Cutoff is proposed, to avoid the present jog along Highland Avenue and the steep intersection with Cherry Street. This improvement has been studied by the State for some years.

In connection with the construction of a third lane on Route 52 north of the railroad, now being carried out by the State, steps should be taken to control entrance onto the highway from drive-in eating places and other establishments on the highway. At present, a drive-in on the hill above Route 52 is a serious hazard since cars are allowed to enter and even back onto the highway over an unrestricted frontage of over a hundred feet. Single driveways spaced not less than a certain minimum distance apart should be required.

3 - Connection Between the Cherry Street Cutoff and Southbound Route 21

At present, the Cherry Street Cutoff is a State highway from Route 52 to College Avenue, but does not connect at this point with any other State route and does not have a good connection southbound to Route 21 going over East River Mountain and south into Virginia and North Carolina.

The need for such a connection will be largely removed by the new Interstate Route 77, if the western route for this highway is used. However, there is a need for the connection in the meantime before the new highway is built, as well as for such a connection to provide access to the Cumberland Road area.

It is not necessary or desirable to build a new connection between College Avenue and Cumberland Road, as has been discussed in the past. Such a connection would involve expensive cutting through steep grades as well as disrupting an established high-quality residential neighborhood.

Instead, it is proposed that Stadium Drive and Leatherwood Lane be taken over as a State route and improved for this purpose. A diagonal connection can easily be made on the Cherry Street Cutoff into Stadium Drive. An easy connection between the end of Stadium Drive and Leatherwood Lane can be made by rounding the corner of Leatherwood Lane and College Avenue. An existing service station can be moved back at this point to permit such a rounding. The existing pavement of Stadium Drive and Leatherwood Lane can largely be used, with a limited widening to provide a full 24-foot pavement for moving traffic. Travel time data indicate that this route even under present conditions takes about 20 percent less time than going via College Avenue and Bland Road.

Also this connection would provide better access to Bluefield's only City park and the stadium, auditorium and swimming pool. The park is currently proposed for future expansion.

4 - Improvement of Intersections

The important Bland Street -- College Avenue intersection suffers especially from the steep grade on College Avenue approaching the intersection from the west. This can be alleviated and access also from Bland Street and Bland Road improved by levelling off the crown of this intersection, which now in effect forms the top of a small hill. The intersection can be widened and channelized by rounding the south edge of College Avenue at the intersection and by removing the existing structure on the east side of the intersection.

At the intersection of Bland Road and Oakhurst Avenue, there is a present opportunity to provide a diagonal cutoff by using a small piece of the property on the south side of this intersection recently acquired for the construction of a new church. A plan for this has been prepared by the church architect. Some cost for land acquisition and filling is involved, but the improvement will add greatly to the capacity of the intersection by separating traffic turning south on Bland Road and traffic proceeding east on Oakhurst Avenue.

The intersection of Route 21 at Cumberland Road with Washington Street is narrow and hazardous. At present, the intersection has four-way stop signs. A traffic light appears to be needed instead, and the corners of the intersection should be rounded by acquiring small parts of the adjoining commercial property. In addition, Washington Street should be closed to all truck traffic and a sign prohibiting through traffic should be installed. Washington Street should be used only as a local residential street because of its narrow width and steep grade.

Improvement is also needed on the intersections at Frederick Street and the Cherry Street -- Maryland Avenue Cutoff, where there is a dangerous curve and poor sight distance; and at Walton Avenue and Cumberland Road, where Walton Avenue comes in on a steep slope and at a sharp angle.

5 - Pavement Widening on the Cherry Street Cutoff,
Cumberland Road and the Grassy Branch
Cutoff

These roads at present have pavements only 20 to 21 feet wide which is below the modern standard of 24 feet (12 feet per lane). In addition, modern standards call for at least 8-foot stabilized shoulders. Widening is required not specifically for street capacity, as shown by Table 1, but for safety and ease of travel.

A proposal has been advanced locally for a new bypass road to the south to replace Cumberland Road as a north-south route. This appears unnecessarily expensive and would introduce undesirable traffic into the developing residential areas in this section.

6 - Widening of Bland Street

The congested conditions indicated on Table 13 for Bland Street between Federal Street and Union Street have been partially alleviated by the directional lane lights recently installed by the City. Eventually, however, the capacity of this street should be increased and present curves reduced by the widening of the pavement to allow a full four moving lanes (48 feet). At some points along the irregular right-of-way of the street it will be possible to do this by restricting on-street parking instead of actual pavement widening. It would be desirable to carry out the widening in the built-up section near Federal Street as part of a future urban renewal project which would include the blighted areas on both sides of Bland Street at this point.

7 - Extension of Hill Avenue and Wayne Street

The extension of Hill Avenue westward to Bramwell Road is a long-range proposal. This street extension would allow the expansion of Bluefield State College in this direction, in addition to the development of new residential areas.

As a more immediate proposal, it is recommended that Wayne Street east of Grant Street be improved and extended along the railroad to provide a series of new industrial sites. This could be done in conjunction with an urban renewal project in this area which would allow the utilization of project funds for the construction of the street extension, the provision of utilities, and the grading and improvement of industrial sites.

8 - Replacement of Hale's Culvert

Bramwell Road, West Virginia Secondary Route 11, goes under the Norfolk & Western Railway at its south end near Bluefield Avenue via a low, narrow one-lane tunnel known as Hale's Culvert. This underpass is hazardous and inadequate, and shows signs of structural deterioration.

It is recommended that this underpass, which forms the only direct connection to the rest of Bluefield for the residential area north of the railroad along Bramwell Road, be reconstructed, possibly in a different location. Existing grades on the east side of the present location of the underpass may allow a bridge at less cost than a tunnel.

9 - Interchange With Interstate Route 77

According to present plans the nearest interchange to Bluefield on the new Interstate Route 77 would be on the Ada-Oakvale Road approximately 3 miles east of the City. This is not excessively far, but involves a bad intersection at the railroad underpass between the City and the proposed interchange. It might well be of advantage to the City to have a closer interchange or at least to have adequate provision made for the improvement of the access road between the City and the interchange.

D - STANDARDS FOR STREET WIDTH

Recommended minimum standards for street pavement width are 48 feet exclusive of parking or breakdown lanes for four-lane arterial roads, 24 feet exclusive of parking or breakdown lanes for two-lane arterial and collector streets with 8 feet minimum for parking lanes, and 24 feet for local streets except in business or multifamily residential areas where the minimum should be 30 feet.

In particularly hilly sections where existing local streets are developed with a pavement width of 21 feet or less, the repaving or reconstruction of these streets with a 21-foot width is considered acceptable.

Minimum right-of-way widths should be 70 feet for four-lane arterials, 60 feet for two-lane arterials and collector streets, and 50 feet for local streets.

E - NEXT STEPS

As the next step in implementing these traffic proposals, it is recommended that the State follow up the studies now under way on the Bluefield Avenue — Princeton Avenue widening and make a review and cost analysis of the rest of the arterial improvement proposals made in this Plan. Also, it would be desirable to allocate highway planning funds to a restudy in further detail of the basic traffic data in this report. Such a further study should be done in close cooperation with the City Planning Commission. Again, although time and available funds have limited the scope of the analysis thus far completed, it is expected that the main outlines of the Plan will not be substantially changed by this further analysis.

V - PUBLIC SCHOOLS

A - INTRODUCTION

Strictly speaking, public schools are not under the jurisdiction of the City Planning Commission because the school system in Bluefield has been administered by Mercer County since the mid-1930's. It is considered appropriate, however, to include a general survey and plan for school facilities in this Master Plan because of the obvious importance of the public schools to the City's development. The cooperation and support given by the Mercer County Board of Education is gratefully acknowledged.

Bluefield is fortunate in many respects that its schools are part of the larger County system. The County has successfully raised capital through bond issues for school modernization and much of the City's school system has been substantially improved. More needs to be done, however, in three areas: replacing old, outmoded elementary schools, modernizing junior high school facilities, and handling a coming increase in high school enrollments.

The principal plan recommendations (which are limited to physical facilities and exclude the teaching system and school administration) involve:

- 1) additional high school facilities to supplement Bluefield High,
- 2) new junior high schools to replace Fairview and Genoa Junior High Schools,
- 3) provision of playfield facilities for Central Junior High,
- 4) replacement of the Stinson, Lawson, East End, and Jones Street elementary schools, and
- 5) enlargement of play areas for the Ramsey and Preston Schools.

These recommendations are based on a survey of present facilities and a projection of enrollments.

B - PRESENT CONDITIONS

The public schools are "big business" in Bluefield. There are two high schools in the City with an enrollment as of autumn 1960 of 1,049 students, three junior high schools with 1,660 students 1/, and 11 elementary schools with 2,090 pupils. Nearly all pupils in Bluefield attend the public schools; the only private facilities are one small parochial school extending through ninth grade. Only five or six pupils per year go to high school from this parochial school.

The County Board of Education imposes no racial restrictions on school admissions, but neighborhood patterns and past practices have established a largely separate system for white and Negro pupils. One of the high schools, one of the junior high schools and four of the elementary schools are predominantly Negro.

Conditions in the individual schools are as follows:

1 - Bluefield High School

Size: 20 classrooms plus music room, auditorium, cafeteria, gym

Capacity: 800 2/; enrollment: 785 3/

Age: 3 years

Site: 20.0 acres

Condition: excellent

Enrollment Trend: at maximum capacity

This is a new, modern high school located on an open 20-acre site on the south border of the City. The site was annexed to the City when the high school was built, reflecting the scarcity of reasonably flat undeveloped land within the City proper. The school serves the entire white population of the City (there are also eight Negro students) and some outlying areas.

Facilities provided are excellent. The only apparent problem is in accommodating increased numbers of students now attending Bluefield schools who will move on to high school over the coming few years. Many of these students are from outside the City, however. The high school is now at a maximum capacity, with all available classrooms being fully used.

1/ Including about 500 from outside the City.

2/ Capacities are as reported by the school principal following State requirements; generally 30 pupils per classroom.

3/ Enrollments given in this section are as of October 1960.

2 - Park Central High School

Size: 12 classrooms plus 6 special purpose rooms
 Capacity: 250; enrollment: 264
 Age: 8 years
 Site: 1.2 acres
 Condition: excellent
 Enrollment Trend: stable

This is also a modern high school in excellent condition. Located in the North Side area, it serves primarily the City's Negro population.

An important deficiency is its small site and complete lack of outdoor athletic field or play facilities (the Bluefield State College field is used for football practice).

3 - Central Junior High

Size: 24 classrooms plus 6 special purpose rooms
 Capacity: 800; enrollment: 768
 Age: 40 years *
 Site: 0.6 acres
 Condition: generally good
 Enrollment Trend: upward

This 40-year old building near the west end of the City's central business district was used as the central city high school prior to the construction of the new Bluefield High. Interior condition is good, although the design is outmoded in some respects. The major deficiency is complete lack of outdoor play space. When originally built, the surrounding area was undeveloped and the site was donated by the owner of a large tract of land in the area as a stimulus for new housing construction. Only enough land was provided, unfortunately, for the building itself, and now the surrounding area is completely built up. The entire site slopes sharply.

Of the 1960 enrollment of 768, 418 students are brought in by bus from outside the City. The enrollment is predominantly white.

* Ages given for the older schools are approximate.

4 - Fairview Junior High and Elementary

Size; 29 classrooms, one class in the auditorium,
and 4 special purpose rooms

Capacity: 800; enrollment: 892

Age: 45 years, enlarged
35 years

Site: 2.1 acres

Condition: deteriorating

Enrollment Trend: upward

This school serves as both an elementary and junior high school for parts of the predominantly white South Bluefield area. The building shows general deterioration due to extensive overcrowding. Grades 1 through 9 are all housed at present in this school, at an average of about 38 pupils per classroom, which is well over the generally accepted standard of 30. Outdoor play space is limited. Among substandard interior conditions are a shortage of lockers, deteriorated toilet rooms, and subdivision of some former full-size classrooms into two small classrooms.

The present junior high enrollment includes about 100 students from outside the City in the suburban area to the east.

5 - Genoa Junior High

Size: 10 classrooms, gym, band room, shop,
and lunchroom

Capacity: 300; enrollment: 268

Age: 40 years

Site: 0.3 acres

Condition : fair

Enrollment Trend: stable

Serving primarily the Negro population and located immediately south of Valley Ridge in central Bluefield, this is an old building on an extremely inadequate site and with inadequate interior facilities. There is no outdoor play space. A separate on-site classroom for the Shop class recently was erected using prefabricated materials for a cost of about \$5,000. It has been quite successful. There are no dressing rooms for the students, no lockers, and a shortage of storage facilities in the Home Economics room and elsewhere. There is no fire escape for egress from the second floor.

The building has had, however, a general renovation during the past 3 years, and has an especially good lunchroom and kitchen.

6 - Ramsey Elementary School

Size: 18 classrooms plus lunchroom, auditorium,
and gym

Capacity: 540; 1960 enrollment: 245

Age: 35 years

Site: 0.5 acres

Condition : fair to good

Enrollment Trend: downward

This is a large, substantial, predominantly white school near the center of the City, formerly used as a junior high school as well as an elementary school. The site is sharply sloping, with an extremely small outdoor play area. Structural condition is good, although some facilities such as toilet rooms show signs of deterioration.

The school is used to less than half its actual capacity, due primarily to its location in the older section of the City which has lost substantial amounts of population. About 60 pupils are brought in from South Bluefield and areas outside the City by school bus.

7 - Wade Elementary School

Size: 15 classrooms plus 5 special purpose rooms

Capacity: 450; enrollment: 391

Age: 40 years

Site: 2.4 acres

Condition: good

Enrollment Trend: downward

Wade School, serving the predominantly white West End area, is a well-maintained building supplied with an excellent playground also used by the City Recreation Department during the summer months.. The school formerly served also as a junior high, and has a large gym which is only partly used as well as a shop which is not used. About 60 pupils are brought in from outside the City by bus.

The Mercer County Exceptional School is housed in separate facilities on the site with 63 children who are retarded or crippled. This special facility goes through the 4th grade level.

8 - East End Elementary School

Size: 6 classrooms

Capacity: 180; 1960 enrollment: 182

Age: 40 years

Site: 0.9 acres

Condition: poor

Enrollment Trend: stable

This is a small school, serving the lower-income predominantly white East End area, of obsolete construction and design. All interior construction is wood showing obvious signs of wear and there are some cracks in the exterior masonry. Toilet rooms are in bad condition. There is a small but effectively used outdoor playground. The site is steep and difficult to reach.

9 - Hancock Elementary School

Size: 6 classrooms

Capacity 180; 1960 enrollment: 194

Age: 35 years

Site: 0.8 acres

Condition: good

Enrollment Trend: moderately upward

This is a predominantly Negro school at the east end of the North Side area. Although the building is of light construction, its exterior and interior condition is relatively good, with stuccoed interior walls and ceilings. The outdoor playground is effectively used.

10 - Jones Street Elementary School

Size: 6 classrooms

Capacity: 180; 1960 enrollment: 174

Age: 40 years

Site: 0.3 acres

Condition: fair

Enrollment Trend: declining

This is a smaller school serving the Negro area in the Valley Ridge section. Interior construction is of wood, with some deterioration. Complete lack of outdoor play space is a serious deficiency. The small site is entirely surrounded by houses crowded on narrow streets.

11 - Stinson Elementary School

Size: 6 classrooms
 Capacity: 180; 1960 enrollment: 157
 Age: 40 years
 Site: 0.5 acres
 Condition: fair to poor
 Enrollment Trend: stable

Stinson School serves the central part of the North Side Negro area. The school is well maintained, but is old and of entirely wood construction, located on a steep site high on the Stony Ridge hill with no outdoor play space and very difficult access. Heating is by a hand-fired coal furnace. Outdoor play space cannot be provided on the site because of the steep slope.

12 - Lawson Elementary School

Size: 4 classrooms
 Capacity: 120; enrollment: 70
 Age: 45 years
 Site: 0.2 acres
 Condition : poor
 Enrollment Trend: stable

This is a small school also on the upper slope of the North Side area, now used in effect as an annex to the Stinson School. Of the four classrooms, two are used for the first grade from the Stinson School area. The other two classrooms, on the second story, are unused and in very poor condition, with large interior holes and cracks. The site is sloping with no playground facilities. Interior construction is entirely of wood.

13 - Memorial School

Size: 9 classrooms and a lunchroom
 Capacity: 270; enrollment: 285
 Age: 35 years; addition, 5 years
 Site: 1.1 acres
 Condition: excellent
 Enrollment Trend: stable

This school serves the higher-income white residential area in the south-east section of the City. It is of excellent construction and design and has been

provided with special facilities from contributions by the parents in the area served. The school has an outdoor playground which is not large but is effectively used. One classroom was recently built in a separate prefabricated structure on the site, and has been quite successful although there are no separate coatroom facilities.

14 - Preston Elementary School

Size: 6 classrooms plus auditorium and lunchroom

Capacity: 180; enrollment: 162

Age: 35 years

Site: 0.9 acres

Condition: good

Enrollment Trend: stable

Preston School serves the white area in the south edge of Valley Ridge. Construction of the school is substantial, and there is an effectively used outdoor play area.

15 - Whitethorn Elementary School

Size: 6 classrooms plus temporary classroom
in the cafetorium

Capacity: 180; enrollment: 184

Age: 35 years

Site: 1.2 acres

Condition: excellent

Enrollment Trend: stable

This school serves the higher-income white area in the southwest section of the City. Construction is good, although the school originally had only two rooms and four were added. A new addition is now under construction which will provide six more classrooms. The site is sloping and difficult, but a small playground will be provided when the construction is completed.

16 - Cumberland Heights Elementary School

Size: 8 classrooms plus cafetorium and kitchen

Capacity: 240; enrollment: 256

Age: 4 years

Site: 10.0 acres

Condition: excellent

Enrollment Trend: stable

Although this school is just outside the City limits and serves the Grassy Branch area to the southeast of the City almost exclusively, it is included in this survey since the pupils from this area go on to Bluefield junior high and high schools.

Opened in the fall of 1956, this school was designed and built directly by the Mercer County Board of Education, which acted as its own contractor. The design is modern although rather plain, and all necessary facilities are provided. The site is large but much of it is unusable because of steep slopes. The playground is of somewhat limited size.

The area in which the school is located is not subject to zoning as in the City. A motel immediately next to the school and growing commercial development nearby are potential adverse influences because of traffic and noise.

17 - Summary

The principal problems found in Bluefield's school facilities are as follows:

a) Size of Site and Playground Area

Nearly all the older schools in Bluefield suffer from extremely inadequate sites and lack of outdoor play area. This can be attributed partly to the City's steep topography and partly to the lesser emphasis put on the importance of outdoor play space in the era when the older schools were built.

Modern school standards call for a minimum of five acres for an elementary school site and 20 acres for a junior high or high school. It is interesting to note that these standards have been achieved in two of the newest schools, Bluefield High School and the Cumberland Heights Elementary School.

Both these new schools are located, however, outside of the City's original boundaries on relatively open land, reflecting the almost complete lack of such sites within the City proper. This factor, combined with the effective use of small playgrounds made by the Memorial, Preston, and Hancock Elementary Schools, indicates that the schools must be built inside the City boundaries. Thus, a standard within the City of perhaps two acres for elementary schools would not be unreasonable. Some existing schools can be brought closer to this standard by acquiring additional land adjoining their sites.

b) Structural Condition

Structural condition and maintenance is generally very good throughout the school system, especially in relation to the age and obsolete construction of a number of the school buildings. It is apparent, however, that certain schools will have to be replaced in the near future due to deterioration and obsolescence.

c) Shifts in Enrollment

The extensive population shift which has taken place in Bluefield over the past 10 years has exerted a considerable strain on sections of the school system. South Bluefield schools are all at or above their capacities while the schools in the central area such as Ramsey and Wade have excess space. Several schools have shown large increases or decreases in enrollment even though the total enrollment in all schools combined changed only by minus two percent. Various adjustments have already been made, such as changes in use between elementary, junior high, and high schools, and more will be required.

C - PROJECTION OF ENROLLMENTS

The accompanying table presents a projection of total enrollments by grades for the coming 5 years. Past enrollments since 1956 are used as a base for this projection.* The method used was to project each age group as it moves through the school system: for example, the third grade in 1958 became the fourth grade in 1959.

Two projections are actually made. The first is on the basis of the percentages of "attrition" which applied from 1958 to 1960, that is, the percentages of pupils which dropped out between each grade. Since the 1958 to 1960 period appears to have been one of an unusually large amount of population loss in the City, the second projection is made on the basis of no such attrition, except between the 10th and 11th grades when apparently large numbers of high school students drop out to go to work. Actual future enrollments will lie somewhere between these two projections, although probably closer to the projection with attrition.

The projected figures on first grade enrollments were based on the 1956-1960 figures modified by the number of births to Bluefield residents 6 years previously. Enrollments in 7th grade, the first year of junior high school,

* Except 1957, for which figures were not available from the Board of Education.

**PROJECTION OF ENROLLMENTS,
PUBLIC SCHOOLS IN AND ADJOINING BLUEFIELD, WEST VIRGINIA**

	Actual Enrollments**				Projected Future Enrollments: With Attrition							Projected Future Enrollments: Without Attrition**			
	1956	1958	1959	1960	Actual Attrition 1958-1960 Used	1961	1962	1963	1964	1965	1961	1962	1963	1964	1965
Predominantly White															
Elementary:															
1st Grade	384	407	388	324	Related to Births	300	300	285	280	270	300	300	285	280	270
2nd Grade	355	383	376	368	5%	308	285	285	271	266	324	300	300	285	280
3rd Grade	379	348	358	315	10%	350	269	271	271	258	368	324	300	300	285
4th Grade	382	398	333	347	4%	299	333	255	257	258	315	368	324	300	300
5th Grade	293	374	329	324	5%	330	285	316	242	244	347	315	368	324	300
6th Grade	294	371	326	346	6%	329	313	270	300	230	324	347	315	368	324
Totals	2,087	2,241	2,110	2,024		1,916	1,785	1,682	1,621	1,526	1,978	1,954	1,892	1,857	1,759
Junior High:															
7th Grade	354	451	532	572	Not Related to Elem.	550	550	550	550	550	550	550	550	550	550
8th Grade	403	374	393	479	10%	515	495	495	495	495	572	550	550	550	550
9th Grade	378	310	344	341	10%	432	463	445	445	445	479	572	550	550	550
Totals	1,135	1,135	1,269	1,392		1,497	1,508	1,490	1,490	1,490	1,601	1,672	1,650	1,650	1,650
Senior High:															
10th Grade	314	336	304	326	3%	324	410	440	423	423	341	479	572	550	550
11th Grade	208	279	246	231	25%	244	243	308	330	317	262	273	383	458	440
12th Grade	182	222	256	228	8%	219	232	231	293	313	231	262	273	383	453
Totals	711	837	806	785		787	885	979	1,046	1,053	1,034	1,014	1,228	1,391	1,443
Predominantly Negro															
Elementary:															
1st Grade	135	121	133	120	-	120	120	115	110	100	120	120	115	110	100
2nd Grade	113	115	111	108	15%	114	114	114	109	103	120	120	120	115	110
3rd Grade	88	111	104	100	12%	103	108	108	108	103	108	120	120	120	115
4th Grade	89	111	118	83	10%	95	98	103	103	98	100	108	120	120	120
5th Grade	90	94	85	103	15%	79	90	93	98	93	83	100	108	120	120
6th Grade	75	78	95	79	3%	98	75	85	88	93	103	83	100	108	120
Totals	590	630	646	593		609	605	618	616	590	634	651	683	693	635
Junior High:															
7th Grade	64	107	77	89	3%	75	93	72	81	83	79	103	83	100	106
8th Grade	92	92	104	77	1%	86	71	88	68	77	89	79	103	83	100
9th Grade	112	81	96	102	-	74	82	67	84	65	77	82	79	103	83
Totals	268	280	277	268		235	246	227	233	225	245	271	265	286	291
Senior High:															
10th Grade	92	86	77	94	3%	97	69	78	64	80	102	77	89	79	103
11th Grade	82	100	94	76	-	89	92	66	74	61	94	102	77	82	79
12th Grade	79	81	86	94	7%	72	85	87	63	71	76	94	102	77	82
Totals	253	267	257	264		258	246	231	201	212	272	273	263	245	271

* Source: Mercer County Board of Education.

** Except that a 15% attrition rate is applied to the 11th Grade.

are not projected directly from 6th grade enrollments since large numbers of out-of-town pupils enter the Bluefield schools in this grade. It is assumed that the present rate of entrance into junior high school will continue.

It was brought to our attention after the accompanying table was prepared that the age requirements for children entering first grade were changed for the 1960-1961 school year. Previously all children reaching age 6 before February 1st were allowed to enter first grade; now, they can enter only if they reach age 6 before December 1st. Thus the size of the first grade entering in 1961 was about one-sixth less than the 1960 entering class.

Accordingly, the size of the first grades shown on the accompanying table should be increased for 1961 on. The total increase in elementary school enrollments will not be enough, however, to invalidate our previous conclusions.

The projection with attrition indicates that the present total number of school classrooms will be adequate for the next 5 years for all groups except the predominantly white high school group. For this group, the present capacity of the Bluefield High School will become inadequate by 1962.

The projection without attrition shows a more pronounced future excess over the capacity of the Bluefield High School, and in addition shows a 1965 surplus of about 300 students over the present enrollment level in the white junior high schools and of about 85 pupils in the Negro elementary schools.

D - PLAN RECOMMENDATIONS

Plan recommendations for the various schools are based on present conditions, enrollment projections, and analysis of development trends in the City. These recommendations are listed first school by school, followed by a summary and recommended general order of priority (see Map 9).

1 - Bluefield High School

Bluefield High is now only 15 students short of its rated capacity of 800. As indicated by the total enrollment projections, there will be from

250 to 400 additional students in high school in the Bluefield area by 1965, creating a substantial excess over present capacity.

Many of the high school students, however, come from outside the City of Bluefield itself. This is shown by the present 418 out-of-town students now in Central Junior High School and 100 in Fairview Junior High. The Mercer County Board of Education will have a choice, then, of building an addition to Bluefield High School, which would probably not be desirable in that it would overload the present special-purpose facilities such as the gymnasium and cafeteria; or it can enlarge or construct a new high school in another section of the County. This is an important decision which will require considerable study at the County level.

2 - Park Central High School and Genoa Junior High

Park Central High School is fully adequate from a structural standpoint. Genoa Junior High School, however, is recommended for replacement because of its age, obsolete construction and its inadequate site.

According to a recent report by Dr. James Bryant Conant, Education in the Junior High School Years,* a 10-classroom building would be too small to provide an adequate educational program with all the facilities that are required, and with adequate diversity of course material to accommodate the different levels of student ability and vocational goals. Park Central High School's 12-classroom size is below the recommended minimum size for the same reasons. The best plan, then, appears to be to build a new junior high as an addition to Park Central together with added special-purpose rooms as needed. The resulting combined junior-senior high would be of adequate size for a full program. Again according to Dr. Conant, the combination of grades would not be harmful in a school of this size, however it would in a school the size of Bluefield High.

The City's urban renewal program offers an opportunity to add 1.5 acres or more to the present Park Central site, within topographic limitations, allowing room for junior high facilities and a small playfield. Park Avenue is proposed to be rerouted to the east and north of the school, allowing uninterrupted expansion room to the west. It is estimated that the Urban Renewal Authority can make the land available within 2 years. The present enrollment of about 270 in the Genoa School appears to be steady with no substantial future increase expected. Thus, approximately 10 new classrooms are required.

* Princeton, New Jersey: Educational Testing Service, 1960.

A possible alternative plan which has been proposed locally and which may have merit is the building of new facilities elsewhere in the Bluefield area in combination with other existing or expanded high and junior high schools to accommodate the students in Park Central High and Genoa Junior High, with the present Park Central building being taken over by Bluefield State College. This is a major question of policy for the City and County.

3 - Central and Fairview Junior High Schools

A new junior high school is urgently needed to replace the present overcrowded facilities at Fairview Junior High. Fairview's present junior high enrollment is 624, and is increasing. It is recommended that the new junior high school have a capacity of at least 800, which would accommodate the Fairview enrollment in the near future at least, plus some of the 768 students now in the old Central Junior High School.

A building would thus be required of about the same size as the present new Bluefield High School. A similar site of 20 acres should be provided. The best apparent location would be again on the south side of Cumberland Road.

With the junior high being moved from the Fairview School, there would be a space requirement for the elementary grades of about 300 pupils, or 10 to 12 classrooms of the present 29 in the school. Whether some of the existing classrooms should be demolished or closed, or whether it would be more economical in the long run to replace the entire building with a smaller school, would depend on the cost factors involved. The present site is adequate for elementary school use.

The main problem with Central Junior High School is its complete lack of outdoor play space. It is intended that the City's third or fourth urban renewal project will include the area surrounding the school and that it will be possible for the City's Urban Renewal Authority to acquire, clear, and grade an appropriate site for at least a small playfield.

4 - Ramsey Elementary School

Even though 60 pupils in this school are brought in by school bus from other areas, the Ramsey School is now used at less than half its actual capacity. There will be a question over the more distant future as to whether it is more expensive to maintain the existing large structure or to replace

it with a new smaller elementary school. For the immediate future, however, its continued use as an elementary school appears to be necessary to serve the residential areas within its service district. A special effort is needed to provide some outdoor play space if at all possible. The use of the roof of the building, perhaps by removing the two unused classrooms now projecting above the rest of the structure, may be a possibility, or perhaps the construction of an elevated platform arrangement at the rear of the building.

5 - Wade Elementary School

Adequate; no recommendation for change.

6 - East End Elementary School

This school should be replaced with a new six-classroom school in the same general location. A possible 2-acre site would be immediately south of Princeton Avenue and east of Talbot Street. Present structures on this site are scattered and dilapidated.

7 - Hancock Elementary School

Adequate; no recommendation for change.

8 - Jones Street Elementary School

Recommended for replacement; six rooms as at present appears adequate. The present site appears best for the new school but should be enlarged by clearing adjoining houses.

9 - Stinson and Lawson Elementary Schools

These are already programmed by the County for replacement with a single new elementary school in the North Side area. A desirable site indicated by the City's current urban renewal studies would be on the north side of Pulaski Street between Burton and Reese Streets.

An enrollment projection indicates that by 1965 this school district may have up to 100 more pupils than the present 590. Thus, a 10-room school is indicated.

While the proposed site is now largely built up, the County could acquire only enough land at present for the school building itself. Then the City's urban renewal program can provide additional site area when the proposed North Side Project goes into execution, anticipated for 1962.

The Urban Renewal Authority could take charge of finding relocation housing for the families displaced by both the school itself and the enlargement of its site.

10 - Memorial School

This school will be adequate for the foreseeable future except that it would be desirable to remove the single separate classroom eventually and use the land for playground purposes.

11 - Preston Elementary School

This school is also adequate for the foreseeable future except that again it would benefit by acquisition of additional playground space. This could be accomplished by acquiring one house, the grounds of which adjoin the school on the north and west.

12 - Whitethorn Elementary School

This school is adequate for the foreseeable future. The playground area which will result when the present construction is completed is limited, but because of the sloping site no addition appears feasible.

13 - Cumberland Heights Elementary School

This new school is adequate in all respects, except that nearby commercial development provides an illustration of the need for land use control in the newer areas outside the City's boundaries by means of zoning. It is especially important for school sites to be protected against encroachment by incompatible uses.

The reason for this is obvious where there are taverns, pool halls, and similar uses near a school, as is the case to some extent with the Central Junior High School (the Bluefield Avenue Urban Renewal Project will remove some of these uses). For other types of nonresidential development such as stores and gas stations there can still be an adverse effect due to traffic, noise, and unsightly appearance. It is essential that areas surrounding schools be carefully zoned so as to preserve a proper school environment.

14 - Summary

While any over-all schedule can only be tentative because of the many changing factors involved, the following is the list of recommended

improvements by general priority. The actual priority will depend on County educational policies and County-wide factors beyond the scope of this report.

- a) Replace Stinson and Lawson Elementary Schools in the North Side area.
- b) Construct a new junior high school to replace Fairview Junior High.
- c) Construct a new junior high school as an addition to Park Central High to replace Genoa Junior High; or as an alternative, turn Park Central High over to Bluefield State College and provide new or added high and junior high facilities elsewhere.
- d) Construct added facilities or a new school to accommodate expanding enrollments at Bluefield High School.
- e) Provide play area for the Central Junior High by acquiring land in a future urban renewal project.
- f) Replace the Jones Street Elementary School.
- g) Replace the East End Elementary School.
- h) Alter the Fairview School for exclusive elementary use or replace the building with a new elementary school.
- i) Alter the building or acquire additional land for playground space at the Ramsey School, and acquire additional area for play space at the Preston Elementary School.

VI - COMMUNITY FACILITIES

A - INTRODUCTION

Bluefield's community facilities other than schools - including parks, playgrounds, public buildings, and utilities - were established on a sound basis during the City's period of strongest growth in the 1920's. The present City Park was acquired then the City Hall was built, and an extensive system of sewers and storm drains installed, among other improvements made.

Since the 1920's, however, there has been no systematic program for maintaining these improvements and making additions as municipal standards over the nation have risen. The provision of adequate facilities for modern service is one of the main requirements for the City's continued strength, and can have an important bearing on its ability to attract new economic development.

The Community Facilities Plan (see Map 9) endorses the addition to the City Park now under option for purchase as the key element in the City's open-space land program eligible for Federal aid under recent legislation. Recommendations are made for the eventual development of six new neighborhood playgrounds in addition to the five now in operation; four of these new playgrounds would be on new or enlarged school sites. A new playfield would be provided on the site of a new junior high school. Present proposals for a new library are strongly endorsed, and a central location recommended. Improvements to the City Hall, especially the jail section, are proposed. Additions to storm drainage lines in South Bluefield are recommended, together with the use of the sanitary fill process for garbage disposal instead of the present open dump.

B - PARKS AND PLAYGROUNDS

Bluefield has been seriously handicapped in developing a modern system of outdoor recreation facilities by the steep topography of the City and the lack of consideration given to recreation space when the City's streets and building lots were first laid out. Considerable progress has been made in recent years, however, especially in the development of the City Park and series of small neighborhood playgrounds.

The accompanying table indicates the extent of present facilities, additions proposed under the Master Plan, and the relation of both to the over-all standards set by the National Recreation Association. The approximate doubling of the present playground and playfield facilities is proposed, with the addition of about 8 acres in playgrounds and 20 acres for a new playfield. The City now holds an option on a 270-acre addition to the City Park, which is strongly endorsed.

Recreational facilities rank among the most important of all the community facilities supported by a City's taxpayers. Adults as well as children will benefit from a fully developed system, and the character and attractiveness of the City as a whole can be substantially enhanced by achieving a higher level of recreation service.

1 - Playgrounds

The City's Recreation Department carries out an intensive supervised recreation program in five playgrounds in different sections of the City. This program runs from June 1st to August 15th, involves a total registration of over 5,000 children, and includes all age groups from 4th to 10th grade.

While the program is operating effectively, improvements in playground facilities are needed both in the size of existing playgrounds and in the number of playgrounds needed to serve all sections of the City. This is especially in view of the National Recreation Association's recommendation that no home with children should be over a half-mile from a playground (the accompanying map shows the present lack of coverage in parts of Bluefield).

Existing and proposed facilities are as follows:

- a) East End Playground - This is a small play area on the hillside above Princeton Avenue in the east end section of the City. A wading pool and basketball court is included. Due to the steep topography, it does not appear feasible to enlarge this playground, although some additional grading and landscaping would be desirable.
- b) East River Playground - This playground is on a more level and usable site, and has toilet rooms as well as a wading pool and basketball court. Enlargement is prevented by surrounding streets and houses.

- c) Hardy Street Playground - This intensively used playground serves the entire North Side area. It includes an indoor recreation hall used for teenage activities on week ends. It is proposed under the City's General Neighborhood Renewal Plan Program to more than double the size of this playground by the clearance of adjoining substandard housing. This would be done as part of the City's second urban renewal project which is to encompass most of the North Side.
- d) Midway Playground - This playground, which includes a limited amount of play apparatus but no wading pool, is on privately owned land which has been made available for playground use for several years by its recently deceased owner. It is recommended that the land be acquired from the owner's estate, and that the usable area of the playground be extended by another acre by filling in a depression adjoining the present playground area. A wading pool and other facilities should also be added.
- e) Wade Playground - This is the largest of the City's playgrounds, and is part of the site of the Wade Elementary School. The County Board of Education makes the playground available for the City's recreation program during the summer months. A wading pool and basketball court are included. No enlargement is required.
- f) Central Junior High - It is proposed in the School Plan that land in a future urban renewal project be acquired by the County Board of Education as a playground to serve the Central Junior High School. This would also be highly desirable for use in the summertime as a neighborhood playground to serve the older central area of the City, which now has no such facility.
- g) North Side Playground - The replacement for the Stinson and Lawson Elementary Schools now programmed by the County Board of Education should be provided with at least a 2-acre site, with the assistance of the City's urban renewal program. The playground for this school can advantageously be included in the City's summer recreation program to serve the western portion of the North Side area.
- h) Jones Street School - This would be a 1.5-acre playground on the site of the new replacement for the Jones Street School recommended in the Master Plan for schools.
- i) Preston School - It is proposed in the School Plan that the Preston School site be enlarged by about an acre. The school playground would then be suitable for use by the City in its playground system.

- j) Montvale Park - This area in Southeast Bluefield was donated by a private individual for park purposes. It is somewhat run down in appearance due to lack of landscaping attention, and is not developed as a playground although it is occasionally used informally for this purpose. It is recommended that this park be incorporated in the playground system and developed as such, since there are now no playground facilities serving the southeast area. It would be desirable instead to have the site developed as an actual park with landscaping, benches, walks, etc., if an alternative site could be found for a playground; but this appears difficult.
- k) Country Club Area - It is recommended in the more distant future, that a new playground be developed to serve the southwest area of the City. The Whitethorn School playground would be well located for this purpose, but apparently will be too small and is not capable of enlargement. It appears that it would be desirable to acquire a new site, possibly adjoining or including a small portion of the Bluefield Country Club. Since private yards are large in this area such a playground would have a relatively low priority. Private contributions might be used to finance this playground.

These recommendations provide for the addition of six new playgrounds to the present five, and the approximate doubling of the present playground area. The total is still somewhat below the National Recreation Association's standard of 19.5 acres, but would be acceptable in view of the extreme limitations of topography and lack of open usable area in the City. For priorities, it is recommended that the acquisition of the Midway Playground come first, followed by the enlargement of the Hardy Street Playground and the development of the North Side, Central Junior High, Jones Street, Montvale Park, Preston, and Country Club Area Playgrounds.

Such an enlargement of the City's playground system would require an increased budget for playground operation and maintenance. The present budget, which includes operation of the City auditorium as well as the playgrounds, is \$20,000 per year. An additional \$10,000 to \$15,000 per year would probably be required to operate the expanded system. Capital costs, however, would be relatively low, since the

Central Junior High, Preston, North Side, and Jones Street Playgrounds would all be provided by the County Board of Education, and the Hardy Street Playground addition would be carried out under the City's urban renewal program.

2 - Playfields

Playfields are designed to serve high school age groups and adults. Normally, they include facilities for football, baseball, tennis, basketball, archery, and the like.

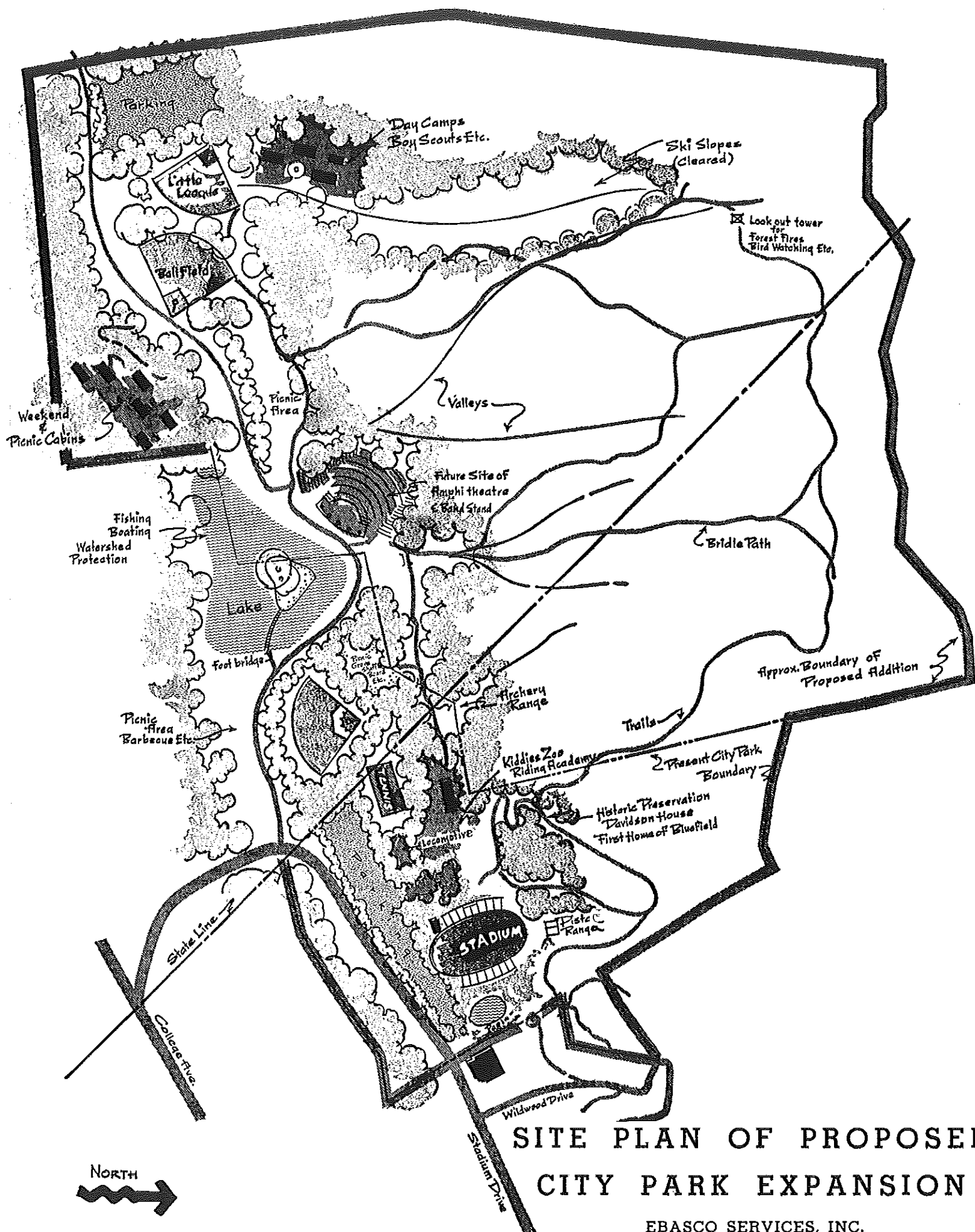
Present facilities include the football and baseball field at the new Bluefield High School and a baseball stadium and tennis courts at the City Park. No new playfield area outside of these two facilities is recommended except that the new junior high school proposed in the Master Plan for schools should include at least 10 acres on its site for playfield use which will also serve the high school and adult age groups in the City.

3 - City Park

Bluefield's present 50-acre City Park includes a series of individual facilities which, while highly desirable in themselves, do not comprise a park in the usual sense. A 270-acre addition to the west of the present park, which is now under option by the City, is essential to develop the area for the full range of recreational facilities which are needed.

The accompanying drawing indicates ways in which the new enlarged park could be developed. This would necessarily be a long-term affair, consisting of a series of projects undertaken by civic groups and by Bluefield, Virginia, as well as by the City. Much of the park would be located in Virginia, but as the property of the City of Bluefield it would be governed by City and West Virginia State laws, as is now the case with Bowen Field.

The City Park now includes Mitchell Football Stadium, Bluefield Auditorium, police pistol range, a baseball stadium and softball fields, exhibition locomotive, the Davidson House, and five excellent clay tennis courts. Under the proposed plan, the baseball stadium would be relocated further east. The parking areas would be surrounded by



trees and grassy area at the eastern and western entrances, with other areas to allow for overflow parking during sporting events. Potential new facilities include week-end and picnic cabins, day camps for such organizations as Boy and Girl Scouts, Little League baseball fields, ski slopes, picnic groves, shuffleboard courts, archery range, foot and bridle paths, a lookout tower for bird watching, a children's zoo, and an amphitheater and bandstand. In addition, a lake is proposed for boating and fishing which would also serve as an impounding basin for storm water drainage from South Bluefield. It would be formed by damming the present stream that runs through the area and empties out through the center of Bluefield, Virginia.

It is strongly recommended that the land for the park addition be purchased, and that an access road and clearing and grading be started as an initial step.

For the more distant future, it is recommended that the tracts to the north and east of the present park on Valley Ridge be acquired for trails, camping, and other future development. These tracts are largely unusable for building but have excellent woodland cover. Possibly an equivalent of the New England "town forest" could be developed in which logging is carried on as a local public works and employment program.

4 - Open-Space Land Program

The National Housing Act of 1961 provides for \$ 50 million in Federal grants to States and local communities to aid in the acquisition of permanent open-space land. The purpose is to encourage the sound, healthful development of communities within the framework of long-range planning.

The proposed additions to Bluefield's City Park fully meet the requirements of this Federal Aid Program. The additions are in accordance with the City's principles and specific objectives for its open-space land program, enumerated as follows:

- a) Provision of an adequate municipal park area for recreational activity requiring extensive land area and facilities not possible except on a City-wide basis and not found in nearby areas outside the City.

- b) Retention as open land of privately owned areas too steep for sound development. These are the areas designated for restricted development in the Future Land Use Plan. While development is not completely prohibited, the effect of the controls set on streets and utilities will largely prevent building in these areas. Open space preventing urban sprawl will thus be preserved and the development of more blighted areas on steep slopes similar to those now in existence in Bluefield can be prevented. This objective can of course be attained without Federal aid.

The open-space land program in Bluefield is proposed to be implemented by City acquisition of the park additions as the only practical means of park development, and by exercise of subdivision and building controls to restrict private development in the City's mountainous areas as discussed under the Future Land Use Plan.

5 - Regional Parks

The Bluefield area is only moderately well served by regional parks equipped for swimming, boating, camping, and other larger-scale activities. The nearest such park is at the Bluestone Reservoir about 25 miles from the City.

It would be of substantial benefit to the City, both for its residents and for the attraction of tourist trade, if a regional park could be established on East River Mountain. Bluefield's Congresswoman has begun inquiries about the possibility of a national park; the Virginia side of the mountain is already a national forest. State development could also be a possibility. Because of the steepness of the mountain on both sides, however, probably the best form of development would be a motel-type resort center with a cog railway or chairlift, swimming pool, and a restaurant. This could be developed privately instead of under State or Federal auspices.

C - CITY BUILDINGS

1 - City Hall

Bluefield's City Hall is spacious, substantial, and well located in relation to the City's central business district. Its principal problems are some inside deterioration and obsolete arrangement of some of its space for present-day use.

Table 14
 PLAN FOR RECREATION FACILITIES
CITY OF BLUEFIELD

	<u>Existing (Acres)</u>	<u>Proposed (Acres)</u>	<u>National Recreation Association Standards</u>
<u>Playgrounds:</u>			
East End	0.8	0.8	
East River	0.9	0.9	
Hardy Street	0.7	1.7	
Midway	1.0	2.0	
Wade	1.6	1.6	
Montvale Park	1.8 <u>a/</u>	1.8	
Central Junior High School	-	2.0	
Preston	0.5	1.5	
North Side	-	1.5	
Jones Street	-	1.5	
Country Club Area	<u>-</u>	<u>2.0</u>	
Total	7.3	17.3	19.5
<u>Playfields:</u>			
Bluefield High	10.0	10.0	
New Junior High	<u>-</u>	<u>10.0</u>	
Total	10.0	20.0	24.4
<u>Parks:</u>			
City Park:	Total Area	50.5	320 <u>b/</u>
	Usable Area	25	100 <u>b/</u> 78

a/ In public ownership but not actively used as a playground at present.

b/ Would also serve the Bluefield, Virginia area. Does not include the future Valley Ridge addition.

In addition to general painting and renovation throughout the interior, the most urgently needed improvement is the modernization of the City Jail on the third floor. This facility is badly deteriorated and lacks adequate light and provision for servicing. The City library on the first floor is inadequate, ~~as discussed below~~. The auditorium on the first floor is now unused and dilapidated. There is ~~virtually no parking space~~ available for the City officials and visitors, a difficult condition to correct because of the building's steeply sloping site.

While a new building might ultimately provide better service and lower operating cost, the replacement of the present structure at least within the next 10 years does not appear practical. Remodeling would cost substantially less than new construction and could meet all present needs except parking. It might be possible, however, to develop a limited amount of parking under the present building by excavation.

2 - City Library

Bluefield's only public library is located at present in three rooms on the first floor of the City Hall. The limited service which the library provides is illustrated by the average circulation of the books in comparison with national standards. For a city of Bluefield's size, library standards call for a circulation of books per month of about 15,500.* The actual monthly circulation of books from Bluefield's library is only 1,200, which is extremely low even taking into account the nature of the national standards of a goal rather than actuality.

This low level of service is undoubtedly due partly to lack of financial support to provide an adequate and up-to-date collection of books, but to a large extent it is also due to the facilities occupied by the library. The amount of space is much too small, 2,300 square feet as against the recommended standard of 10,000 square feet. At least as important, the first floor of the City Hall is a difficult climb from street level, and there is practically no parking for visitors within a reasonable distance of the City Hall. The library is not visible from the outside of the building and so does not "advertise" itself as a library as it should.

* Wheeler, Joseph L., The Effective Location of Public Library Buildings, University of Illinois Library School, 1958.

To provide more adequate library facilities, the alternatives recommended are: either the construction of a new building in the downtown area (present-day library practice calls for a central location where pedestrian traffic is heavy, much as for a retail store*) or the construction of new library facilities on the basement level of City Hall with direct access from the sidewalk. A new building would probably provide more desirable facilities and could have better access from parking areas, as well as allowing space for the storage of a Book-mobile which could serve outlying areas. Cost factors may, however, make the City Hall location preferable.

An indication of cost is provided by the attractive new library built in 1957 at Bluefield Junior College. This building is approximately the size which would be required for a central Bluefield library. Its cost including furniture but excluding land was slightly over \$ 100,000.

3 - Fire Stations

Bluefield has two fire stations, a central station at Roanoke and Mercer Streets immediately across the railroad from the central business district, and a branch fire station on Bland Street in South Bluefield. There are two pumpers and one ladder truck in the central station and one pumper and an auxiliary truck in the Bland Street station.

Both buildings are old but contain adequate space and facilities for present-day use. The reconstruction of the Mercer Street bridge now being planned by the City and the Norfolk & Western Railroad will facilitate access to the central station. Though the location of ~~the~~ ^{the central} station across the railroad from its main service area is not ideal, the Fire Chief indicates that the engines have never had difficulty in getting across the bridge.

No changes in fire station facilities are proposed as part of the Master Plan.

* Wheeler, Joseph L., The Effective Location of Public Library Buildings, University of Illinois Library School, 1958.

D - UTILITIES

1 - Water System

Bluefield's water system is owned and operated by the West Virginia Water Service Company. The principal water sources for Bluefield are the reservoirs at Ada and Norton, supplemented by wells, all to the east of the City.

The main problems with the present water system are lack of adequate water pressure for fire protection in certain sections of the City and lack of expansion capacity to allow for possible new industrial and other development. It appears that the best solution would be the acquisition by the City of the waterworks as has been proposed repeatedly over the years. The most recent study of this was by the City Manager in February 1960.

Among the benefits of municipal ownership of the water system cited by the City Manager as having advantages from a planning standpoint are better coordination of water line extensions with Master Plan development proposals, use of water facilities as noncash grants-in-aid for urban renewal projects, and control over development outside the City by requiring conformity to a plan before extending water lines. These are all valid points and should be taken seriously into account in future negotiations for City acquisition of the water system.

Because water pressure is uneven in different sections of the City, it is recommended that building permits be withheld unless there is or will be adequate water pressure at the site. This could perhaps be incorporated in the Building Code.

2 - Sanitary Sewers

The sanitary sewer system in Bluefield is operated by the Sanitary Sewer Commission, a semi-independent authority-type agency. The Commission's expenses are borne by sewer charges which are proportional to the amount of water used.

Sewerage is available in all sections of the City except a small area on Bramwell Road at the City's north boundary. There are two drainage areas, one draining into the East End treatment plant which is now operating at full capacity, and the other into a larger plant in

Bluefield, Virginia which has substantial capacity for expansion. No future problems are anticipated except in relation to the Cumberland Road and Grassy Branch areas outside the City boundaries to the east. These areas have grown substantially in the past 10 years and most houses use cesspools or septic tanks instead of a public sewage system. There is a potential threat to the City's water supply through sewage filtering through underground limestone strata as well as a health hazard in these new areas. It would be highly desirable for the County, or the City if this area is annexed in the future, to require connection to public sewer lines (the City can require this within its own boundaries but not outside). In this event, expansion of the East End plant would be required, or as an alternative a pumping station and enlarged trunk line in South Bluefield leading to the Bluefield, Virginia treatment plant.

Present sewer lines in the City are largely adequate except for the trunk lines draining the North Side area extending east and west under the Norfolk & Western Railway. The movement of trains has crushed the old clay pipes in a number of places. Under the General Neighborhood Renewal program now in progress, it is proposed that these lines be replaced and treated as a noncash grant-in-aid for the proposed urban renewal project on the North Side.

3 - Storm Sewers

A complete plan for storm drainage was developed for the City in the 1920's but was only partially carried out. Present records are not entirely clear as to which lines were constructed during this era and which were planned but not built.

A major problem exists in South Bluefield. The Union Avenue — Oakhurst — Heatherwood section is subject to moderate flooding, and the College Avenue area, especially west of Maryland Avenue, is subject to severe flooding. The City Engineer has prepared a cost estimate of \$ 106,100 for the improvement of drainage along College Avenue from Maryland Avenue to the west City boundary as a first priority operation. This includes correction of a present situation in which a four-by-ten-foot box culvert drains into a four-by-five-foot box culvert.

The improvement of the South Bluefield storm drainage system will put a larger volume of water into the stream which now flows through the City Park and empties through the middle of Bluefield, Virginia and ultimately into the Bluestone River. A lake for an impounding basin, as discussed above under the proposed addition to the City Park, is recommended to remedy this situation.

4 - Garbage Disposal

Garbage disposal is now in an open burning dump to the northeast of the City off the Old Princeton Road. While there is no immediate nuisance as the surrounding area is undeveloped, it would be better practice and probably more economical in the long run to replace this open dump with a "sanitary fill," in which each day's garbage load is progressively covered over with earth by a bulldozer. The land thus filled in can ultimately be used for building or other development.

E - PRIVATELY SUPPORTED ACTION

Nationally, communities vary widely in the extent to which the public facilities are supported by private donations instead of public bonds. Some communities over-emphasize the role of philanthropy by wealthy individuals or families, to the extent that local government abdicates its responsibilities. It appears from this Master Plan survey, however, that the Bluefield area shares the characteristics of many communities which developed from "wealth of extraction" - that is, mining or otherwise extracting natural resources as against the manufacturing of products. Private contributions for public facilities are completely, or nearly completely, lacking.

It would be very advantageous for the City's basic economy and prospects for future growth if private capital could be made available for such items as improvements to the City Park and development of new playgrounds. Such contributions would also form fitting memorials to the families who developed the wealth of the Bluefield area. A particularly appropriate facility for private contribution is the new City library and its furnishings, equipment, and books.

VII - PUBLIC IMPROVEMENTS PROGRAM

A - INTRODUCTION

Cities in most states over the country finance their public improvements (or capital improvements) such as parks, playgrounds, sewers, and public buildings out of the annual city budget. This normally includes full payment of the cost of the smaller items and payments on bonds for the larger items.

In West Virginia, however, the State imposes a strict constitutional limit on the property tax rate. This has had the effect, for Bluefield, of restricting the annual budget only to operating expenses with nothing left over for any substantial capital improvements. The only way such improvements can be financed is for the City voters to approve special bond issues by a three-fifths election majority.

Bluefield's last bond issue for public improvements was in 1923, and no improvements have been possible without bond issues since 1932, when the State constitutional budget limitation was established. This long period without substantial public improvements accounts for the number of needed items referred to in this Master Plan.

The timing and extent of a new bond issue or issues to make up the backlog of needed improvements and maintain the City's strength and attractiveness depends on the extent of support shown by Bluefield's voters. Rather than to attempt to define the extent of an individual bond issue or issues - except to recommend strongly that bonds should be issued - needed improvements are presented as a total list in order of priority to be financed in two 3-year periods.

The major items included are the City's share of the replacement of the Mercer Street Bridge, storm drainage in South Bluefield, acquisition and development of the City Park addition, a new City Library, playground acquisitions, a swimming pool on the North Side, and minimum improvements to the City Hall and City jail. City contributions will also be required for urban renewal projects, but probably not immediately since "noncash grants" will apparently make up the one-third local contribution (the Federal Government pays two-thirds) for at least the first two projects.

Public improvements are also proposed to be provided by non-City agencies or without direct City expenditures. These include State and Federal highway contributions (which would take care of all the proposed arterial road improvements), Bluefield Sanitary Sewer Commission improvements, new facilities by the Mercer County schools, possible water system acquisition, and Norfolk & Western Railway bridge contributions.

B - CITY FINANCES

The provision of public improvements in Bluefield is hampered by two basic restrictions placed on the City's finances by the State:

- 1) The State Constitution sets the maximum property tax rate for the City. Bluefield, like most cities in the State, levies this maximum rate, but is still forced to raise money from a number of other sources, principally the "privilege tax" or sales tax (see Table 15). These sources are used nearly to the utmost, according to the City Manager, to meet current operating expenses. Thus, it is not possible to pay for public improvements above the \$10,000 range out of current revenues.
- 2) State law allows the City to issue bonds for public improvements up to 5 percent of its total assessed valuation, meaning bonds totaling roughly \$2,500,000 (the City presently has no bonds outstanding). However, all bond issues must be approved at an election by a three-fifths majority of the votes cast. Even with voter approval no extra property tax levy is authorized for interest and repayment of the bonds, so the City must raise this money from other sources.

With these restrictions, then, public improvements which must be financed by the City (as against improvements provided by the Federal and State governments or by gifts) will require the issuance of bonds with approval by the City's voters. This has been understood for some time by City officials and civic leaders, as expressed in a statement by the City Manager:

"It is often said that the bond issue of the progressive era from 1921-1925 made Bluefield what it now is. Today's advocates of a similar program point out the obvious need for many projects and argue that their city is being left behind in comparison with others."

The carrying charges for possible bond issues, while these must be met from sources outside the real estate tax, appear not to be too heavy to bear under the City's present financial structure.

Table 15

**BLUEFIELD CITY RENENUES COLLECTED
AS OF END OF FISCAL YEAR 1955-1961**

	<u>1956-57</u>	<u>1957-58</u>	<u>1958-59</u>	<u>1959-60</u>	<u>1960-61</u>
Property (Real Estate) Taxes	\$ 110,215.49	\$ 127,819.24	\$ 141,260.40	\$ 138,597.08	\$ 145,155.15
Privilege (Sales) Tax	273,025.36	262,644.34	242,155.81	254,707.79	256,636.72
Special Service Fee for Fire Protection	75,792.50	86,311.17	95,724.64	135,161.02	142,263.68
Public Utility	38,766.75	41,077.51	41,082.39	42,185.47	41,293.66
Liquor Revenue Consumers Tax	22,755.65	22,885.18	21,062.49	20,507.41	20,832.95
General Licenses	20,856.11	19,978.26	21,524.34	21,357.91	21,604.67
Police Court Fines	31,619.81	41,951.50	30,708.75	24,355.45	23,198.25
Garbage Fees	7,564.50	10,764.50	11,162.88	11,768.75	11,918.50
Previous Years Taxes	5,164.61	4,095.93	4,168.22	3,298.43	4,457.13
Special Assessment for Fire Trucks					17,782.79
Stadium Receipts	5,894.55	5,137.95	6,102.00	6,817.05	6,433.75
Miscellaneous Accounts	24,238.81	22,840.16	19,791.04	23,316.69	19,689.48
Sundries	6,525.41	3,084.72	5,658.47	13,164.26	7,425.88
Legacy-Recreation Park Purchase Fund					500.00
Library Receipts	1,042.06	1,061.46	936.53	891.47	889.90
Other	<u>21,682.84</u>	<u>25,216.06</u>	<u>14,730.04</u>	<u>15,765.26</u>	<u>17,331.30</u>
Total	\$ 645,144.45	\$ 674,867.98	\$ 656,068.00	\$ 711,894.04	\$ 737,413.81
Cash Balance First of Year	<u>16,971.55</u>	<u>18,645.29</u>	<u>26,534.28</u>	<u>3,828.35</u>	<u>1.50</u>
Grand Total	\$ 662,116.00	\$ 693,513.27	\$ 682,602.28	\$ 715,722.39	\$ 737,415.31

A \$500,000 bond issue, for example, would have an annual cost (with 30-year 3-1/2 percent bonds as specified by the State Sinking Fund Commission) of approximately \$30,000. This would be about 4 percent of total annual City revenues and slightly over 5 percent of revenues from non-real estate sources. The impact on the average citizen or homeowner in terms of tax increases might be less than these percentages since a larger proportion would probably be absorbed by business, utility, and industrial taxpayers.

The analysis of revenue trends in Table 15 cannot reliably be projected into the future since a number of items are subject to change by the State and by special local circumstances. In particular, real estate assessments are now being revised by the County under a recent State requirement that all real estate must be uniformly assessed at 50 percent of true value. However, the total tax base has shown a generally increasing trend in recent years:

TAX BASE INCLUDING PUBLIC UTILITY
AND GENERAL PROPERTY TAX

1955-1956	\$45,718,100
1956-1957	49,303,600
1957-1958	52,953,300
1958-1959	58,272,900
1959-1960	54,223,700
1960-1961	56,878,450

C - CITY IMPROVEMENTS

The following are needed City improvements recommended in approximate order of priority, separated into two groups for financing over two 3-year periods. The basis for each proposed project is discussed in more detail in the preceding chapters.

First 3-Year Period

1. Replacement of Mercer Street Bridge

The City now has an agreement with the Norfolk & Western Railway under which the Railway will do the design of a replacement for the Mercer Street Bridge and will contribute 50 percent of the cost. The City's 50 percent contribution toward the cost of the new bridge is estimated at \$100,000

The cost of the bridge will be used as a noncash grant credit for the Bluefield Avenue and North Side Urban Renewal project, meaning, in effect, that the Federal Government will match this cost on a two for one basis.

2. Storm Drainage in South Bluefield

The most urgently needed drainage facility in South Bluefield is an enlarged storm drain on College Avenue from Maryland Avenue to the west City boundary. The present drain is inadequate and causes frequent flooding. The cost of this facility is estimated by the City Engineer at \$ 106,000

Certain additional subsidiary drains for Union Street and other sections of South Bluefield may be needed, but have not yet been estimated.

3. Acquisition and Improvement of City Park Addition

The acquisition cost of the 270-acre addition to the City Park, which is now under option by the City, is \$67,000. Together with a start on the installation of improvements to this addition, the amount entered for inclusion in a bond issue is 87,000

4. New City Library

As a general cost estimate, it is considered that the construction cost of a new building would be close to the \$100,000 cost of the library at Bluefield Junior College constructed in 1957. The additional cost of new books and extra equipment might be borne by public donations. Assuming the use of a new site for the building at \$40,000, total City cost would be 140,000

5. Playground Acquisitions

Immediate acquisition is proposed of the land which has been used by the City for the Midway Playground, estimated at about \$2,000. Other proposed playground acquisitions would be carried out by the Mercer County schools. Total City costs for acquisition and improvement are estimated generally at 5,000

6. Urban Renewal Contributions

It now appears that no City contribution will be required for the Bluefield Avenue Project. For the second proposed project under the General Neighborhood Renewal Plan, the North Side Project, the GNRP Report estimates that City noncash grants for site improvements, less credits, will be approximately . . . \$ 30,000

Total	\$ 468,000
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Second 3-Year Period

1. North Side Swimming Pool

Construction of a municipal swimming pool proposed in the North Side area is estimated, on the basis of the cost of the swimming pool in the City Park, at \$ 70,000

2. Improvements to City Hall

Improvements to the City jail and other essential improvements are estimated roughly at 60,000

3. Urban Renewal Contributions

The GNRP report estimates the City contribution for the third project, the Princeton Avenue project, to be approximately \$ 127,000. Adding another \$ 200,000 for a possible North Side industrial project, total allowance for urban renewal contributions is 327,000

Total	\$ 457,000
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It is interesting to note the impressive list of improvements made from the City's 1923 bond issue. These included a new City Hall for \$ 100,000, widening and improving Bland Street and Princeton Avenue for \$ 200,000, purchase and improvement of the present City Park for \$ 50,000, general sewer construction for \$ 360,000, and miscellaneous street and sewer work for \$ 140,000.

D - NON-CITY IMPROVEMENTS

The following are improvements proposed to be made by non-City agencies without direct expenditures by the City. Some of these are already committed:

1. State Road Commission and
Federal Bureau of Public Roads

These agencies would be responsible for all or nearly all the financing for the arterial road improvements recommended in this Master Plan. The costs of the individual improvements have not been calculated except for the widening of Bluefield and Princeton Avenues in the Bluefield Avenue Urban Renewal project which is estimated by the State at \$1,170,000. A request is made that the State Road Commission prepare estimates for the remaining improvements proposed in this Master Plan.

2. Bluefield Sanitary Sewer Commission

A preliminary estimate of \$115,700 has been furnished by the Commission staff as the cost of replacing the sewer trunk lines under the Norfolk & Western Railway tracks. A referendum is not required for the issuing of bonds to meet this cost; the Commission need only determine that the improvement is needed, move to issue the bonds which would be paid for by the revenue from the sewer tax, and increase the sewer tax by the necessary amount.

According to the Commission staff, the present tax is only approximately half the State average for municipal sewer systems.

3. Mercer County Schools

The County Board of Education would have jurisdiction over the school improvements recommended in this Master Plan. Cost estimates are not developed at this time since this is more appropriately done by the County itself. An order of priority is recommended, but the exact programming will depend on the needs and financial ability of the County as a whole.

4. Water System

If and when the Bluefield water system now owned and operated by the West Virginia Water Service Company is acquired by the City, this would be accomplished by the issuance of revenue bonds not requiring a referendum. The bonds would be supported by the revenues from the water system, and it would not be expected that the present water rates would increase because of the acquisition.

5. Norfolk & Western Railway

The Norfolk & Western Railway is obligated to pay half the cost of the replacement of the Mercer Street Bridge. Construction designs are

now being developed by the Railway, and the City's share of the bridge is expected to count as a noncash grant-in-aid toward the Urban Renewal Program. The total cost of the bridge is estimated at about \$ 200,000, of which the Railway would contribute \$ 100,000.

VIII - ZONING AND SUBDIVISION REGULATIONS

A - INTRODUCTION

Two basic tools to implement the land use proposals in this Master Plan and to improve land development standards in the City are zoning and subdivision regulations. Bluefield has had a relatively modern Zoning Ordinance since 1938 which now needs certain revisions. Subdivision regulations, which the City does not now have, are not particularly urgent since there is very little usable land still available for subdividing (platting new streets and building lots) in the City. However, these regulations would be desirable in case new areas are annexed and to serve as an example outside the City.

The principal revisions proposed for the Zoning Ordinance will:

- 1) Exclude all new residential use from industrial zones.
- 2) Require commercial and industrial establishments to provide off-street facilities for parking and loading.
- 3) Require the Board of Adjustment to set forth fully its reasons when granting a zoning variance.
- 4) Set a more up-to-date schedule of required lot area per family for houses and apartments.

The principal changes proposed for the Zoning Map (see Map 10) include:

- 1) Rezoning from industrial to business or residential sections of the North Side and on Princeton Avenue.
- 2) Cutting back the business zoning in the vicinity of College Avenue and Jefferson Street.
- 3) Rezoning to residential of most of the present business zone on Stadium Drive.
- 4) Cutting back the commercial and industrial zones on the Cherry Street — Maryland Avenue Cutoff and the north branch of Route 52.

The proposed subdivision regulations establish desirable minimum standards for street widths and layout and obligate the subdivider to install adequate street paving, drainage, utilities, and other improvements before building permits for new structures will be issued.

B - CHANGES IN ZONING REGULATIONS

Bluefield's present land use pattern shows an orderliness in some areas, especially South Bluefield, which can be traced directly to the Zoning Ordinance enacted in 1938. This ordinance divides the City into districts where only certain uses are permitted, and also sets minimum standards

for building height and setbacks as well as setting up a procedure in which a permit must be obtained from the City before any building can take place.

The present ordinance was thoroughly modern when it was adopted, and is still largely in accord with accepted zoning practice. Although present-day ordinances generally have a more compact and readable form, Bluefield's ordinance is now well established and has been used successfully for many years; thus its basic form need not be altered. In order to fully meet present-day conditions, especially with regard to the increased impact of the automobile and the consequent need for parking and loading regulations, the following changes are proposed to the content of the ordinance (the wording of these proposed changes is submitted separately):

- 1) References to stables for animals are no longer needed (Sections 2, 8, and 9 of the ordinance).
- 2) The ordinance allows the renting of rooms or lodgings, or the serving of meals for compensation, in "A" residence districts without restriction, and "B" residence districts to not more than five persons (Section 8, paragraph 2). Most present-day ordinances do not allow any renting or lodgings or serving of meals for compensation in the most restricted residence districts, which for Bluefield would be the "B" residence district. However, if this practice is widely established locally there is no need for change.
- 3) It is strongly recommended that all residential use be prohibited in light and heavy industrial districts. The areas so zoned are not desirable for housing, and any housing construction would have an adverse effect both on families moving into this housing and on adjoining industrial uses.
- 4) The ordinance now states (Section 15, paragraph A) that a nonconforming use, which is a use contrary to the Zoning Ordinance which existed before the passage of the ordinance and thus was permitted to remain, must be permanently discontinued if the use stops at any particular time. To clarify this provision, it is recommended that wording be added to make this provision effective when the use is discontinued for a period of 6 months or more.
- 5) A front yard or setback from the street is not now required in industrial districts. Under modern practice industrial and heavy commercial structures are normally set back from the street in the interests of better appearance and greater flexibility of development of the adjoining streets. It is recommended that at least a 15-foot setback be required. (In Section 26.)

- 6) The ordinance now implies (Section 29) that new structures may be erected containing both residential and commercial or industrial uses. This type of mixed-use structure should be prohibited; it does not appear that in Bluefield such an arrangement would be satisfactory or necessary for living quarters.
- 7) The wording of the ordinance (Section 31) should be clarified so as to prevent the construction of accessory buildings except in rear yards.
- 8) A new article should be inserted in the ordinance setting off-street parking and loading requirements. At least one off-street parking space should be required for each single-family house and each apartment in multifamily housing. All new commercial structures, outside of the central business district, should be required to provide at least a certain minimum amount of off-street parking for customers and visitors, and industrial buildings should provide employee parking. In addition, all commercial structures outside the central business district and all industrial buildings should include provision for off-street truck loading berths arranged so that the trucks do not block the street.
- 9) A Zoning Study Committee appointed in 1949 made the recommendation that when an appeal is made to the Board of Adjustment, there should be provision for more effective notice to adjoining and nearby property owners than by legal advertisements in the newspapers. A provision for this purpose might well be added to Section 38, calling for the posting of notices (tied to trees, telephone poles, etc.) within 200 or 300 feet of the property for which the appeal is being made.
- 10) It is strongly recommended that the Board of Adjustment be required to state in full its reasons for the granting of variances, in the terms set by the ordinance. Wording to this effect might well be added to Section 39. An inspection of the minutes of the meetings of the Board indicates that in a number of cases variances appear to have been granted simply because nobody appeared at the meeting to object. It is the responsibility of the Board to decide the merits of appeals in relation to the objectives of the Zoning Ordinance and to the welfare of the City as a whole, not only to the opinions of particular property owners.
- 11) The ordinance now allows (Section 39, paragraph 12) the construction of a detached private garage in the front yard in a residence district where topographic conditions prevent rear yard location. While this probably must be allowed for existing houses, it appears that such construction should not be allowed with new houses, since the effect is undesirable and adequate provision can usually be made in the design of the new structure for either an adjoining garage or one in the rear.

- 12) The ordinance allows (Section 39, paragraph 14) the Board of Adjustment to permit building on lots of sub-standard size where the lots are considered not to be capable of improvement otherwise. This provision probably gives the Board an excessive degree of discretion and could well be deleted.
- 13) In the schedule of area regulations attached to the Zoning Ordinance, it is recommended that a minimum lot size of 5,000 square feet be established for one-family dwellings in all zoning districts (down to 3,000 square feet is now allowed in certain area districts). A minimum of 2,750 square feet should similarly be set for two-family dwellings for lot area per family. This is on the basis of the recommended density standards of the American Public Health Association (Planning the Neighborhood, 1960).

In addition, the lot area per family requirements should be revised in accordance with the APHA standards for multiple dwellings, with different lot areas per family being set according to the number of stories. In some cases smaller lot areas per family would be permitted than now included in the ordinance, and in other cases larger lot areas per family would be required. Controls on maximum land coverage by buildings should also be provided in accordance with the APHA standards to assure adequate light, air, and open space for recreation, landscaping, and off-street parking.

C - CHANGES IN THE ZONING MAP

In addition to the proposed changes in the text of the Zoning Ordinance, certain changes are recommended in the Zoning Map to carry out the objectives of the Future Land Use Plan.* These changes are generally as follows (see map 10):

- 1) Sections of the North Side adjoining the railroad and also a section along the east end of Princeton Avenue are now zoned for light industrial use where primarily residential uses now exist. These sections could be used only with difficulty for industrial purposes and their scattered development with nonresidential uses would have an adverse effect on the residential neighborhoods involved. It is therefore proposed that the zoning for these sections be changed from industrial to residential (or commercial for certain sections).

* The Zoning Map will differ somewhat from the Future Land Use Plan in that zoning is a short-range control. However, the Zoning Map should help the City to work toward the long-range objectives of the Future Land Use Plan.

- 2) On the basis of existing land use and probable future development, it is considered that the business zoning in the South Bluefield shopping area is somewhat over-extended to the south and west. Specifically, it is recommended that the present business zoning be changed to residential on the west side of Jefferson Street and Vineyard Street. The College Avenue change is particularly important since the residential character of this street is well established and could be seriously damaged by the intrusion of business.
- 3) It is proposed that the present business zoning be removed from nearly the entire length of Stadium Drive to conform with existing land use. The residential character of this street is well established, and the Future Land Use Plan does not propose commercial development in this area except at the intersection of Stadium Drive and the Cherry Street — Maryland Avenue Cutoff and where it now exists immediately adjacent to the City Park.

In addition to allowing the intrusion of scattered commercial uses, business zoning in a residential area has the disadvantage in Bluefield that standards for housing development are lower under the present ordinance. Smaller lot and yard sizes are allowed than in residential zones.

- 4) Portions of the Cherry Street — Maryland Avenue Cutoff and the north branch of Route 52 are now zoned for business or industrial use. Because of the steep topography involved and the heavy traffic on these routes, it is proposed that this zoning be entirely removed on Route 52 and cut back to existing area of commercial use on the Cherry Street — Maryland Avenue Cutoff.

An example of the inadvisability of the present zoning is the drive-in eating place on Route 52 which creates a hazard on the highway from cars entering and backing out. The steep topography makes an adequate setback for such uses difficult or impossible.

D - SUBDIVISION REGULATIONS

Subdivision regulations control the layout of new streets and building lots. Under these regulations, the City is given the power (subdivision regulations can only be adopted after the City Board of Directors has adopted a Master Plan) to set minimum standards for street and lot design and to require developers to install adequate improvements.

This is an extremely important power where there are substantial tracts of undeveloped land and a large amount of new construction. Since Bluefield has nearly reached the end of its supply of usable land available

IX - FURTHER STUDIES

As this Master Plan is adopted and carried into effect, and as additional resources become available from various sources, further studies to continue the planning work thus far developed would be desirable both to expand the scope of the Plan and to keep it up to date. Some special studies suggested by the planning work accomplished so far are as follows:

- 1) Planning study of potential annexation of areas adjacent to the City. This should include a planning survey of the areas and a detailed estimate of costs and requirements for improvements for the areas should they be taken into the City; to be coordinated with the County Planning Commission.
- 2) An economic survey of the existing industries in the Bluefield area to determine expansion potentials and possibilities for outside aid in financing and other ways to exploit these potentials. This might be a university research project.
- 3) Detailed site planning and preparation of development cost estimates for improvement of the City Park.
- 4) Expanded origin-destination and travel time surveys, engineering design of street and highway improvements and related cost estimates (to be done by or under the State Road Commission).
- 5) Parking survey for the Bluefield Parking Commission to determine supply and demand in the entire central core and also in the South Bluefield shopping area. The survey should also include a financial analysis of the Commission's program to determine the extent to which additional facilities can be supported.
- 6) Study and revision, where needed, of the City Building Code. In particular the Code might prohibit new buildings on unpaved streets (a number of new houses were noted on dirt streets), since the City cannot now compel street paving. Also, the Code might prohibit the installation of gas and water meters in front yards because these are both unsightly and dangerous; the meters should be either inside the house or against the exterior foundation wall.
- 7) Site planning studies of the proposed industrial urban renewal sites on the North Side, with plot layouts, development cost estimates, and site improvement estimates; also preparation of advertising brochures.
- 8) Continuing study of highway connections between the City and the scheduled new Interstate Route 77 and their effect on the City's traffic pattern.

It is recommended that this Master Plan receive a limited review in 2 or 2-1/2 years and a comprehensive restudy within 5 years. The Federal Government will soon provide two-thirds matching grants for Master Plan work under the Housing Act now being passed, instead of one-half as at present.

Ideally, the City should have a community planner on its staff to deal with the day-to-day development problems and also have charge of the updating of the Master Plan. The City Manager and the Urban Renewal Authority Director can provide a substantial amount of technical guidance to the City Planning Commission, however, and consulting services can be utilized for the larger work items and to provide the continuing study and guidance needed.

