

# BLUEFIELD

## COMPREHENSIVE PLAN

Prepared for the

### CITY PLANNING COMMISSION

October, 1974

By

**balzer and associates  
planning consultants  
roanoke, virginia**

Under contract with The Department of Finance and Administration, Office of the Governor, State of West Virginia.

The preparation of this report was financed in part through an urban planning grant from the Department of Housing and Urban Development under the provisions of Section 701 of the Housing Act of 1954 as amended.

This report was prepared under the supervision of the Community Affairs Division of the Planning and Development Department of the Governor's office of Federal/State Relations.

GRANT CONTRACT NO. W.VA. 1014  
PROJECT NO. W.VA. 7

TITLE: Comprehensive Plan, Bluefield, W.Va.

AUTHOR: Balzer & Associates, Planning Consultants

SUBJECT: Existing and future development designed to guide the physical growth of the City.

DATE: October 31, 1974

NAME OF PLANNING AGENCY: Governor's Office Of Federal/State Relations  
Dept. Of Planning And Development

PARTICIPATING LOCALITIES: City Of Bluefield

SOURCE OF COPIES: City Managers Office  
City Of Bluefield, W.Va.

HUD PROJECT NO.: W. Va. P-1014

NO. OF PAGES: 211

ABSTRACT:

This plan and program for the future development of Bluefield is intended to update and replace the 1962 Comprehensive Plan. This report is designed to guide the physical growth of the City in order that the broad goals of community development will be achieved. These goals include efficient utilization of land, a traffic circulation pattern free from congestion, an ample number of community facilities for each neighborhood, and sound housing for every citizen.

The background and inventory information will serve as the basis for the planning considerations presented in this report. Bluefield's current problems and the trends suggesting potential problems were identified and solutions to those problems are included in this report.

Included is the analysis of past settlement patterns and the recommendation of a future pattern of growth. A discussion of major physical features of the City, its economic structure, and social patterns is included. Population analyses and 1980 and 1990 projections are included based on employment activity and overall economic growth.

Throughout the analysis of background information, definite findings related to the economic, social, cultural, and aesthetic status of the community were determined. These findings, as included in this report, provide the foundation or the basis for the preparation of the Future Land Use Plan. This Plan takes the form of a set of policies which should guide the process of making decision about future development in Bluefield.



# balzer and associates

COMMUNITY DEVELOPMENT CONSULTANTS

Oak Grove Plaza  
2051 Electric Road, S. W.

• Roanoke, Virginia 24018 •

Telephone (703) 774-4456

October 31, 1974

Mr. G. Ross Boyce, President  
Bluefield Planning Commission  
Bluefield, West Virginia

Dear Mr. Boyce:

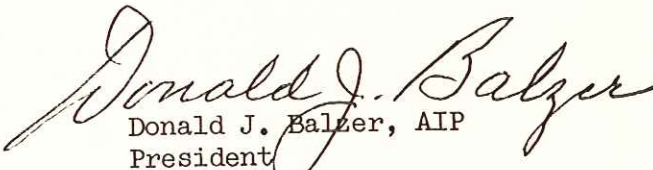
In accordance with our agreement with the State Department of Planning and Development, we are pleased to submit the final report on the Comprehensive Plan for Bluefield, West Virginia. The final document is a compilation of a series of preliminary reports submitted between March 1974 and September 1974, and incorporate approved modifications and additions by the Planning Commission. This report presents the results of the inventories and analysis of population, economic base, land use, community facilities and building conditions.

We have enjoyed the cooperative spirit of the Planning Commission, City Board, City Manager and staff for their assistance in the preparation of the Comprehensive Plan. Bluefield's future remains promising and we appreciate the opportunity of making this important contribution to that future.

We also wish to acknowledge the assistance and cooperation from the many citizens, state agencies, and officials of the City of Bluefield.

Respectfully yours,

BALZER AND ASSOCIATES, INC.

  
Donald J. Balzer, AIP  
President

DJB:b





## CITY BOARD

Honorable C. Edwin Elliott, Mayor

Allan Connelly

Angelo Monaco

J. E. Walker

(Vacant)

---

Fred P. Burton, City Manager

---

## CITY PLANNING COMMISSION

G. Ross Boyce, President

Frank Allen

J. S. Redmond

Joseph McClaugherty

Paige Wooldridge

Leroy Katz

Jack Lloyd

Frazier Miller

John Duffy

Bob Austin

Fred P. Burton

C. Edwin Elliott, ex-officio

## ACKNOWLEDGEMENTS

We wish to acknowledge the cooperation and assistance extended to us by the officials of Bluefield, the Planning Commission and City Board. Special acknowledgement goes to the City Manager, Mr. Fred P. Burton, and his staff for their invaluable assistance in the preparation of this report.

Additional valuable information and assistance was provided by the following agencies:

- State Department of Planning and Development
- West Virginia Department of Highways
- West Virginia Department of Commerce
- Region I Planning Council
- Mercer County Board of Education
- West Virginia Department of Employment Security
- Bluefield Chamber of Commerce



# TABLE OF CONTENTS

|                                     | <u>Page</u> |
|-------------------------------------|-------------|
| <u>BACKGROUND STUDIES</u>           |             |
| Base Map . . . . .                  | 1           |
| Building Conditions . . . . .       | 3           |
| Existing Land Use . . . . .         | 7           |
| Population . . . . .                | 21          |
| Economic Base . . . . .             | 46          |
| Community Facilities . . . . .      | 106         |
| Major Thoroughfares . . . . .       | 130         |
| <u>GENERAL GUIDE PLAN</u>           |             |
| ✓ Goals and Objectives . . . . .    | 150         |
| ✓ Future Land Use . . . . .         | 158         |
| Community Facilities Plan . . . . . | 173         |
| Major Thoroughfare Plan . . . . .   | 197         |

## TABLES

| <u>BACKGROUND STUDIES</u>                      | <u>Page</u> |
|--|-------------|
| <u>Building Conditions</u>                     |             |
| Table 1 - 1971 Building Conditions             | 4           |
| <u>Existing Land Use</u>                       |             |
| Table 2 - Existing Land Use - 1974             | 9           |
| Table 3 - Land Use Density - 1974              | 19          |
| <u>Economic Base</u>                           |             |
| Table 4 - Total Labor Force                    | 54          |
| " 5 - Percent in Labor Force                   | 55          |
| " 6 - Population and Labor Force               | 57          |
| " 7 - Labor Force By Occupational Group        | 59          |
| " 8 - Occupational Group And Class Of Workers  | 61          |
| " 9 - Employment And Labor Force Projections   | 66          |
| " 10 - Occupation Group Projections            | 67          |
| " 11 - Family Income                           | 70          |
| " 12 - Median Earnings                         | 70          |
| " 13 - Projected Family Income                 | 72          |
| " 14 - Projected Per Capita Income             | 73          |
| " 15 - Projected Mining Employment             | 78          |
| " 16 - Production Of Coal                      | 79          |
| " 17 - Manufacturing Employment                | 81          |
| " 18 - Projected Manufacturing Employment      | 83          |
| " 19 - Projected Railroad Employment           | 84          |
| " 20 - Wholesale Trade And Employment - 1970   | 85          |
| " 21 - Wholesale Trade And Employment - 1973   | 86          |
| " 22 - Projected Wholesale Trade               | 87          |
| " 23 - Retail Trade And Employment - 1970      | 89          |
| " 24 - Retail Sales - 1970                     | 91          |
| " 25 - Retail Trade And Employment - 1973      | 93          |
| " 26 - Projected Retail Trade And Employment   | 94          |
| " 27 - Services Employment And Sales           | 96          |
| " 28 - Projected Services And Employment       | 97          |
| " 29 - Retail, Services, Wholesale Floor Space | 99          |
| " 30 - Projected Retail Floor Space            | 101         |
| " 31 - Projected Services Floor Space          | 102         |
| " 32 - Projected Wholesale Floor Space         | 105         |
| <u>Community Facilities</u>                    |             |
| Table 33 - School Grade Enrollment             | 108         |
| " 34 - School Enrollment                       | 109         |
| " 35 - School Standards                        | 110         |
| " 36 - Recreation Facilities                   | 120         |



|                                       |             |
|---------------------------------------|-------------|
| <u>Community Facilities (con't.)</u>  | <u>Page</u> |
| Table 37 - Recreation Space Standards | 121         |
| " 38 - Bluefield Government Offices   | 124         |
| " 39 - Library Volume And Circulation | 126         |
| " 40 - Fire Department Equipment      | 127         |

|                                     |     |
|-------------------------------------|-----|
| <u>Major Thoroughfares</u>          |     |
| Table 41 - Existing Mileage Summary | 132 |
| " 42 - Existing Major Thoroughfares | 140 |
| " 43 - Travel Time And Speed        | 142 |
| " 44 - Summary Of External Trips    | 148 |
| " 45 - Summary Of External Trips    | 149 |

#### GENERAL GUIDE PLAN

|  |     |
|--|-----|
| <u>Future Land Use</u>                 |     |
| Table 46 - Future Land Use Allocations | 171 |

|  |     |
|--|-----|
| <u>Community Facilities Plan</u>         |     |
| Table 47 - Educational Statistics - 1990 | 175 |
| " 48 - School Age Population Projection  | 176 |
| " 49 - Police Department Requirements    | 192 |

|  |     |
|--|-----|
| <u>Major Thoroughfare Plan</u>             |     |
| Table 50 - Major Thoroughfare Improvements | 208 |

## CHARTS

### BACKGROUND STUDIES

### Page

#### Population

|  |    |
|--|----|
| Chart 1 - 1960-1970 Age, Sex Characteristics | 34 |
| " 2 - Population Trends - 1940 to 1970       | 36 |
| " 3 - Projected Population - 1960 to 1990    | 43 |

#### Economic Base

|                                       |    |
|---------------------------------------|----|
| Chart 4 - Employment Distribution     | 60 |
| " 5 - Occupation Distribution         | 62 |
| " 6 - Family Income                   | 71 |
| " 7 - Projected Family Income         | 74 |
| " 8 - Projected Per Capita Income     | 75 |
| " 9 - Wholesale Trends And Projection | 88 |
| " 10 - Retail Trends And Projection   | 95 |

## MAPS

### BACKGROUND STUDIES

|                                      |     |
|--------------------------------------|-----|
| Map 1 - Base Map                     | 2   |
| " 2 - Building Conditions            | 6   |
| " 3 - Existing Land Use              | 20  |
| " 4 - Enumeration Districts          | 22  |
| " 5 - Population Distribution - 1970 | 44  |
| " 6 - Population Distribution - 1990 | 45  |
| " 7 - Existing Community Facilities  | 129 |
| " 8 - Existing Major Thoroughfares   | 134 |
| " 9 - 1970 Traffic Volume            | 138 |

### GENERAL GUIDE PLAN

|                                  |     |
|----------------------------------|-----|
| Map 10 - Future Land Use Plan    | 172 |
| " 11 - Community Facilities Plan | 196 |
| " 12 - Major Thoroughfare Plan   | 212 |
| " 13 - Future Area Growth Map    | 213 |



# **BACKGROUND STUDIES**



**base map**

---

**base map**

---



## BASE MAP

In preparation for any Comprehensive Plan, the planner makes use of a variety of maps, depending on the resources of the local government, including an engineering survey map, which is generally maintained by the public works department or city engineer; a topographic map showing contour lines, drainage courses, and other natural features; tax maps showing property lines; and miscellaneous reference maps, such as insurance maps showing structures, and highway maps.

Using these maps and recent aerial photographs, if available, the planner prepares a base map of the community or planning area.

The base map for the City of Bluefield at a scale of 1"=400', showing streets, railroads, property lines and easement lines, structures and municipal boundaries will be used throughout the research and analysis of detailed studies presented in this study.

The City Base Map was updated by the City Engineering Department during 1971. In addition, the planning consultants reviewed and made corrections to the Base Map by comparing the features and information against the city tax maps.

After all modifications were completed the Base Map was reproduced in various scales; to be used for report presentations, rough studies, sketches, and a large scale for wall display.





**building conditions**

---





## BUILDING CONDITIONS

In October, 1971, the City of Bluefield conducted an exterior survey of building conditions in Bluefield. All principal structures, residential and non-residential, were evaluated and classified in one of four categories: sound, minor deterioration, major deterioration, and dilapidated.

Following broadly the terminology and standards employed by the U. S. Bureau of the Census, these classifications were defined as follows:

1. Sound - well maintained; no repairs needed or only minor repairs, normally corrected during regular maintenance.
2. Minor Deterioration - some signs of deterioration evident, minor repairs by normal upkeep required.
3. Major Deterioration - extensive signs of deterioration resulting from serious lack of proper maintenance evident; major repairs needed.
4. Dilapidated - unsound and in need of a substantial number of major repairs or requiring demolition.

Such a survey is somewhat limited because the complete building exterior cannot usually be observed from the street, and it is not possible to obtain information on interior conditions and facilities. In spite of these limitations, a building survey of this type is useful in obtaining preliminary information on building conditions. The findings of the survey are tabulated in Table 1.

Table 1  
Building Conditions, 1971  
City of Bluefield

| <u>*Neighborhoods</u> | <u>Sound</u> | <u>Minor<br/>Deterioration</u> | <u>Major<br/>Dilapidation</u> | <u>Total</u> |
|-----------------------|--------------|--------------------------------|-------------------------------|--------------|
| Bramwell Road         | 52           | 38                             | 5                             | 108          |
| North Side            | 178          | 270                            | 225                           | 801          |
| West End              | 374          | 372                            | 38                            | 792          |
| C.B.D.                | 25           | 73                             | 35                            | 136          |
| Valley Ridge          | 77           | 107                            | 84                            | 285          |
| East End              | 137          | 169                            | 29                            | 338          |
| Southeast             | 1325         | 92                             | 5                             | 1427         |
| Southwest             | <u>1498</u>  | <u>210</u>                     | <u>14</u>                     | <u>1730</u>  |
| Total                 | 3666         | 1331                           | 435                           | 5617         |

\*Neighborhoods are outlined on Building Conditions Map.

In order to later analyze the conditions within the City, the City was divided into eight neighborhoods. The neighborhood boundaries were established on the basis of physical inventories which provide information on social and physical barriers.

The attempt was made to divide the City into near homogeneous units for study purposes.

Map 2 indicates the results of the exterior survey made of the structures in the City for their state of 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 deteriorating sections include the central business district, the North Side area and the Valley Ridge area. Both the West End and East End neighborhoods are showing signs of minor deterioration. South Bluefield shows almost no signs of

major deterioration, although scattered structures with deficient conditions are apparent.

Since the development of the Master Plan in 1962, the building conditions in Bluefield has changed somewhat by the clearance and rehabilitation that has taken place in the Bluefield Avenue Urban Renewal Project and an extensive code enforcement program.







**existing land use**

---



## EXISTING LAND USE

An important element in the Comprehensive Plan is a study of the existing land uses within the City. It describes the location of the various land activities and the interrelationship each has on other community activities. The existing Land Use Study determines whether the buildable land has been developed in the best interests of the City. The use and development of each parcel of land is important, not only to its owner and the adjacent property owners, but to the City as a whole.

## CLASSIFICATION OF LAND USE

To determine how land is used in Bluefield, a Land Use Survey was conducted during February of 1974. This consisted of making an on-the-ground inspection of the entire City. The initial step in conducting the Land Use Survey was to place all lands into the following categories.

- Residential
- Commercial
- Industrial Production
- Mineral Extraction
- Industrial Storage
- Agricultural
- Public Service
- General Community Services
- Open Space
- Vacant

For land use evaluation these categories have been further

broken down in order to permit a more detailed examination and analysis. The land use data was transferred, through the coding system set forth by the Standard Land Use Classification System used in West Virginia, on to a base map of the City at the scale of 1"=400'. Table 2 shows the 1974 Land Use Survey tabulations for the City.



TABLE 2  
EXISTING LAND USE  
Bluefield, W. Va.  
February, 1974

| <u>Standard Land Use<br/>Classification System</u> | <u>Acres</u> | <u>% of Dev.<br/>Land</u> |
|--|--------------|---------------------------|
| <u>Residential</u>                                 |              |                           |
| One-family   | 1,219.54     | 50.6                      |
| Two-family   | 20.60        | 0.9                       |
| Multi-family                                       | 24.55        | 1.0                       |
| Mobile Homes                                       | 3.58         | 0.1                       |
| Total  | 1,268.27     | 52.6                      |
| <u>Commercial</u>                                  |              |                           |
| CBD or Regional                                    | 49.64        | 2.1                       |
| Neighborhood or Local                              | 6.31         | 0.3                       |
| Highway or Auto Oriented                           | 42.33        | 1.7                       |
| Total  | 98.28        | 4.1                       |
| <u>Industrial Production</u>                       | 4.04         | 0.2                       |
| <u>Mineral Extraction</u>                          | -            | -                         |
| <u>Industrial Storage</u>                          |              |                           |
| Warehousing and Wholesaling                        | 10.83        | 0.5                       |
| Open Storage                                       | 12.31        | 0.5                       |
| Total  | 23.14        | 1.0                       |
| <u>Agricultural</u>                                | -            | -                         |
| <u>Public Service</u>                              |              |                           |
| Transportation                                     | 848.30       | 35.2                      |
| Transmission                                       | 1.93         | 0.1                       |
| Sanitation   | 1.84         | 0.1                       |
| Safety   | 0.76         | -                         |
| Total  | 852.83       | 35.4                      |
| <u>General Community Services</u>                  |              |                           |
| Administrative                                     | 1.53         | 0.1                       |
| Health and Welfare                                 | 57.10        | 2.3                       |
| Social and Cultural                                | 2.60         | 0.1                       |
| Total  | 61.23        | 2.5                       |
| <u>Open Space</u>                                  |              |                           |
| Recreation   | 90.89        | 3.8                       |
| Cemeteries   | 9.58         | 0.4                       |
| Total  | 100.47       | 4.2                       |
| TOTAL DEVELOPED LAND                               | 2,408.26     | 46.3                      |
| <u>Vacant</u>                                      |              |                           |
| Woodlands  | 2,484.02     |                           |
| Marshlands   | -            |                           |
| Other Urban Lands                                  | 304.62       |                           |
| Total  | 2,789.02     | 53.7                      |
| TOTAL LAND USE ACRES                               | 5,197.28     | 100.0                     |

## GROWTH INFLUENCES

### Residential

The residential land use pattern in Bluefield is typical of many towns and cities throughout the southern Appalachian Region. The original residential development occurred because of the desirability of living adjacent to the major employment center, the railroad, followed by later suburban type development in outlying areas.

Some of the oldest residential areas are located around the Central Business District and Northside area and tend to rim commercial areas in a shallow strip backing into the hillside. The major residential growth in recent years has occurred in the southern sections of the City, south of Valley Ridge. In older areas, East End, North Side, West End, Valley Ridge, and the Central Business District very little residential growth has occurred because of steep topography, unavailable land, density, and in some cases the unattractive appearance of older residential areas.

Bluefield, unlike many cities, has not experienced a population shift to the suburban areas. Land desirable for residential use outside the City boundary has not developed as desirable neighborhoods. Almost all new residential growth is taking place in scattered locations within South Bluefield. Recently, the City annexed an area south of the City which contains a great deal of good residential development.

Residential uses make up the bulk of the occupied land

areas in Bluefield. Total residential areas account for 1,268.27 acres or 52.6 percent of developed land within the City. This figure accounts for approximately 72.4 acres per 1,000 population throughout the City. Of this, the great majority of residential land is used for sites of single-family homes. The predominance of private homes in Bluefield and the migrated movements from the downtown residential areas to South Bluefield, as well as the trend toward larger lots, explain this unusually large amount of residential land within the City. An additional factor is that of steep topographic variation within the City. Development of some of the steeper slopes for home sites has necessitated the creation of large lots. Areas which contain proportionately large amounts of single-family units are generally located in South Bluefield and the Cumberland Road annexed area. Duplex housing is very scarce except in the older areas where larger homes have been converted to two-family dwellings. Single-family and duplex dwellings account for 1,240.14 acres in the City. Except for low-income apartment units on Hill Street, the construction of multi-family dwellings has been very insignificant in recent years. Mobile home units are sparsely located throughout the City. In recent years, mobile home sites have begun to develop within residential areas along Cumberland Road. Multi-family and mobile homes account for only 28.13 residential acres within the City.

#### Commercial

The major commercial activity is concentrated in the Central Business District lining Federal Street, Bland



Street, and Princeton Avenue. Within the past decade there has been a shift in some commercial areas of the City. Because of the implementation of the Bluefield Avenue Urban Renewal Project, almost all business lining that street has been relocated to other areas. Commercial establishments that once occupied buildings along Princeton Avenue have also relocated because of street improvements, additional parking, better location, or going out of business. However, most of this commercial shift is staying within the City, either within new shopping centers or within the downtown core area. Most of the wholesale business and warehousing are located near the railroad or adjacent to major transportation facilities.

The Central Business District has remained a hub of commercial activity, although some commercial expansion and shopping center activity has developed along the major highways. Two major areas of general or highway-oriented commercial use extend outward from the Central Business District west along Princeton Avenue and Bluefield Avenue, and southward along Bland Street to College Avenue. Major commercial development is also taking place along Cumberland Road from Bland Road to Grassy Branch Cutoff. A few other commercial uses occur at random in other sectors of the City. New commercial growth is particularly strong along Cumberland Road and within the Bluefield Avenue Urban Renewal Area. Total commercial land in Bluefield amounts to 98.28 acres or 4.1 percent of total developed land area.

### Industrial

Almost all industrial uses in Bluefield are located adjacent to the railroad. Industry uses consist mostly of light industrial activities such as lumber and building materials, and mining equipment and service, related to the coal industry. Like commercial land uses, a few industrial uses occur at scattered locations. Industrial use accounts for 27.18 acres or 1.2 percent of total developed land area.

### Public and General Community Uses

Public and general community uses form no consistent pattern. Schools, parks, churches, hospitals and other community facilities are located in various parts of the City and appear to adequately serve the community. Most of the city government structures and public service facilities are located in or near the business district. This category comprises 63.83 acres or 2.7 percent of total developed land.

### Open Space

Park and recreation development represents a relatively small proportion of existing development. The City Park and Bluefield Country Club comprise most of the park and recreation use in the City. Open space use consists of about 100.47 acres or 4.2 percent of developed land.

### Vacant Land

Bluefield is well provided with vacant land. Approximately



2,789.02 acres are either vacant or used for agriculture. However, poor soil conditions and mountainous topography with steep slopes limit the types of use of vacant land in certain areas throughout the City. Much of the rugged terrain is suitable for parks and recreational facilities, and with proper controls much of the steep terrain could be developed as low-density residential use. Tracts of relatively flat land accessible to rail and highways, as well as utilities, is naturally more suitable for industrial and commercial activities. With the predicted growth of the economy, employment and population, important considerations will be the use of vacant land to its greatest potential. Vacant land comprises approximately 53.7 percent of total acreage within the City.

#### Rights-of-Way

Streets, highways and railway rights-of-way, are included in this category. The construction of new streets and parking areas have substantially increased this acreage. The Norfolk and Western Railway right-of-way constitutes a high percentage of this land use. With a total of 850.23 acres in rights-of-way in Bluefield, this comprises 35.3 percent of the total developed acreage. The amount of land for streets, highways, and railroad is slightly more than that of average cities; this is due to the Norfolk and Western Railway and highway right-of-way widths found throughout the City.

#### LAND USE PROBLEMS

The existing land use development pattern in general has

been orderly. However, numerous problems have erupted which will affect the future character of the City.

The most obvious land use problem in Bluefield is the imbalance of uses, especially in residential and industrial uses that affect the economic and physical vitality of the City. The disproportionately low amount of industrial land in Bluefield inhibits industrial expansion and hinders the City in its efforts to provide a higher level of services to the entire community.

Another problem is the lack of level, developable land within the City limits. Although Bluefield has plenty of vacant land, much is inadequate for future development because of topography. Accompanying inadequate amounts of land is the lack of housing for all sectors of the population, including low-income groups. Past market trends in home construction have facilitated or encouraged middle to high income dwelling construction.

The commercial areas in Bluefield are compact and generally well located. Because of topography and zoning controls, commercial use has been allowed to intermittently locate along Bluefield Avenue, Bland Street, and Cumberland Road, outside the immediate downtown area. The existing commercial areas sufficiently serve the convenience shopping demands, even though the commercial useage is relatively small compared to other cities.

Clearly, one of the more serious land use problems is a lack of community facilities to adequately serve the City



population. The greatest deficiency is in public park and recreation space and its distribution, particularly the school playgrounds, neighborhood parks and playfields. Excluding the City Park, all other park and recreation space in the City is insufficient to adequately serve the community. Presently, the City has approximately 18 acres of neighborhood playgrounds and playfields or 1 acre per 1,000 population, as compared to the national standard of almost 2 acres per 1,000 population.

#### LAND USE CHANGES SINCE 1960

Prior to 1960, Bluefield's land use pattern reflected the original growth in the northern valley along the railroad followed by later suburban-type development across Valley Ridge in South Bluefield. Between 1960 and 1974 the City's main concern was to redevelop and revitalize various older commercial and residential areas which were in a blighted condition and no longer adequate for modern use. This is reflected by the implementation of the Bluefield Avenue Urban Renewal Project, the planning stages that now exist for revitalization and improvement of the Northside Urban Renewal Project, and the recent construction of low-income housing units on Hill Street. Recent changes in land uses within the downtown area have taken place since 1960. Several deteriorated buildings have been razed and replaced by new buildings or additional parking areas have developed.

The most important land use change since 1960 occurred

during 1970 with the annexation of 1,649.34 acres in the southern portion of the City. Eventhough this additional land area is not actually a land use change, but the extension of the City's boundaries, it shows a significant change in land uses when compared to 1960 uses.

Low density orderly trends are dominant today throughout the City. Tendencies toward orderly development are clearly notable in population distribution, residential development, retailing, wholesaling, and industrial and office development. The continued trend of dispersement of residences, especially in South Bluefield, has generated a requirement for dispersed schools and playgrounds. Additional small shopping centers, such as Bluefield Plaza and Westgate Shopping Center, have located in suburban areas, supported largely by the suburban type residential development found in South Bluefield and Bluefield, Virginia. The completion of Interstate 77 and future completion of Corridor Q will provide for rapid movement by automobile from north in Mercer County to downtown Bluefield and the nearby shopping centers as well as residential neighborhoods in the southern portions of Bluefield.

At this point, the normal planning procedure would be to compare existing land use statistics in 1960 with the 1974 Land Use Survey statistics. Such a comparison would show land use changes, either reuse or new development by residential, commercial, industrial, public

services, open space, etc. Therefore, trends could be developed based on past growth and used for forecasting future demands. This method will not be used because of apparent error in tabulation of 1960 Land Uses found in Table 10, page 26 of the City of Bluefield Master Plan. Table 10 shows that Bluefield, for 1960 had only 372.1 acres of single-family residential acres. This cannot possibly be accurate and casts doubt on the accuracy of other 1960 existing land use statistics.

For projecting future land use demands, space requirements will be based on current space use and the review of population and employment projections. The Future Land Use section of the Comprehensive Plan explains the projecting methods more fully.



TABLE 3  
LAND USE DENSITY  
Bluefield, W. Va.  
1974

| <u>Land Use</u>            | <u>1974 Acres</u> | <u>Acres<br/>Per 1,000<br/>Population</u> | <u>Acres<br/>Per 1,000<br/>Employment</u> |
|----------------------------|-------------------|---|---|
| Residential                | 1,268.27          | 72.4                                      | 221.9                                     |
| Commercial                 | 98.28             | 5.6                                       | 17.2                                      |
| Industrial Production      | 4.04              | 0.2                                       | 0.7                                       |
| Mineral Extraction         | -                 | -   | -   |
| Industrial Storage         | 23.14             | 1.3                                       | 4.0                                       |
| Agricultural               | -                 | -   | -   |
| Public Service             | 852.83            | 48.7                                      | 149.3                                     |
| General Community Services | 61.23             | 3.5                                       | 10.7                                      |
| Open Space                 | 100.47            | 5.7                                       | 17.6                                      |
| Vacant                     | <u>2,789.02</u>   | <u>159.2</u>                              | <u>488.1</u>                              |
| Total Acres                | 5,197.28          | 296.6                                     | 909.5                                     |

1970 Population (including annexed area) - 17,521

1970 Employment - 5,714.

Gross Density - 3.37 persons per acre.

Residential Net Density - 13.81 persons per acre.





**population**

---



## POPULATION

### 1970 Population Characteristics Analysis

An examination of the first count summary data from the 1970 Census of Population for Bluefield, begins to give a useful profile of the physical, economic, and social condition of the city. This data has been examined, studied and analyzed to draw from it a few significant indexes. Depending upon the kind of answers desired, an enormous number of cross-comparisons and manipulations can yield a variety of conclusions. The following were considered important at this early phase of the update of the Comprehensive Plan. See Map 4 showing the 1970 Census enumeration districts.

The size of family units living in a single-housing unit is quite small, well below the national average. The citywide average is only 2.64 people per housing unit and this figure varies among census enumeration districts within the city from 2.11 to 3.18. A comparison of the people per unit (Chart I) with the average value of the housing unit (Chart II) will show that the five districts with the highest people per unit ratio are also among the seven districts with the lowest average value of house. In other words, the poorer tend to have the larger families which should not come as any surprise.

Chart II shows the relationship between home ownership by race and value of homes. It is perfectly obvious that in districts 39 and 43, which are all or predominantly white, the average unit value is the highest in the city. Interestingly enough, however, in districts 31, 33, 35,





# BLUEFIELD, WEST VIRGINIA

Chart I

| Enum. Dis. | People | Housing | Pop/House |
|------------|--------|---------|-----------|
| 31         | 1,411  | 444     | 3.18      |
| 32         | 1,151  | 380     | 3.02      |
| 33         | 1,133  | 395     | 2.86      |
| 34         | 1,651  | 577     | 2.86      |
| 35         | 1,195  | 424     | 2.81      |
| 36         | 844    | 400     | 2.11      |
| 37         | 622    | 273     | 2.27      |
| 38         | 1,843  | 710     | 2.59      |
| 39         | 1,339  | 499     | 2.68      |
| 40         | 1,225  | 523     | 2.34      |
| 41         | 958    | 356     | 2.69      |
| 42         | 1,467  | 616     | 2.38      |
| 43         | 1,082  | 411     | 2.63      |
| Total      | 15,921 | 6,008   | 2.64      |

BLUEFIELD, WEST VIRGINIA

Chart II

| E.D. | Total Units - Owner Occupied |       | Average \$ Value Per Unit |            |
|------|------------------------------|-------|---------------------------|------------|
|      | White                        | Negro | White                     | Negro      |
| 31   | 137                          | 167   | \$5,888                   | \$6,395    |
| 32   | 8                            | 204   | \$7,357                   | \$7,026    |
| 33   | 112                          | 99    | \$6,651                   | \$6,957    |
| 34   | 355                          | 15    | \$7,867                   | \$5,350    |
| 35   | 142                          | 116   | \$6,087                   | \$6,422    |
| 36   | 92                           | 9     | \$4,878                   | \$6,694    |
| 37   | 101                          | 9     | \$7,297                   | \$8,916    |
| 38   | 304                          | 151   | \$15,155                  | \$5,935    |
| 39   | 432                          | ---   | \$30,234                  | -----      |
| 40   | 264                          | 7     | \$19,593                  | \$7,285    |
| 41   | 242                          | ---   | \$13,722                  | -----      |
| 42   | 412                          | 1     | \$14,777                  | (withheld) |
| 43   | 335                          | ---   | \$22,996                  | -----      |
|      |                              |       |                           |            |
|      |                              |       |                           |            |

36 and 37, the average value of houses owned by Negroes was higher than the average value within the district. This would tend to say that while there are wealthy white neighborhoods, there are very poor white homeowners in certain racially-mixed neighborhoods whose house value is below that of the Negroes in the same district.

Chart III is for all of Bluefield and reflects the value of all owner-occupied units. If an arbitrary figure were assigned to those houses listed as under \$5,000 in value and for those listed as over \$50,000, the average value of houses in Bluefield would be about \$15,000. A truer figure for realistic comparison would be the mean value of owner-occupied units which is closer to \$11,000.

Chart IV relates to rental units. In all cases the Negro renter is paying less per month than the average rent paid in that district. Also, as the number of Negroes increases in a district, the lower the average monthly rent becomes. It should be noted that where the number within a district is quite small, the data is withheld to preserve confidentiality.

Chart V shows the rental range within the city as a whole. The average rent is about \$58.00 per month while the mean rent is about \$55.00.

Throughout the city, 10,931 people live in owner-occupied housing while 4,883 live in rental units. This is a factor of approximately 69 percent owner-occupied to 31

# BLUEFIELD, WEST VIRGINIA

Chart III

| Owner-Occupied Units | Value                |
|----------------------|----------------------|
| 561                  | Less than \$5,000    |
| 940                  | \$5,000 to \$9,999   |
| 653                  | \$10,000 to \$14,999 |
| 492                  | \$15,000 to \$19,999 |
| 270                  | \$20,000 to \$24,999 |
| 262                  | \$25,000 to \$34,999 |
| 160                  | \$35,000 to \$49,999 |
| 114                  | \$50,000 or more     |
| Average Value        | \$15,529             |
| Mean Value           | \$11,000             |



# BLUEFIELD, WEST VIRGINIA

Chart IV

| E.D. | Total Units Rented |       | Per Unit Monthly Rent |          |
|------|--------------------|-------|-----------------------|----------|
|      | White              | Negro | White                 | Negro    |
| 31   | 60                 | 50    | 37                    | 35       |
| 32   | 3                  | 129   | 30                    | 30       |
| 33   | 108                | 36    | 49                    | 35       |
| 34   | 169                | 7     | 47                    | 21       |
| 35   | 66                 | 70    | 36                    | 29       |
| 36   | 254                | 3     | 52                    | Withheld |
| 37   | 128                | 1     | 50                    | Withheld |
| 38   | 126                | 76    | 45                    | 28       |
| 39   | 47                 | 1     | 62                    | Withheld |
| 40   | 215                | 7     | 63                    | 42       |
| 41   | 93                 | --    | 67                    | --       |
| 42   | 183                | 1     | 68                    | Withheld |
| 43   | 59                 | --    | 70                    | --       |
|      |                    |       |                       |          |
|      |                    |       |                       |          |

# BLUEFIELD, WEST VIRGINIA

Chart V

| Renter Occupied | Monthly Rent         |
|-----------------|----------------------|
| 483             | Less than \$40.00    |
| 519             | \$40.00 to \$59.00   |
| 499             | \$60.00 to \$79.00   |
| 139             | \$80.00 to \$99.00   |
| 46              | \$100.00 to \$119.00 |
| 31              | \$120.00 to \$149.00 |
| 11              | \$150.00 to \$199.00 |
| 1,728 Total     |                      |
| Average Rent    | \$58.00              |
| Mean Rent       | \$55.00              |

percent rented. Within the Negro community, over 67 percent are homeowners to 33 percent renters. This means that ownership-renter characteristics between whites and blacks are comparable.

Statistics on people per room in a unit attempt to give a picture of the extent of crowding. The figures show that the number of Negroes living in crowded conditions is half or less than half of the total number of people living in crowded conditions. This means that, since Negroes are 23 percent of the total city, a higher relative percent of them are in crowded conditions than whites. The figures are as follows:

|                       |                              |       |
|-----------------------|------------------------------|-------|
| Total occupied:       | 1 or less people per room    | 5,315 |
| "                     | 1.01 to 1.50 people per room | 215   |
| "                     | 1.51 or more people per room | 86    |
| Total Negro occupied: | 1 or less people per room    | 1,030 |
| "                     | 1.01 to 1.50 people per room | 84    |
| "                     | 1.51 or more people per room | 45    |

Evidence of the out-migration is the housing that is not occupied at all. The census shows 154 vacant units that had been unoccupied for more than six months. It showed 64 units for sale and 150 units for rent.

There is a national phenomenon among Negroes in poverty conditions toward female-headed households. In Bluefield, it appears that about one-quarter of the houses that are crowded are occupied by female-headed families. The numbers are as follows:

|  |     |
|--|-----|
| Husband-wife families with 1.01 or more people per room  | 222 |
| Female-headed families with 1.01 or more people per room | 69  |
| Husband-wife families with 1.51 or more people per room  | 61  |
| Female-headed families with 1.51 or more people per room | 19  |



The extent of crowding with respect to owners versus renters and Negroes versus whites might not be as expected. The total of persons in occupied units with 1.01 or more persons per room is 2,047, but the split between those in owner-occupied units is over half of that total, 1,093 to 954 in renter-occupied units. Negroes comprise slightly less than half of those, 970 living in units with 1.01 or more people per room, and the breakdown between owners and renters is about the same as the totals, 521 in owner-occupied units and 449 in renter-occupied units.

One significant figure for any city relates to plumbing. There are 1,051 people in the city who lack one or more of the following: hot-pipe water, flush toilet, flush toilet for this household only, or bathtub or shower for this household only. These people represent 216 families. Also, 379 people in housing units containing 1.01 people or more per room lack one or more of the above cited basic plumbing facilities.

Chart VI shows the location of these population and housing characteristics which are indicators of social, physical and economic decay and impending crisis. Reading across the columns, the danger signs are certainly present in districts 31 and 38 consistently. Districts 32, 33, 34, 35, and 36 also contain an alarming number of the characteristics of decline. It is interesting to note that even in the more affluent districts the number of units for sale and for rent are fairly high.

Chart VII is a breakdown of all of Bluefield by age group and by race and sex. The out-migration of those in the



BLUEFIELD, WEST VIRGINIA

Chart VI

| E.D. | Units-Sale | Units - Rent | Hus.-Wife :<br>: 1.01 + p/r | Female Hd.:<br>: 1.01 + p/r | Hus.-Wife :<br>: 1.51 + p/r | Female Hd.:<br>: 1.51 + p/r | People w/o :<br>: Plumbing | People 1.01 :<br>: w/o plumb. |
|------|------------|--------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|----------------------------|-------------------------------|
| :    | :          | :            | :                           | :                           | :                           | :                           | :                          | :                             |
| :    | :          | :            | :                           | :                           | :                           | :                           | :                          | :                             |
| :    | :          | :            | :                           | :                           | :                           | :                           | :                          | :                             |
| 31   | 3          | 11           | 42                          | 15                          | 13                          | 4                           | 247                        | 129                           |
| 32   | 1          | 19           | 30                          | 7                           | 13                          | 1                           | 144                        | 39                            |
| 33   | 7          | 16           | 27                          | 9                           | 6                           | 3                           | 131                        | 59                            |
| 34   | 3          | 14           | 24                          | 10                          | 6                           | 2                           | 133                        | 58                            |
| 35   | 6          | 4            | 20                          | 5                           | 3                           | 0                           | 150                        | 22                            |
| 36   | 2          | 32           | 12                          | 6                           | 2                           | 2                           | 70                         | 11                            |
| 37   | 0          | 15           | 9                           | 3                           | 1                           | 0                           | 32                         | 0                             |
| 38   | 12         | 18           | 29                          | 12                          | 8                           | 6                           | 96                         | 34                            |
| 39   | 7          | 0            | 2                           | 0                           | 0                           | 0                           | 3                          | 0                             |
| 40   | 5          | 8            | 8                           | 2                           | 6                           | 1                           | 28                         | 19                            |
| 41   | 8          | 7            | 4                           | 0                           | 0                           | 0                           | 0                          | 0                             |
| 42   | 8          | 7            | 9                           | 0                           | 3                           | 0                           | 13                         | 8                             |
| 43   | 3          | 0            | 6                           | 0                           | 0                           | 0                           | 4                          | 0                             |
| :    | :          | :            | :                           | :                           | :                           | :                           | :                          | :                             |
| :    | :          | :            | :                           | :                           | :                           | :                           | :                          | :                             |
| :    | :          | :            | :                           | :                           | :                           | :                           | :                          | :                             |

most productive ages is clearly evident in the small numbers, males in particular, of those between 25 and 34 in relation to those 15 to 24 and the drop is evident at age 20 on. There are, for example, 243 fewer females age 25 to 34 than there are females age 65 to 74. There are nearly 300 percent more Negro males 65 and over than Negro males 25 to 34 years old. Nearly forty percent of the population of Bluefield is under 15 or over 65. This is a characteristic typical of Appalachia, having serious long-term social and economic consequences.

#### 1960 to 1970 Comparative Characteristics

While the characteristics of the population of Bluefield in 1970 are important in and of themselves, a comparison of certain 1970 characteristics with certain 1960 characteristics indicates what has been happening over the past decade. This may be a trend that can be projected into the future, though this is not necessarily the case. These characteristics are results and can be valid by projection only if their causes can be predicted to continue also.

A careful study and analysis of Chart VII reveals a great deal about the changes in the composition of Bluefield population from 1960 to 1970 with respect to age groups, sexes and races. One note should be made here. In 1960, the population was reported by white and non-white (which included all races in addition to Negroes). In 1970, it was reported for all races and for Negroes, with the races other than white and Negro is infinitesimal in Bluefield and therefore not of significant statistical consequence to invalidate the comparisons.



Chart VII

|          | TOTAL |       |        | WHITE |       |      | NEGRO |      |      |
|----------|-------|-------|--------|-------|-------|------|-------|------|------|
|          | 1960  | 1970  | Net    | 1960  | 1970  | Net  | 1960  | 1970 | Net  |
| Under 5  | 1,779 | 951   | -828   | 1,277 | 694   | -583 | 502   | 257  | -245 |
| 5 to 14  | 3,631 | 2,513 | -1,118 | 2,596 | 1,787 | -809 | 1,035 | 726  | -309 |
| 15 to 24 | 2,495 | 2,581 | +86    | 1,733 | 1,914 | +181 | 762   | 667  | -95  |
| 25 to 34 | 2,059 | 1,306 | -753   | 1,650 | 1,074 | -576 | 409   | 232  | -177 |
| 35 to 44 | 2,583 | 1,761 | -822   | 2,047 | 1,471 | -576 | 536   | 290  | -246 |
| 45 to 54 | 2,456 | 2,209 | -247   | 1,855 | 1,792 | -63  | 601   | 417  | -184 |
| 55 to 64 | 2,158 | 2,021 | -137   | 1,591 | 1,523 | -68  | 567   | 498  | -69  |
| 65 over  | 2,095 | 2,452 | +357   | 1,618 | 1,850 | +232 | 477   | 602  | +125 |

| MALES    | TOTAL |       |      | WHITE |       |      | NEGRO |      |      |
|----------|-------|-------|------|-------|-------|------|-------|------|------|
|          | 1960  | 1970  | Net  | 1960  | 1970  | Net  | 1960  | 1970 | Net  |
| Under 5  | 904   | 473   | -431 | 651   | 356   | -295 | 253   | 117  | -136 |
| 5 to 14  | 1,795 | 1,358 | -437 | 1,304 | 1,001 | -303 | 491   | 357  | -134 |
| 15 to 24 | 1,077 | 1,243 | +166 | 748   | 919   | +171 | 329   | 324  | -5   |
| 25 to 34 | 919   | 589   | -330 | 757   | 490   | -267 | 162   | 99   | -63  |
| 35 to 44 | 1,139 | 725   | -412 | 912   | 613   | -299 | 227   | 112  | -115 |
| 45 to 54 | 1,129 | 985   | -144 | 855   | 800   | -55  | 274   | 185  | -89  |
| 55 to 64 | 999   | 884   | -115 | 738   | 661   | -77  | 261   | 223  | -38  |
| 65 over  | 935   | 975   | +40  | 694   | 704   | +10  | 241   | 271  | +30  |

| FEMALES  | TOTAL |       |      | WHITE |       |      | NEGRO |      |      |
|----------|-------|-------|------|-------|-------|------|-------|------|------|
|          | 1960  | 1970  | Net  | 1960  | 1970  | Net  | 1960  | 1970 | Net  |
| Under 5  | 875   | 478   | -397 | 626   | 338   | -288 | 249   | 140  | -109 |
| 5 to 14  | 1,836 | 1,255 | -581 | 1,292 | 886   | -406 | 544   | 369  | -175 |
| 15 to 24 | 1,418 | 1,338 | -80  | 985   | 995   | +10  | 433   | 343  | -90  |
| 25 to 34 | 1,140 | 717   | -423 | 893   | 584   | -309 | 247   | 133  | -114 |
| 35 to 44 | 1,444 | 936   | -508 | 1,135 | 758   | -377 | 309   | 178  | -131 |
| 45 to 54 | 1,327 | 1,224 | -103 | 1,000 | 992   | -8   | 327   | 232  | -95  |
| 55 to 64 | 1,159 | 1,137 | -22  | 853   | 862   | +9   | 306   | 275  | -31  |
| 65 over  | 1,160 | 1,477 | +317 | 924   | 1,146 | +222 | 236   | 331  | +95  |

## 1960-1970 AGE, SEX CHARACTERISTICS

BLUEFIELD, W. VA.

1960

MALES 47%

FEMALES 53%

UNDER 5

5 - 14

15 - 24

25 - 34

35 - 44

45 - 54

55 - 64

65 OVER

10 9 8 7 6 5 4 3 2 1 0% 1 2 3 4 5 6 7 8 9 10

1970

MALES 46%

FEMALES 54%

UNDER 5

5 - 14

15 - 24

25 - 34

35 - 44

45 - 54

55 - 64

65 OVER

10 9 8 7 6 5 4 3 2 1 0% 1 2 3 4 5 6 7 8 9 10

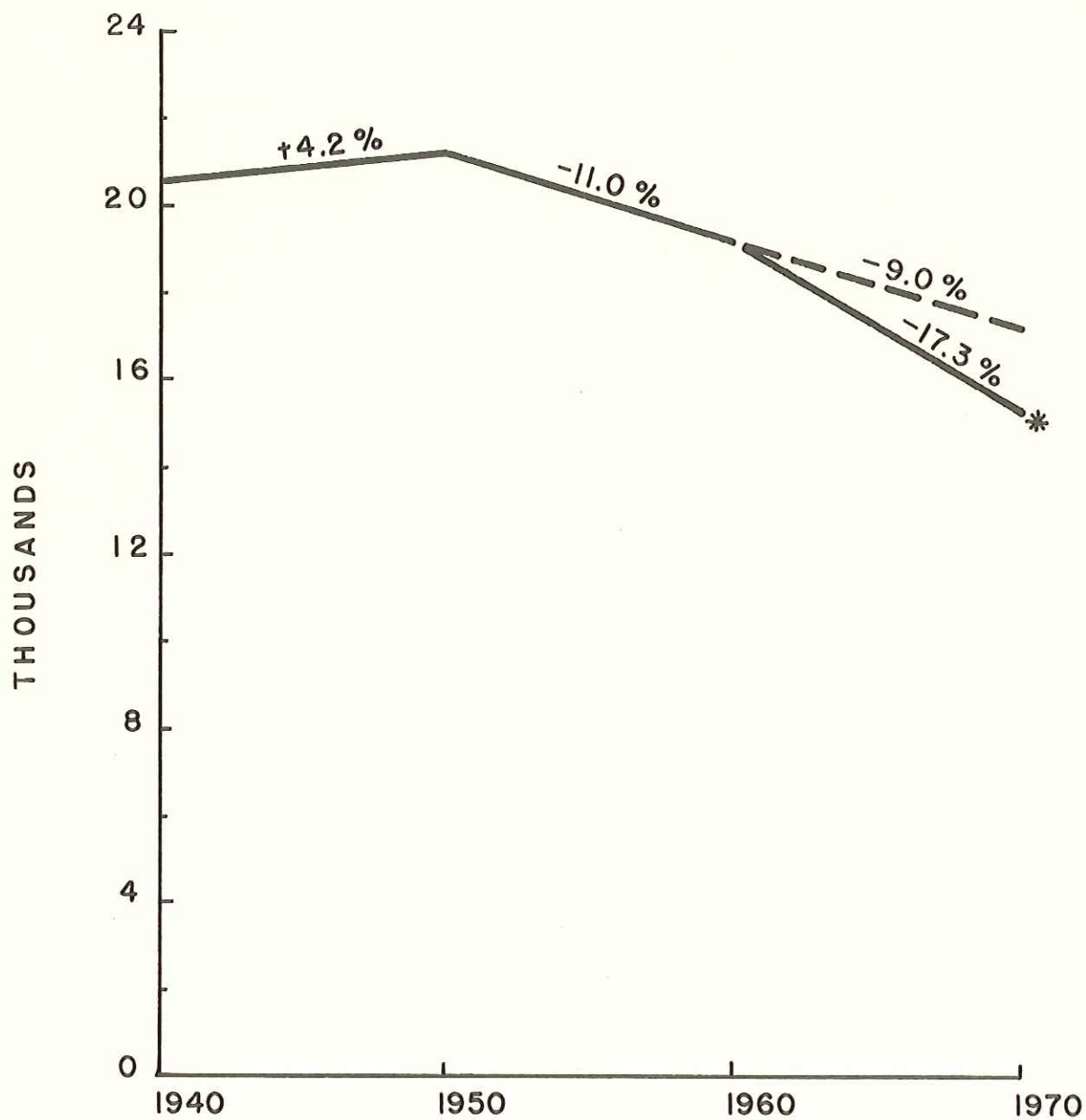


It can be seen that only the age group of 65 years and over increased as a total, for whites and Negroes, and for males and females. Those 65 and over increased as a percent of the total population from 10.9 percent in 1960 to 15.4 percent in 1970 as well. Of the 357 net increase in those over 64, 317 were women and 222 were white women. Also, while Negroes are about one-fourth of the population, they are about one-third of those 65 and over. The age group 15 to 24 years also increased overall but only slightly and in Negroes there was actually a decline in this age.

This Chart can be viewed in two ways. As a 1960 profile versus a 1970 profile, it shows the difference in numbers in specific age groups. Also in age groups from age 5 to 64 the change pattern can be determined by projecting a 1960 number to the next highest age group in 1970. For example, while the age group 15 to 24 increased from 1960 to 1970 by 86 people, the 1960 population in ages 5 to 14 contained 3,631 people whose numbers ten years later had shrunk by approximately 30 percent. There was a net loss from those in ages 5 to 14 in 1960 carried forward to 1970 of 1,189 or over 46 percent. This is most notable among Negroes where 762 between the ages of 15 and 24 in 1960 numbered only 232 in 1970 between the ages of 25 and 34. This loss is of those in the ages of greatest work productivity and also reproductivity as reflected in the substantial decrease in children under age 14. The number of children under five dropped nearly one-half. Also, the ratio of women 15 to 44 years to children less than 15 was 1 to 1.3 in 1960 and only 1 to 1.1 in 1970, showing a decline in the birth rate per women.

## POPULATION TRENDS - 1940 TO 1970

BLUEFIELD, W. VA.



\* NOT INCLUDING 1970 ANNEXED AREA

## POPULATION PROJECTIONS

A "population projection" is just what the term says it is, a projection, and this should not be equated with a prediction. A projection is simply the extension into the future of a line from the past. It is mathematical and contains the implication that those conditions or trends which previously existed will continue to exist in that same fashion or to that same extent.

The City of Bluefield has been in a state of population decline for two decades. The City lost over 2,000 people between 1950 and 1960 and over 3,000 between 1960 and 1970.

| <u>Year</u> | <u>Population</u> | <u>Percent Change</u> |
|-------------|-------------------|-----------------------|
| 1950        | 21,506            |                       |
| 1960        | 19,256            | -10.4                 |
| 1970        | 15,921            | -17.3                 |

While it is true that, by extending its City limits, Bluefield added some 1,735 people to it in 1970, this didn't really affect the economic dynamics of change in the area. The fact remains that during the 1960's net decline occurred at a rate of about 1.5 percent per year and during the 1950's at slightly less than 1.0 percent per year. If the 1960's rate is projected continuously for twenty years, the figures would be as follows:

| <u>Year</u> | <u>Population</u>                    |
|-------------|--------------------------------------|
| 1970        | 17,521 (includes newly annexed area) |
| 1980        | 14,490                               |
| 1990        | 12,284                               |



Since the average rate of loss was 0.5 percent per year during the 1950's than during the 1960's, it might be reasonable to assume an increasing rate of loss during the 1970's and 1980's as well. For example, if the rate of decline were to be 2.0 percent per year in the 1970's and 2.5 percent in the 1980's, the figures would be as follows:

| <u>Year</u> | <u>Population</u> |
|-------------|-------------------|
| 1970        | 17,521            |
| 1980        | 14,017            |
| 1990        | 10,513            |

Population change comes about from three causes: births, deaths, and net migration. Bluefield's birth rate in 1970 was slightly higher than that of the State as a whole and Mercer County as well. At the same time, Bluefield's death rate was considerably higher than that of the State and Mercer County.

|                        | <u>Birth Rate</u> | <u>Death Rate</u> |
|------------------------|-------------------|-------------------|
| State of West Virginia | 17.3%             | 11.4%             |
| Mercer County          | 17.8%             | 12.3%             |
| City of Bluefield      | 18.4%             | 15.6%             |

In all of the above cases, births exceeded deaths, leaving net outmigration as the cause of the population decline in the State, County, and City in the past two decades. At Bluefield's birth and death rates in 1970, the City would gain about 50 people per year if there were equal in and out migration. Since the overall change in the 1960's was a loss of about 300 people per year, outmigration would have had to occur at a rate of 350 people per year to overcome the excess of births over deaths.



Mercer County shows a decreasing rate of decline for 1950 to 1960 as compared with 1960 to 1970 and also shows a substantially decreasing rate of net outmigration.

|               | <u>Percent of Change</u> |                  | <u>Percent Net Migration</u> |                  |
|---------------|--------------------------|------------------|------------------------------|------------------|
|               | <u>1950-1960</u>         | <u>1960-1970</u> | <u>1950-1960</u>             | <u>1960-1970</u> |
| Mercer County | -9.1                     | -7.3             | -23.5                        | -13.3            |

While this was going on, the City of Bluefield had an increasing rate of decline. Also, while the net migration in the County was -13.3 percent, it was -18.6 percent in the City.

Examination of the population pyramid by ages shows an inordinately large number under 20 and over 65 years of age as compared to those in the productive ages. It also shows a large proportion of women to men, 54 percent to 46 percent. In other words, the outmigration is selective, more men than women and particularly those arriving in the labor force ages. Future job opportunity is a vital factor in the future migration pattern and hence growth or decline of the City. If outmigration were stemmed completely and the birth rates continued at the 1970 levels, the population would grow as follows:

| <u>Year</u> | <u>Population</u> |
|-------------|-------------------|
| 1970        | 17,521            |
| 1980        | 18,080            |
| 1990        | 18,620            |

Across the nation, the birth rate appears to be declining slightly and this could happen in Bluefield. The high death rate in Bluefield is probably due to the number of older people there, compared with the County and State as whole.

Should the migration pattern equalize, the death rate could be expected to decline slightly over a period of twenty years, offsetting the effects of a declining birth rate should that occur. In other words, it is reasonable to expect a continuation of the birth-to-death relationship in the future. That would produce a rate of growth of 0.3 percent per year or 3 percent per ten years.

Another method of projecting population is a modified cohort-survival procedure. This technique projects by ten-year age group by carrying an age group forward on the basis of that age group's previous performances. For example, if the age group 15 to 24 lost 47 percent from the 1960 figure to the 1970 figure for ages 25 to 34, then the 1970 figure for age group 15 to 24 is reduced by 47 percent and carried to 1980. The 1980 figure for children 5 to 14 is obtained by adding those under 5 in 1970 to one half of those 5 to 14 in 1970. Children under 5 in 1980 and 1990 are determined by developing a ratio of children under 5 to women of childbearing age both for 1960 and 1970, projecting the females of childbearing age to 1980 and 1990 and thereby projecting children under 5 on the basis of 1980 and 1990 figures for women 15 to 44. Using this method, the age group distribution and totals are as follows:

|             | <u>1960</u>  | <u>1970</u>  | <u>1980</u>  | <u>1990</u>  |
|-------------|--------------|--------------|--------------|--------------|
| Under 5     | 1,779        | 951          | 767          | 570          |
| 5 to 14     | 3,631        | 2,513        | 2,201        | 1,867        |
| 15 to 24    | 2,495        | 2,581        | 1,784        | 1,562        |
| 25 to 34    | 2,059        | 1,306        | 1,367        | 945          |
| 35 to 44    | 2,583        | 1,761        | 1,123        | 975          |
| 45 to 54    | 2,456        | 2,209        | 1,514        | 965          |
| 55 to 64    | 2,158        | 2,021        | 1,833        | 1,256        |
| 65 and over | <u>2,095</u> | <u>2,452</u> | <u>2,283</u> | <u>2,071</u> |
| Totals      | 19,256       | 15,921       | 12,872       | 9,641        |



The assumptions inherent in this method are that migration and birth-death patterns from 1960 to 1970 will continue to 1980 and 1990. Also, the figures projected do not include the area annexed in 1970 since no age breakdown was available for these 1,735 people.

Since migration patterns and rates are directly related to employment levels, a projection of employment levels should be a good basis for forecasting population changes. However, the City of Bluefield could be the place of residence for people who work in Mercer County, perhaps just over the City line, and the reverse could also be the case. Furthermore, the City could annex houses or places of employment in the next twenty years and destroy the basis for a projection if it were for the City alone. For these reasons, it is more valid to project employment within Mercer County, relate that to future migration patterns, and then make an assumption regarding the proportion of the County projection that is applicable to Bluefield.

In 1965, the economic consulting firm of Hammer, Green, Siler Associates made a projection of employment for a Bluefield region that included nine counties. Their curve projection employment increasing between 1965 and 1975 and again from 1975 to 1985 based on an examination of the potential of the regional economy. They also projected an increase in the population of that region and for Mercer County as well as follows:

| <u>Bluefield Region-Nine Counties</u> |             |                   | <u>Mercer County</u> |
|---------------------------------------|-------------|-------------------|----------------------|
|                                       | <u>Jobs</u> | <u>Population</u> | <u>Population</u>    |
| 1960                                  | 75,950      | 306,300           | 68,200               |
| 1965                                  | 73,130      | 287,200           | 65,000               |
| 1975                                  | 77,600      | 287,300           | 65,000               |
| 1985                                  | 82,500      | 294,800           | 68,000               |

The 1970 population of Mercer County was 63,206, which could tend to support the Hammer, Green, Siler Associates estimate for 1965 and projection for 1975. It is interesting to note, however, that the number of people employed and the payrolls increased steadily from 1964 to 1970 in Mercer County, during a decade in which the County lost 5,000 people. Possible explanations for this include the fact that household size was decreasing, which means that jobs relate more to households than to total population, and it could be that those occupying the new jobs were commuting into the County to work.

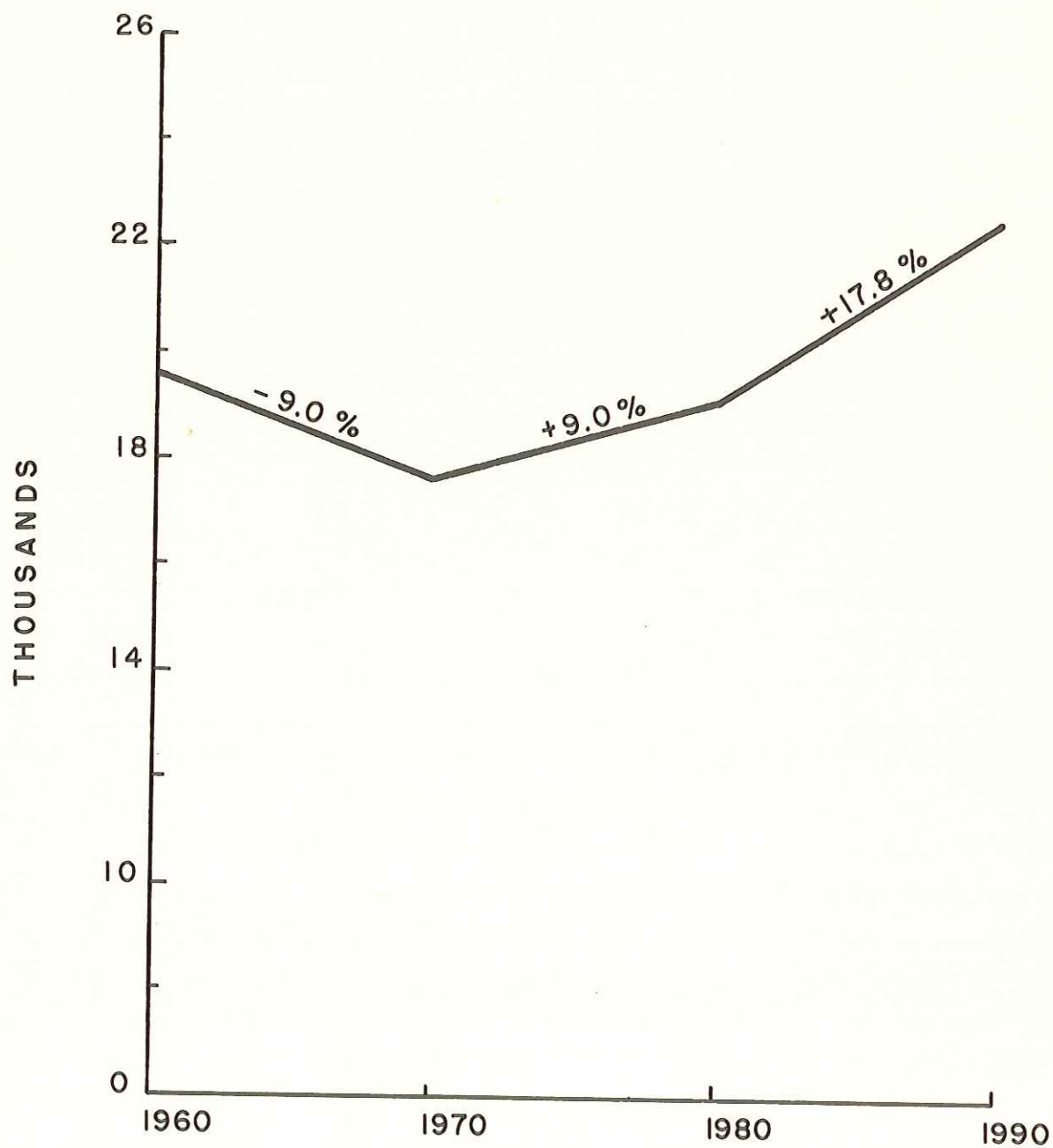
It must be noted that, while the overall figures are increasing, there are areas that are declining such as mining. Manufacturing and services carry the bulk of the increase. This encouraging sign of an upswing in the area economy, while gradual, is never-the-less significant in its direction, perhaps signaling a bottoming out of the past decline. Using the County business patterns in combination with the Hammer, Green, Siler Associate figures, an optimistic projection, assuming a continued successful effort to bring new basic industry jobs to the area, would show a regaining of population by 1975 of the 1965 level and by 1985 to the 1960 level. It would then be reasonable to project to 1990 as follows:

| <u>Bluefield Population Forecast</u> |                           |
|--------------------------------------|---------------------------|
| 1960                                 | 19,256                    |
| 1970                                 | 17,521 (after annexation) |
| 1980                                 | 19,100                    |
| 1990                                 | 22,500                    |



## PROJECTED POPULATION - 1960 TO 1990

BLUEFIELD, W. VA.







**economic base**

---





## SUMMARY OF CONCLUSIONS

- I. Bluefield's economic position has improved considerably within the past few years. Population losses and employment declines have been reduced and many factors indicate a reasonable growth over the next two decades.
- II. What was once a mining and railroad economy has been strengthened by increased importance of merchandising and manufacturing to yield a diversified economy which indicates a healthy future. The national shift from oil to coal is expected to have a favorable result on the Bluefield region but its effect is expected to be moderate due to the economic diversification of the community.
- III, The economy of Bluefield is expected to show continued improvement in the years immediately ahead. With local leadership taking advantage of all opportunities to encourage economic growth, the City will by 1990, record the following gains in employment, population and income.

|                   | <u>1970</u> | <u>1990</u> | <u>% Change<br/>1970-1990</u> |
|-------------------|-------------|-------------|-------------------------------|
| Population        | 15,921      | 22,500      | +41%                          |
| Employment        | 5,714       | 8,765       | +53%                          |
| Household Income  | \$7,535     | \$15,645    | +108%                         |
| Per Capita Income | \$2,982     | \$ 6,258    | +110%                         |

- IV. For the future, the manufacturing sector of the economy should be an area of strength. It is expected that manufacturing growth will occur for several reasons: The completion of Interstate 77 and Corridor Q will open new areas for future manufacturing activity; there will be expansion by companies manufacturing or servicing coal mining machinery; employment in soft-goods, especially food and apparel is expected to increase; by utilizing the beauty and natural environment of the region, growth in all types of recreational activity could become a major industry; and, success by local development groups in attracting new industry.
- V. By 1990 Bluefield retail establishments will realize total retail sales of approximately \$69.2 million, a gain of \$17.2 million or 33.1 percent over 1973 sales levels. Some of this increase will be due to inflation but some will be due to increased physical volume. The volume increase will require an additional 333,000 square feet of floor space by 1990.
- VI. Wholesale trade is expected to increase the physical volume by some 29 percent by 1990 requiring an additional 312,000 square feet of area.

## ECONOMIC BASE STUDY

In this section of the report, past trends in the economy of Bluefield will be examined and specific estimates of its future growth potential will be developed. The analysis will be concerned with those aspects of the economy - employment, labor force, retail activity, industry, wholesale and income - which establish the market from which Bluefield draws its support.

As part of an overall Comprehensive Plan, the Economic Base Study is oriented toward present characteristics of the City in order to determine its strength and weaknesses, desirable goals, and help shape and promote the kind of economic development that may be envisioned as most promising, suitable for Bluefield.

Bluefield's economic position within the region trade and service area has remained relatively strong during the past two decades. In the last twenty years, the region has suffered the loss of a large number of coal mining jobs, its basic industry. High unemployment produced substantial out-migration and reduced economic activity in Bluefield. Economic conditions in the region and in Bluefield have improved considerably in recent years. Employment and population losses have been reduced. All factors point to the increased viability of the regional and City economy in the next two decades.

As the regional market strengthens, Bluefield must be alert to its opportunities for development and must take steps to



modernize its physical plant to remain strong competitively. Although major improvements are needed, the basic structure is sound and provides a viable framework for revitalization and redevelopment.

During the study and analysis of this section of the Comprehensive Plan, it was necessary to review and evaluate other documents and reports emphasizing the existing and potential economic characteristics of Bluefield and its market region. Many reports dealing with the economic base characteristics of Bluefield have been documented in recent years. Almost all of these documents present favorable conclusions about the future economic potentials of Bluefield and its market region. So as not to duplicate the same conclusions and recommendations summarized in these documents, excerpts are listed below.

#### Master Plan for Bluefield - 1962

- "For the future, the development of added manufacturing industry is probably Bluefield's best hope for economic recovery."
- "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 business district."

#### Economic and Market Analysis Study - 1973

##### (Demand for Transient Housing in Bluefield)

- "Bluefield's economy has been growing moderately over the last six years. Employment has increased steadily since 1967, and the labor force has become more diversified with areas such as contract construction and service



enjoying strong increases in manpower. The coal industry looks stronger than ever."

- "Economic growth in Bluefield is expected to increase by twenty percent over a ten-year period, or two percent per year."

#### The Plan for Downtown Bluefield - 1966

- "The economic projections for the Bluefield region are cast in terms of opportunities for economic development. The range of opportunities available to the region is thought to be sufficiently large to stem the past downward trends and lead to an upward movement within the next twenty years."
- "The regional economy is shifting away from its traditional dependence upon the coal industry and is giving increased emphasis to manufacturing and service industries."
- "Bluefield is the key retail trade center. No other commercial concentration in the region approaches the level of retailing and services found in Bluefield."

#### Downtown Bluefield - 1966

(An analysis of its Economic Potential)

- "By 1975 total regional employment is projected to increase by 4,470 jobs and by 1985 by another 4,900 jobs."
- "Bluefield will occupy an increasingly important role in the economic development of the region in future years."
- "Because of its location with respect to the region, and the business and industrial services it provides, Bluefield has major advantages over other parts of the region for expanded manufacturing and other types of economic development."

### Coal - The Curse and the Key - 1968

- "It can be said that the Bluefield region stands on the threshold of a period of considerable potential growth. It has the resources in coal, in wood, in mountains, and scenery. It has the beginnings of a wood products industry, and the development of tourism attractions. The region has the people available to fill the jobs which will stem from the development of these resources. Virtually, all that remains is to provide the education and training, the improvement of the environment and the spur to specific projects."

As can be concluded from the above comments, it appears that many planning, engineering and technical reports evaluating the economic prospects of the Bluefield region are very much enthusiastic about future economic developments and accomplishments. With these comments, recommendations and conclusions in mind, this Economic Base Study as part of the Comprehensive Plan will attempt to evaluate and analyze other elements of the Bluefield economic base not fully discussed within the contents of other documents. These elements of the Bluefield economic base are discussed below with supporting tables, charts, and graphs.

### ANALYSIS OF 1970 LABOR FORCE

The composition of the labor force is an important expression of the economic make-up of Bluefield, since it shows how the City's employed residents make their living. It is important to make a clear distinction between labor force and employment. Labor force is that part of the population which



can potentially participate in active employment. For Bluefield, approximately 5,964 are considered as part of the City labor force, or 37.5 percent of total population. Employment is the total number of people working at establishments within the City. The total employment for Bluefield is 5,714, about 96 percent of total labor force. This means that Bluefield has an unemployment rate of about 4 percent

Shown in Table 4 is the 1960 and 1970 employment status and labor force for Bluefield. This summary shows the comparison of sex distribution that makes up total labor force. Several conclusions can be derived from this table as listed below:

The male participation in the labor force has decreased from 71.2 percent during 1960 to 67.3 percent in 1970. For the same period, the female participation increased from 32.5 percent to 36.8 percent, an overall net increase in total labor force of 4.4 percent, (Note: this 4.4 percent increase in total labor force is not actual because of the difference in the initial age group distribution when comparing 1960 and 1970; 1960 is 14 yrs. and over and 1970 is 16 yrs. and over. However, it does indicate that female participation in the labor force is increasing more rapidly than male participation.) This can be explained by the increasing numbers of persons working per family and also by the high rate of male out-migration in recent years.

The male unemployment rate has decreased from 4.3 percent during 1960 to 2.2 percent by 1970. For the same period,

the female unemployment rate increased from 1.4 percent in 1960 to 2.1 percent during 1970.

The total number of males not in the labor force increased from 28.8 percent in 1960 to 32.7 percent during 1970. During the same period, the females not in the labor force decreased from 67.5 percent during 1960 to 63.2 percent in 1970. This means that more females are gaining employment, whereas the male worker as a percentage of total labor force is remaining relatively constant.

When comparing the persons not in the labor force as discussed above with the persons under 65 years, it can readily be seen that women in this category have decreased considerably since 1960. During 1960, there were 45.7 percent of women 14 yrs. and over not in the labor force, by 1970 this percentage decreased to 36.2 percent. This is another indication that more women are participating in the total labor force.

For both males and females not in the labor force and 65 yrs. and over increased by about 5 percent between 1960 and 1970. This indicates that Bluefield is gaining more retired people each decade as a portion of total population.

Table 5 shows the labor force age group distribution as a percentage of the 1970 population. In only one age group did female participation in the labor force be larger than male participation. In the 16 and 17 yrs. age group, there were 0.1 percent more females in the labor force than there



Table 4  
EMPLOYMENT STATUS - TOTAL LABOR FORCE

Bluefield, West Virginia

|   | <u>1960</u>             |          |          |               | <u>1970</u>             |          |          |               |
|---|-------------------------|----------|----------|---------------|-------------------------|----------|----------|---------------|
|   | <u>14 yrs. and Over</u> |          | <u>%</u> | <u>Female</u> | <u>16 yrs. and Over</u> |          | <u>%</u> | <u>Female</u> |
|   | <u>Male</u>             | <u>%</u> |          |               | <u>Male</u>             | <u>%</u> |          |               |
| Total                                   | 6,333                   |          |          | 7,818         | 5,241                   |          |          | 6,643         |
| Labor Force                             | 4,509                   | 71.2     | 32.5     | 2,541         | 3,527                   | 67.3     |          | 2,443         |
| Employed                                | 4,237                   | 66.9     | 31.1     | 2,432         | 3,410                   | 65.1     |          | 2,304         |
| Unemployed                              | 272                     | 4.3      | 1.4      | 109           | 111                     | 2.2      |          | 139           |
| Not in Labor Force                      | 1,824                   | 28.8     | 67.5     | 5,277         | 1,714                   | 32.7     |          | 4,200         |
| Inmate of Institution                   | -                       | -        | -        | -             | -                       | -        |          | 21            |
| Enrolled in School                      | 557                     | 8.8      | 9.4      | 735           | 527                     | 10.1     |          | 491           |
| Under 65 years                          | 608                     | 9.6      | 45.7     | 3,573         | 391                     | 7.4      |          | 2,404         |
| 65 years and over                       | 659                     | 10.4     | 12.4     | 969           | 796                     | 15.2     |          | 1,284         |
| Unemployed as Percent<br>of Labor Force |                         | 6.0      | 4.4      |               |                         | 3.1      |          | 5.7           |

Source: U.S. Census of Population, 1970  
West Virginia Department of Employment Security

Table 5  
EMPLOYMENT STATUS - PERCENT IN LABOR FORCE  
BY SEX AND AGE GROUP

Bluefield, W. Va.

| Age Group        | 1970            |                           |                   |
|------------------|-----------------|---------------------------|-------------------|
|                  | <u>Male - %</u> | <u>Percent Difference</u> | <u>Female - %</u> |
| 14 and 15 yrs.   | 11.2            | 3.0                       | 8.2               |
| 16 and 17 yrs.   | 17.9            | -                         | 18.0              |
| 18 and 19 yrs.   | 56.2            | 11.1                      | 45.1              |
| 20 and 21 yrs.   | 70.5            | 30.6                      | 39.9              |
| 22 to 24 yrs.    | 77.7            | 24.0                      | 53.7              |
| 25 to 34 yrs.    | 86.4            | 38.4                      | 48.0              |
| 35 to 44 yrs.    | 92.4            | 43.8                      | 48.6              |
| 45 to 64 yrs.    | 86.2            | 42.3                      | 43.9              |
| 65 yrs. and over | 19.0            | 7.7                       | 11.3              |
|                  |                 |                           | -                 |
|                  |                 |                           | 0.1               |
|                  |                 |                           | -                 |
|                  |                 |                           | -                 |
|                  |                 |                           | -                 |
|                  |                 |                           | -                 |
|                  |                 |                           | -                 |

Source: U.S. Census of Population, 1970  
West Virginia Department of Employment Security

were males. All other categories as expected, showed a much larger percentage of male participation in the labor force. The largest percentage difference occurred in the 35 to 44 yr. age group where 92.4 percent of males are in the labor force and only 48.6 percent of the females. The 1960 data by this configuration of age group was not available, which would have provided a comparison of age group involvement in total labor force.

Table 6 shows the labor force by industry group as shown in the 1950, 1960, and 1970 Censuses, and its relationship to population and employment. The largest components in the City's 1970 labor force are retail trade, professional services and manufacturing, followed by personal services, wholesale trade, and transportation. Several components have changed rather drastically since 1950 and also 1960. Mining has dropped from 6.8 percent of total employment to about 2.7 percent in 1970. Transportation has decreased from 16.8 percent during 1950 to 7.6 percent in 1970. This is explained by the large number of employment losses by the Norfolk and Western Railway. Manufacturing and professional services have shown the largest gains during the last two decades. Manufacturing increased from 8.3 percent to 11.5 percent and professional services increased from 10.7 percent to 19.8 percent.

Eventhough total employment has dropped by 32 percent since 1950, the composition of the labor force is shifting from the basic mining and railroad industries to a manufacturing and service economic make-up. Another important trend is beginning to develop even with declining population. The unemployment rate has dropped from 5.3 percent in 1960 to 4.2 percent during 1970. During the middle 1960's, the unemployment rate was much higher than during 1960. Also,



Table 6  
POPULATION AND LABOR FORCE

Bluefield, W. Va.

|                                 | <u>1950</u>   |          | <u>1960</u>   |          | <u>1970</u>   |          |
|---------------------------------|---------------|----------|---------------|----------|---------------|----------|
|                                 | <u>Number</u> | <u>%</u> | <u>Number</u> | <u>%</u> | <u>Number</u> | <u>%</u> |
| Population                      | 21,506        |          | 19,256        |          | 15,921*       |          |
| Labor Force                     | 8,755         | 40.7     | 7,036         | 36.5     | 5,964         | 37.5     |
| Unemployed                      | 383           | 4.4      | 373           | 5.3      | 250           | 4.2      |
| Employed                        | 8,362         | 100.0    | 6,663         | 100.0    | 5,714         | 100.0    |
| Agriculture, Forestry           | 26            | 0.3      | 25            | 0.4      | 26            | 0.5      |
| Mining                          | 568           | 6.8      | 228           | 3.4      | 154           | 2.7      |
| Construction                    | 375           | 4.5      | 177           | 2.7      | 209           | 3.7      |
| Manufacturing                   | 698           | 8.3      | 723           | 10.9     | 658           | 11.5     |
| Transportation                  | 1,401         | 16.8     | 798           | 12.0     | 435           | 7.6      |
| Communications, Utilities       | 336           | 4.0      | 242           | 3.6      | 344           | 6.0      |
| Wholesale Trade                 | 575           | 6.9      | 569           | 8.5      | 455           | 8.0      |
| Retail Trade                    | 1,625         | 19.4     | 1,070         | 16.1     | 1,111         | 19.4     |
| Finance, Insurance, Real Estate | 374           | 4.5      | 325           | 4.9      | 280           | 4.9      |
| Business and Repair Service     | 216           | 2.6      | 234           | 3.5      | 137           | 2.4      |
| Personal Services               | 825           | 9.9      | 655           | 9.8      | 496           | 8.7      |
| Amusements                      | 102           | 1.2      | 129           | 1.9      | 33            | 0.6      |
| Professional Services           | 894           | 10.7     | 1,170         | 17.6     | 1,136         | 19.8     |
| Government                      | 202           | 2.4      | 176           | 2.6      | 240           | 4.2      |
| Not Reported                    | 145           | 1.7      | 142           | 2.1      | -             | -        |

Source: U.S. Census of Population  
West Virginia Department of Employed Security

\*Not including new annexed area



the labor force as part of the overall population is gradually increasing. This can be explained by the increasing numbers of women in the labor force and also young people over 16 years of age.

Table 7 shows the labor force composition in terms of occupational groups. For the decade, it appears that the significant trends have continued. Only four occupational groups have increased their total make-up of the labor force. These include professional and technical, sales workers, manufacturing, and service workers. Overall, these occupational groups increased their composition of the total labor force by 5.3 percent from 1960 to 1970. Other occupational groups remained fairly constant or decreased slightly over the ten year period. Only two occupational groups showed significant losses during the last decade; these include laborers and private household workers. The manufacturing occupation group shown in Table 7 would realize a much larger percentage increase than is depicted, because this category also includes the transport equipment occupation group which includes the railroad industry that has shown a considerable loss of employment since 1960.

These changes in the composition of labor force occupation groups are part of an overall shift upward in occupational levels, with the proportion of laborers and semi-skilled workers declining and the proportion of professional, managerial, manufacturing, and clerical workers increasing.

Table 8 shows the 1970 Census tabulation of occupation groups in more detail, with subcategories of occupation groups and a breakdown by sex. Some items of interest brought out by this table are the following:

Table 7  
LABOR FORCE BY OCCUPATIONAL GROUP  
Bluefield, W. Va.

| <u>Occupation Group</u>              | <u>1960</u>   |              | <u>1970</u>   |              |
|--------------------------------------|---------------|--------------|---------------|--------------|
|                                      | <u>Number</u> | <u>%</u>     | <u>Number</u> | <u>%</u>     |
| <u>Employed Civilian Labor Force</u> | <u>6,663</u>  | <u>100.0</u> | <u>5,714</u>  | <u>100.0</u> |
| Professional, Technical              | 876           | 13.1         | 808           | 14.4         |
| Managers, Administrators             | 688           | 10.3         | 593           | 10.4         |
| Sales Workers                        |               |              |               |              |
| Clerical Workers                     | 1,881         | 28.3         | 1,670         | 29.2         |
| Craftsmen, Foremen                   | 747           | 10.9         | 678           | 11.9         |
| Operatives - Manufacturing           |               |              |               |              |
| Transport Equipment                  | 725           | 10.9         | 696           | 12.2         |
| Laborers                             | 301           | 4.5          | 241           | 3.7          |
| Farmers                              | 8             | 0.1          | 10            | 0.2          |
| Service Workers                      | 798           | 12.0         | 791           | 13.8         |
| Private Household                    | 364           | 5.5          | 254           | 4.4          |
| Not Reported                         | 275           | 4.1          | -             | -            |

CHART 4

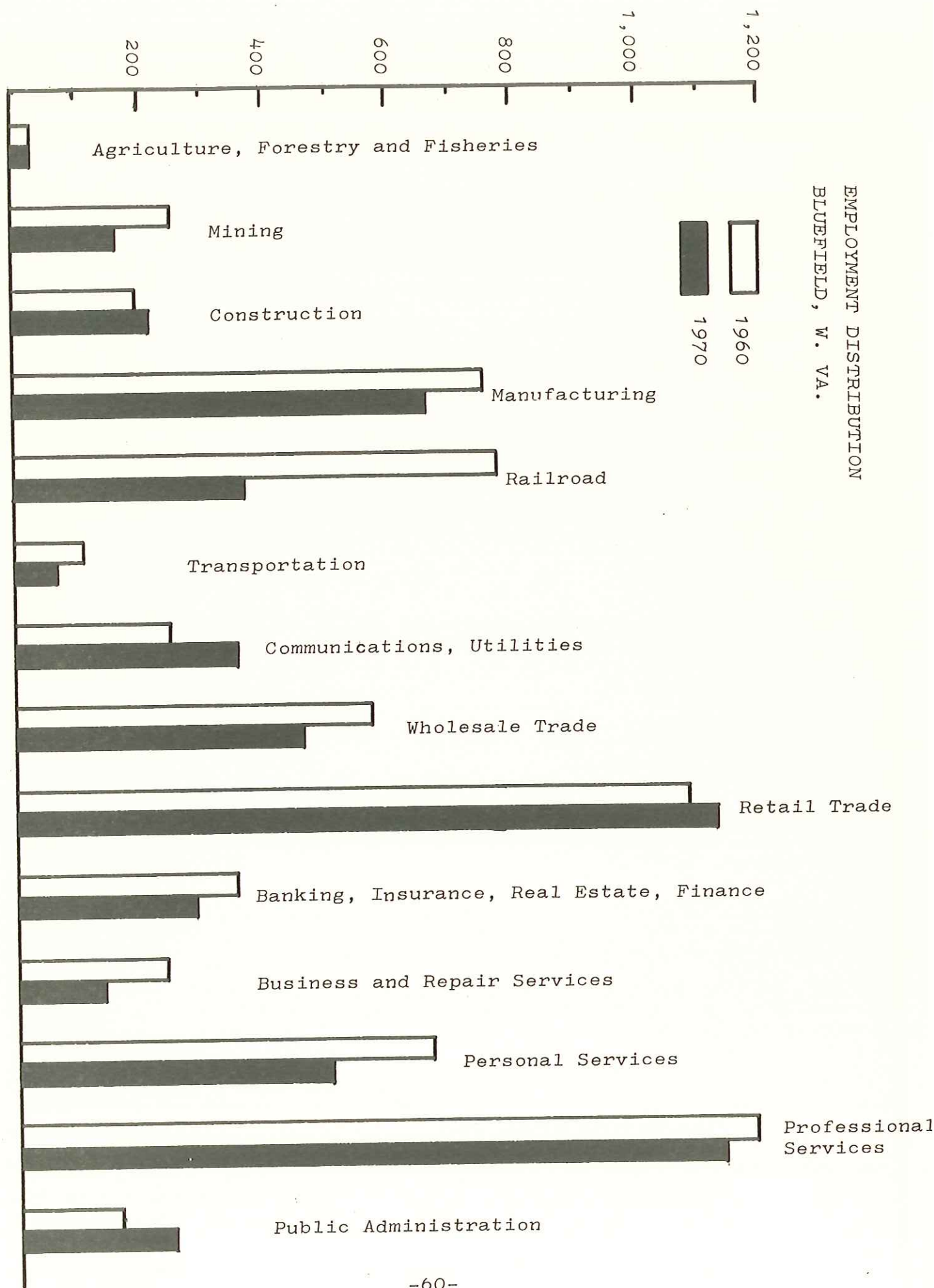




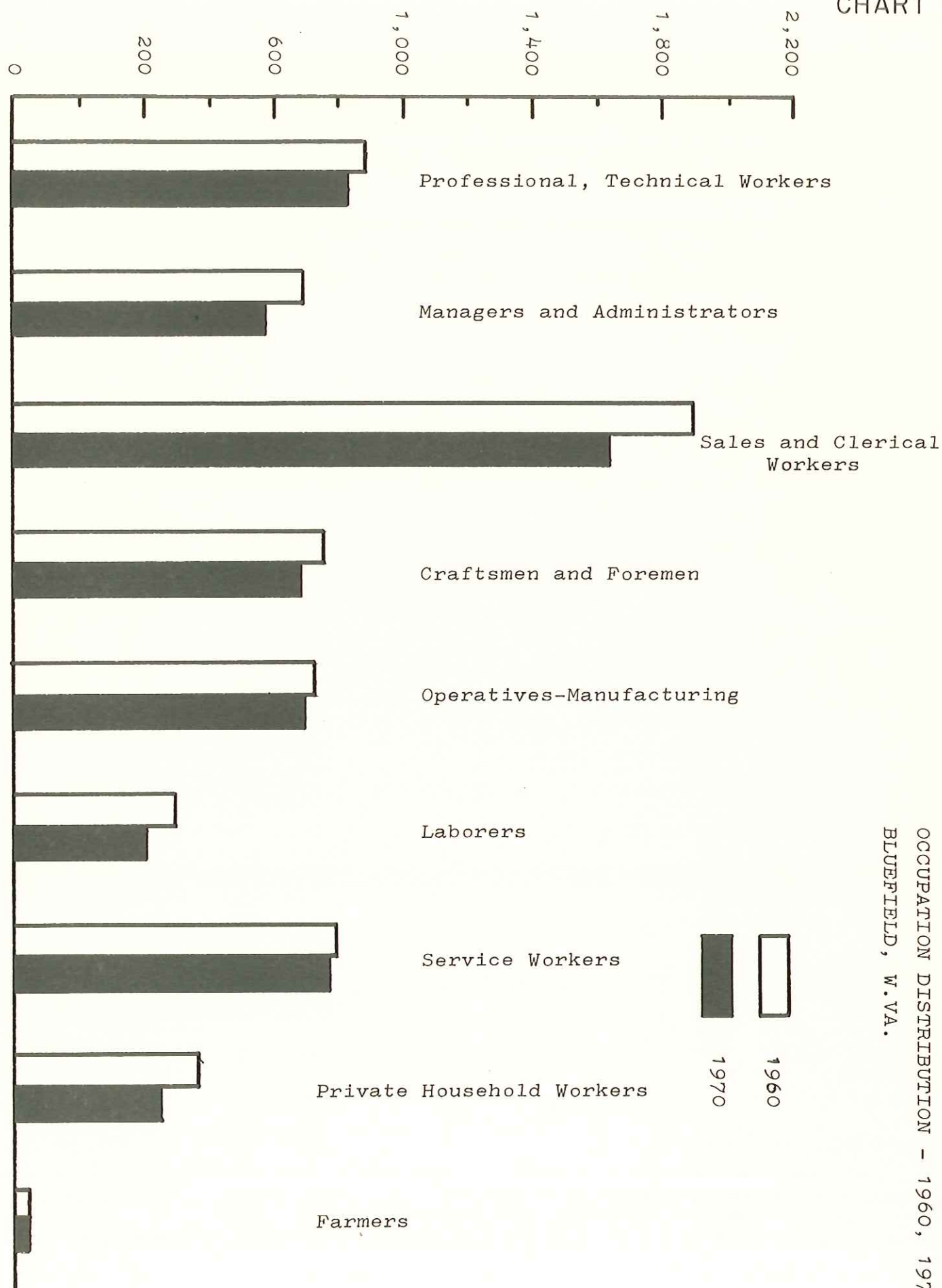
Table 8  
EMPLOYED LABOR FORCE BY OCCUPATION  
GROUP AND CLASS OF WORKERS, BY SEX, 1970  
Bluefield, W. Va.

| <u>Occupational Group</u>               | <u>Male</u>   |          | <u>Female</u> |          |
|---|---------------|----------|---------------|----------|
|   | <u>Number</u> | <u>%</u> | <u>Number</u> | <u>%</u> |
| Total                                   | 3,410         | 100.0    | 2,304         | 100.0    |
| <u>Professional, Technical</u>          | 386           | 11.3     | 422           | 18.3     |
| Engineers                               | 62            | 1.8      | -             | -        |
| Medical & Health                        | 94            | 2.8      | 143           | 6.2      |
| Teachers                                | 64            | 1.9      | 195           | 8.5      |
| Other                                   | 166           | 4.8      | 84            | 3.6      |
| <u>Managers and Administrators</u>      | 528           | 15.5     | 65            | 2.8      |
| Salaried                                | 451           | 13.2     | 39            | 1.7      |
| Self-Employed: Retail Trade             | 41            | 1.2      | 16            | 0.7      |
| Other                                   | 36            | 1.1      | 10            | 0.4      |
| <u>Sales Workers</u>                    | 394           | 11.6     | 182           | 7.9      |
| Retail Trade                            | 114           | 3.3      | 161           | 7.0      |
| Other                                   | 280           | 8.3      | 21            | 0.9      |
| <u>Clerical</u>                         | 332           | 9.7      | 762           | 33.1     |
| Bookkeepers                             | -             | -        | 88            | 3.8      |
| Secretaries, Stenographers              | -             | -        | 309           | 13.4     |
| Other                                   | -             | -        | 365           | 15.9     |
| <u>Craftsmen, Foremen, etc.</u>         | 642           | 18.9     | 36            | 1.6      |
| Auto Mechanics                          | 72            | 2.1      | -             | -        |
| Mechanics, Repairmen, except automobile | 154           | 4.5      | -             | -        |
| Metal Craftsmen                         | 41            | 1.2      | -             | -        |
| Construction Craftsmen                  | 94            | 2.8      | -             | -        |
| Other                                   | 281           | 8.3      | -             | -        |
| <u>Operatives</u>                       | 267           | 7.8      | 106           | 4.6      |
| Durable Goods Manufacturing             | 83            | 2.4      | 39            | 1.7      |
| Nondurable Goods                        | 27            | 0.8      | 19            | 0.8      |
| Nonmanufacturing Industries             | 157           | 4.6      | 48            | 2.1      |
| <u>Transport Operatives</u>             | 317           | 9.3      | 6             | 0.3      |
| <u>Laborers, except farm</u>            | 214           | 6.3      | -             | -        |
| Construction                            | 15            | 0.4      | -             | -        |
| Freight, Stock, Material                | 99            | 2.9      | -             | -        |
| Other                                   | 100           | 3.0      | -             | -        |
| <u>Farmers and Farm Managers</u>        | 5             | 0.1      | 5             | 0.2      |
| <u>Service Workers</u>                  | 325           | 9.5      | 466           | 20.2     |
| Cleaning                                | 133           | 3.8      | 83            | 3.6      |
| Food                                    | 45            | 1.3      | 205           | 8.8      |
| Health                                  | 24            | 0.7      | 80            | 3.5      |
| Personal                                | 60            | 1.8      | 69            | 3.0      |
| Protective                              | 57            | 1.7      | -             | -        |
| Other                                   | 6             | 0.2      | 29            | 1.3      |
| <u>Private Household Workers</u>        | -             | -        | 254           | 11.0     |

Source: U.S. Census of Population, 1970  
West Virginia Department of Employment Security



CHART 5



- The percentage of female work force in the professional and technical group is higher than that of the male work force, primarily because of female teachers and nurses.
- As can be expected, the female clerical workers outnumber males two to one.
- A large proportion of women are working as operatives in durable goods manufacturing - lumber, bakeries, machinery, printing, etc.: nonmanufacturing industries - utility companies, supplies, specialty services, etc.
- The male work force was somewhat more evenly distributed through the occupational groups than the female. Almost one-half of the males, however, are managers and administrators, professional and technical, or craftsmen and foremen. The bulk of the female work force is clerical, service workers, professional and private household workers. Less than one-quarter of female workers is in all of the other categories combined.

#### EMPLOYMENT AND LABOR FORCE PROJECTIONS

Recent trends in Bluefield's labor force have indicated that the economy is stabilizing. Between 1950 and 1960 the labor force as a percentage of total population declined by 4.2 percent. This was brought about by the out migration of workers to other areas. Since 1960 the labor force has increased by 1.0 percent eventhough total population and

employment declined. This is explained by the increasing numbers of women and young people entering the work force.

Changes in Bluefield's economy since 1960 give rise to cautious optimism and hope for future improvement. Our economic projections for Bluefield and the region are based upon an evaluation of the emerging opportunities for development. The wide range of opportunities available to Bluefield is sufficiently large that the past downward trends can be stemmed and that an upward movement can well occur within the next 20 years.

Table 9 shows that major employment growth areas will be in manufacturing, contract construction, services, and retail and wholesale trade. Although employment in local manufacturing has been declining, completion of I-77 and Corridor Q close to Bluefield should alter this trend and bolster the manufacturing industry.

Future estimates of Bluefield's labor force and employment have been related to population by calculating the population participation ratio - or the percentage of employment and labor force that makeup total population. Since 1960 employment has begun to stabilize and some sectors have realized gains in employment - construction, retail trade and communications and utilities. We estimate that the 1970 employment participation ratio has increased to 35.8 from a low of 21.5 in 1958, and should move gradually upward from the 1970 level. For estimating employment, the population ratio has been forecast to reach 36.5 in 1980 and 38.9 in 1990. At these levels, the employment of Bluefield will increase slightly to 6,980 in 1980 and to 8,765 by 1990. The labor force is expected to increase



but not as rapidly as employment because of slightly higher rate of unemployment occurring during middle 1970's.

With this estimated increase of over 3,000 additional employed persons by 1990, it becomes apparent that the labor force must provide the needed occupation worker to support such growth. Our estimates forecast a 1990 population growth for Bluefield at about 22,500 people. This population forecast is based on the turn about of out-migration, particularly those arriving in the labor force ages, and the City's progress in promoting future job opportunities.

Table 10 shows the projected occupation groups that must be provided to support the employment forecasts. The 1990 occupation group projections are also based on the population ratio, using 1970 as the base year and projecting each group as it relates to the primary economic growth sectors, such as mining, construction and manufacturing. Other occupational groups are so called support sectors of the economy and are directly susceptible to the primary industries.



TABLE 9  
EMPLOYMENT AND LABOR FORCE PROJECTIONS  
BLUEFIELD, W. VA.

|                                 | <u>1960</u> | <u>1970</u> | <u>1980</u> | <u>1990</u> |
|---------------------------------|-------------|-------------|-------------|-------------|
| Labor Force                     | 7,036       | 5,964       | 7,350       | 9,225       |
| Population                      | 19,256      | 15,921*     | 19,100      | 22,500      |
| Employment                      | 6,663       | 5,714       | 6,980       | 8,765       |
| Mining                          | 228         | 154         | 210         | 265         |
| Construction                    | 177         | 209         | 258         | 320         |
| Manufacturing                   | 723         | 658         | 805         | 1,010       |
| Transportation                  | 798         | 435         | 530         | 665         |
| Communications<br>and Utilities | 242         | 344         | 420         | 525         |
| Wholesale                       | 569         | 455         | 558         | 705         |
| Retail                          | 1,070       | 1,111       | 1,665       | 1,778       |
| Services                        | 2,689       | 2,322       | 2,744       | 3,435       |
| Others                          | 167         | 26          | 140         | 175         |

\*Not including annexed area.

Source: 1970 Census and Estimates by Balzer and Associates.

TABLE 10  
OCCUPATION GROUP PROJECTIONS  
BLUEFIELD, W. VA.

| <u>Occupation Group</u>     | <u>1970</u> | <u>1980</u> | <u>1990</u> |
|-----------------------------|-------------|-------------|-------------|
| Professional, Technical     | 808         | 993         | 1,240       |
| Managers and Administrators | 593         | 743         | 940         |
| Sales Workers               | 576         | 691         | 865         |
| Clerical                    | 1,094       | 1,332       | 1,675       |
| Craftsmen, Foremen          | 678         | 837         | 1,056       |
| Operatives                  | 373         | 465         | 581         |
| Transport Operatives        | 323         | 395         | 493         |
| Laborers                    | 224         | 285         | 355         |
| Service Workers             | 791         | 949         | 1,197       |
| Household Workers           | <u>254</u>  | <u>290</u>  | <u>363</u>  |
| TOTAL LABOR FORCE           | 5,714       | 6,980       | 8,765       |

Source: 1970 Census and Estimates by Balzer and Associates.

## FAMILY INCOME

The median annual family income in Bluefield for 1970 was \$7,535, this is 55.5 percent higher than the 1960 figure of \$4,846. Table 11 shows the family income distribution by income groups. About 13.3 percent of Bluefield's families had incomes over \$15,000 during 1970, as compared to only 5.6 percent in 1960. More than 17 percent had incomes under \$3,000 in 1970, while 27.5 percent had incomes of less than \$3,000 during 1960. The most significant shift in family income that occurred during the decade was the change of highest percentage of families during 1960 in the \$3,000 and under category of 27.5 percent to 1970 had shifted to the \$10,000 - \$14,999 category at 20.5 percent. The 1970 family income distribution is relatively constant throughout all categories, the highest being 20.5 percent in the \$10,000-\$14,999 category and the lowest of 13.2 being in the \$5,000-\$6,999 category. For 1960 the family income distribution was much heavier in the lower income categories.

A number of factors affecting family income in Bluefield have occurred during the last decade. First, there has been monetary inflation, amounting to about 30 percent during the ten-year period. Second, increases in real wages have taken place due to higher productivity in many economic sectors. Third, there has been a significant decrease in unemployment, which has resulted in a larger percentage of the population receiving wages and a higher per capita income. And, fourth, there has been a shift in the occupational structure; the relative number of mining and railroad workers has decreased

while other occupations have increased in proportion to the total.

Table 12 shows the median earnings of selected income groups. The total 1970 median income for males is \$6,657, more than double the median income for females of \$3,023. Based on available information the highest paid female selected income group is clerical at \$3,818, and the highest paid income group for males are professional and managerial at \$9,538. As expected, the lowest selected income group for males is laborers. The lowest for female workers are operatives and transport.

The per capita income in Bluefield increased from \$1,346 in 1960 to about \$2,982 in 1970. This is an overall gain of 121.7 percent. This can be attributed to the increasing family income, and also the number of workers per family increased during the last ten years.



TABLE 11

FAMILY INCOME  
Bluefield, W. Va.

|  | <u>1960</u> | <u>% Change</u> | <u>1970</u> |
|--|-------------|-----------------|-------------|
| Median Family Income                   | \$4,846     | + 55.5          | \$7,535     |
| Number of Families                     | 5,018       | - 15.5          | 4,238       |
| Percent of Families<br>with income of: |             |                 |             |
| under \$3,000                          | 27.5        | - 10.4          | 17.1        |
| \$3,000 - \$4,999                      | 24.4        | - 8.4           | 16.0        |
| \$5,000 - \$6,999                      | 19.9        | - 6.7           | 13.2        |
| \$7,000 - \$9,999                      | 17.0        | + 2.9           | 19.9        |
| \$10,000 - \$14,999                    | 5.6         | + 14.9          | 20.5        |
| over \$15,000                          | 5.6         | + 7.7           | 13.3        |
| Per Capita Income                      | \$1,346     | + 121.7         | \$2,982     |

Source: U.S. Census of Population, 1970  
West Virginia Department of Employment Security

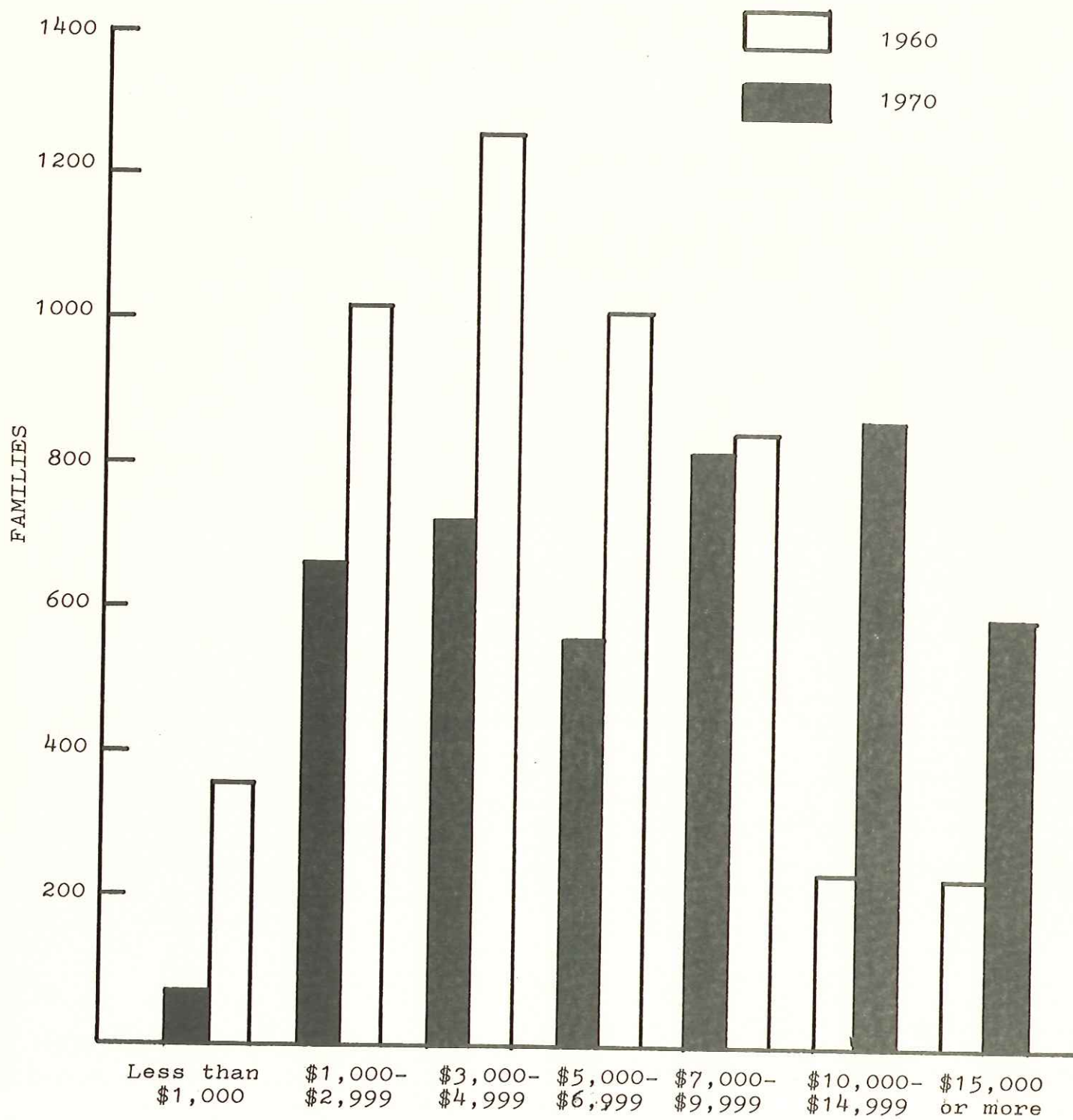
TABLE 12  
MEDIAN EARNINGS OF INDIVIDUALS OF  
SELECTED INCOME GROUPS

Bluefield, W. Va.

|                                | <u>1970</u> |               |
|--------------------------------|-------------|---------------|
|                                | <u>Male</u> | <u>Female</u> |
| Total                          | \$6,657     | \$3,023       |
| Professional, Managerial, etc. | 9,538       | -             |
| Craftsmen, Foremen, etc.       | 6,783       | -             |
| Operatives, Transport, etc.    | 6,061       | 2,625         |
| Laborers                       | 3,053       | -             |
| Clerical                       | -           | 3,818         |

Source: U.S. Census of Population, 1970  
West Virginia Department of Employment Security

FAMILY INCOME  
BLUEFIELD, WEST VA.



## INCOME PROJECTIONS

Forecasts of Bluefield's future family and per capita income levels have been based on the assumption that the rate of increase will be substantially above increases of recent years. While Bluefield is not expected to catch up with the national average, it is expected to be above its own past performance.

The annual rate of gain has been projected at about 4.0 percent, more than double recent increases, but still less than national and state rates. At this rate of expansion, family incomes in Bluefield will average \$10,845 in 1980 and increase to \$15,645 by 1990.

TABLE 13  
PROJECTED FAMILY INCOME  
CITY OF BLUEFIELD

| <u>Year</u> | <u>Family Annual Income</u> |
|-------------|-----------------------------|
| 1960        | \$ 4,846                    |
| 1970        | 7,535                       |
| 1975        | 9,040                       |
| 1980        | 10,845                      |
| 1985        | 13,020                      |
| 1990        | 15,645                      |

Source: Estimates by Balzer and Associates.

Per capita incomes are projected to grow at the rate of 4.0 percent per annum between 1970 and 1990 for Bluefield. Pop-

ulation and total family income projections indicate that Bluefield residents could be expected to enjoy per capita income in excess of \$4,300 per year in 1980, and over \$6,250 per year in 1990.

TABLE 14  
PROJECTED PER CAPITA INCOME  
CITY OF BLUEFIELD

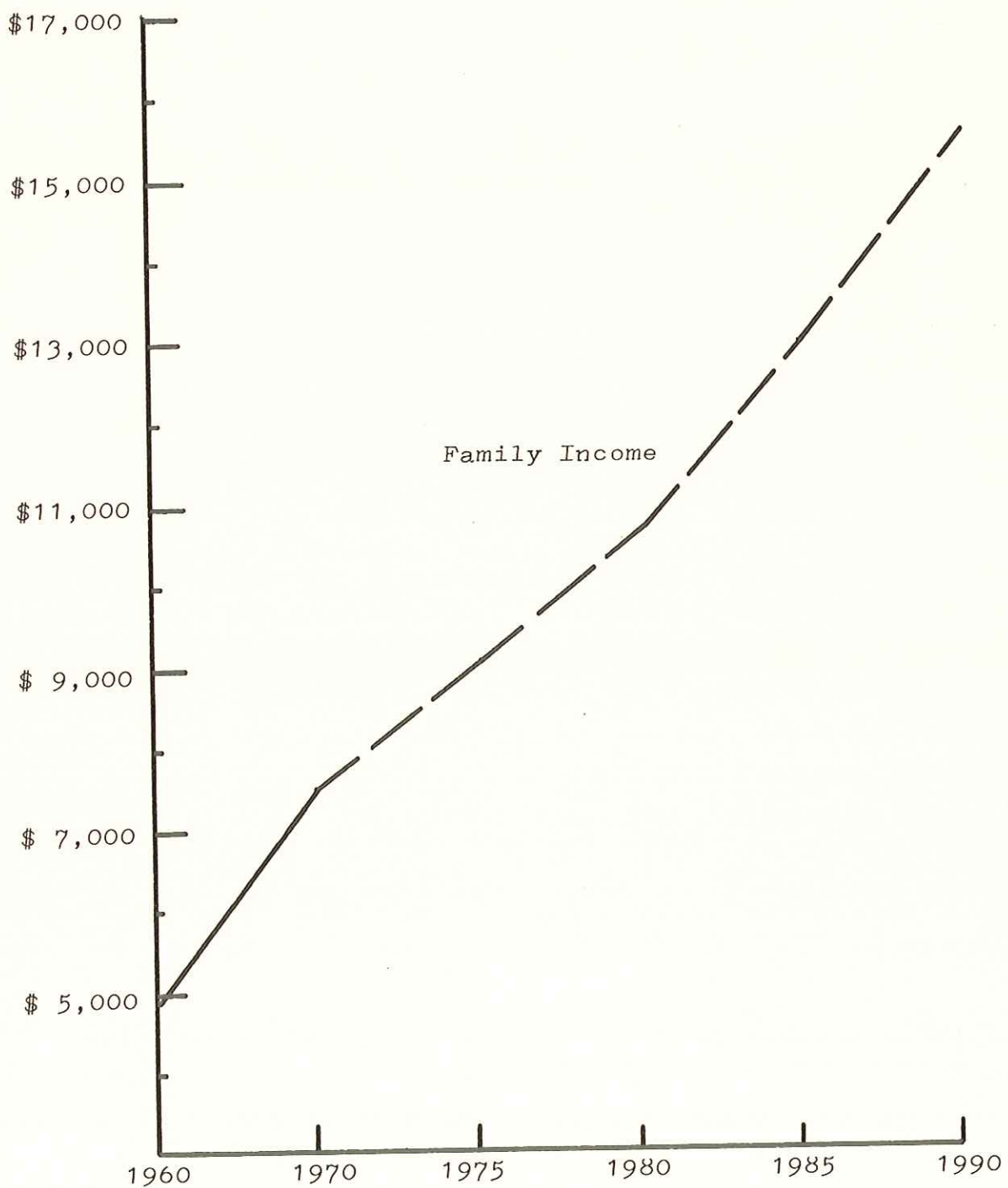
| <u>Year</u> | <u>Per Capita Income</u> |
|-------------|--------------------------|
| 1960        | \$ 1, 346                |
| 1970        | 2,982                    |
| 1975        | 3,616                    |
| 1980        | 4,338                    |
| 1985        | 5,208                    |
| 1990        | 6,258                    |

Source: Estimates by Balzer and Associates.

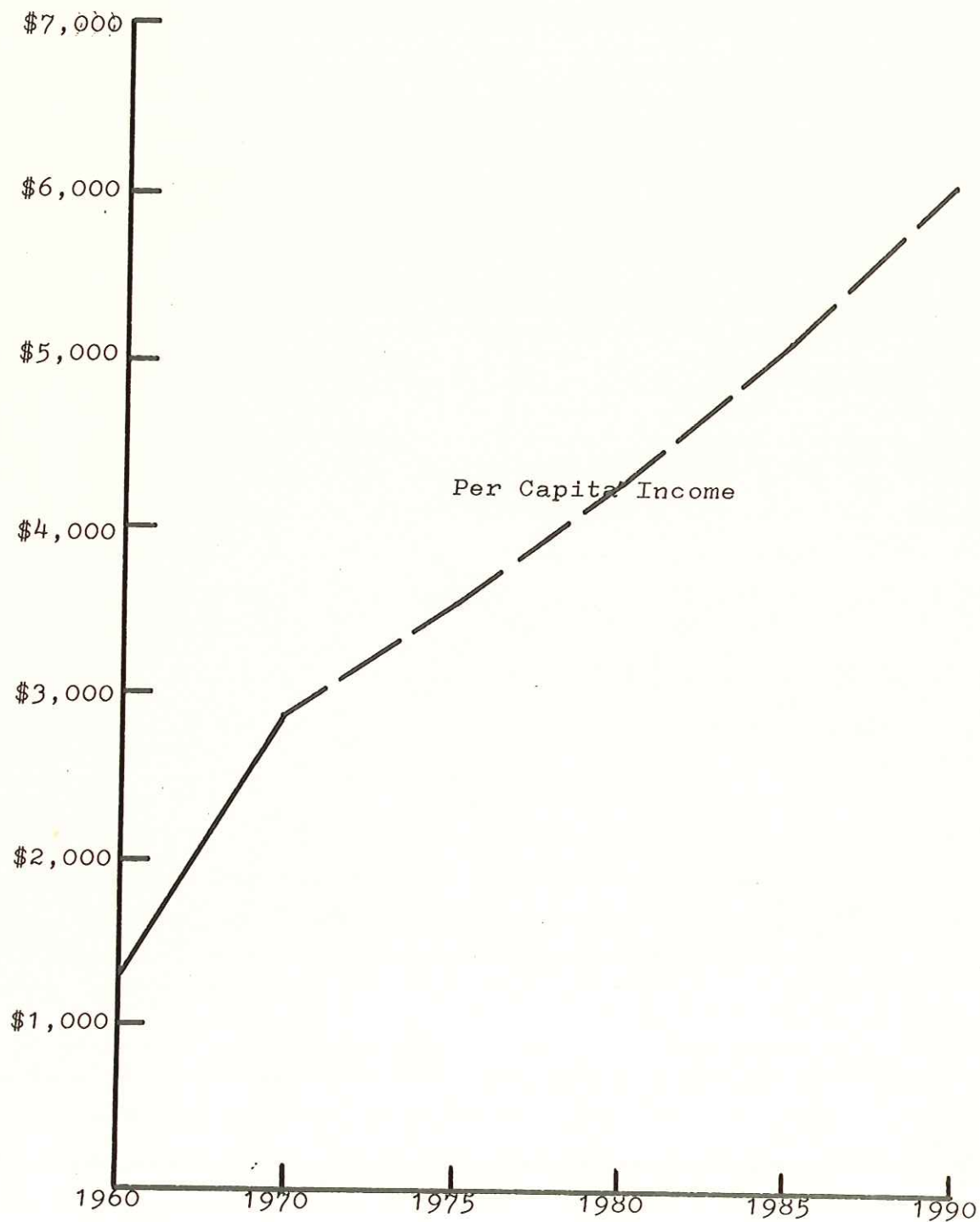
In Bluefield, the average number of persons per household is projected to decline at the rate of 0.1 percent per year, reflecting the national trend toward smaller families. However, despite the decline in persons per household, average family and per capita income is projected to grow at the rate of 4.0 percent between 1970 and 1990 compared with the slow income growth rate that Bluefield experienced between 1960 and 1970.



PROJECTED FAMILY INCOME  
BLUEFIELD, WEST VA.



PROJECTED PER CAPITA INCOME  
BLUEFIELD, WEST VA.



## ANALYSIS OF INDUSTRY SECTORS

This section of the Economic Base Study analyzes the industry sectors in terms of historical trends and their potential for new jobs.

Bluefield functions as the trade center for its surrounding area, and its economy is based on serving the mining industry and related manufacturing industries. For this reason, this analysis will pay particular attention to the basic industries with supported service activities. Bluefield depends upon the basic activity in the surrounding area, and the recent declines in coal production employment are the major cause for the past economic slump.

### Coal

The principal and dominant source of jobs in the Bluefield Region is mining. As coal brought thousands of people into the region, it also contributed to the entrenchment of a one-product economy. Coal was the economic lever that controlled the area. The railroads, service facilities, and wholesale and retail trade were all geared to the economy of coal.

Coal production and employment reached a peak in the late 40's and early 50's and then a long economic downward trend began, marked by a combination of increasing productivity and decreasing markets. Employment in mining within the Bluefield region dropped from a high of over 47,500 to a low of 23,700 in less than twenty years. Another reason for the coal industry fluctuation over the years is due to demands and technological changes.

The industry itself is beginning to stabilize as a result of two new important developments: first, the long-term contract, and second, the need for trained, skilled personnel. The long-term contracts have several positive implications. Large sums of money can be committed to developing new mines. Coal producers can borrow the money to invest on the most modern plants that require highly-skilled labor. Even more important, employees can depend on stable year-round work that will allow them to become part of the community; they can borrow money and build homes. The new demands for skilled labor (60 percent of manpower needs; electricians, technicians, engineers, supervisors, etc.) will be accompanied by demands for attractive communities to draw the skilled labor. Secondary employment is expected to result from the need to service increases in mining operations and from the need to service the mining employees and their families.

Table 16 shows how coal production in the region has fluctuated. With the production of some 91.0 million tons of coal in 1940 in the six county region surrounding Bluefield, coal production fell sharply to a low of 49.9 million tons in 1950, then slipped to 44.5 million tons in 1960. Production increased to over 63.3 million tons by 1970, and is projected to go higher in the coming years. In Wyoming County and Buchanan County coal production is growing steadily, while Mercer, McDowell, Raleigh, and Tazewell counties production totals are considerably behind their 1950 figures.

Table 15 shows how rapidly technological change in productivity can cause unemployment. The drop in em-



ployment in mining in the region during the period from 1950 to 1970 is one of the most startling examples of the drastic effects of technological change in employment. In 1950, about 47,588 workers were employed in the six county area in order to mine about 50 million tons of coal. In 1960, only 24,924 miners were needed to mine about 45 million tons of coal. Thus, 11 percent less coal was mined in 1960, but with 48 percent fewer miners. Almost as startling are the 1960-1970 comparisons. While tonnage increased by 42 percent during the period, employment decreased by more than 4.5 percent.

Mining is at least three times as important to the economy of the Bluefield region as it is to all of West Virginia, and over 25 times as important to the region as it is to the U. S. In 1970, over 25 percent of the labor force was employed in mining and this primarily in coal mining. With the prospects for increasing markets for the region's immense coal reserves and the slowdown in the rate of technological change, it is reasonable to expect a significant increase in mining employment over the next few years. Table 15 shows the projected mining employment for the Bluefield region.

TABLE 15  
PROJECTED MINING EMPLOYMENT  
Bluefield Region

|                 | <u>1950</u> | <u>1960</u> | <u>1970</u> | <u>1980</u> | <u>1990</u> |
|-----------------|-------------|-------------|-------------|-------------|-------------|
| Mining Industry | 47,588      | 24,924      | 23,796      | 30,213      | 36,627      |

TABLE 16

PRODUCTION OF COAL IN TONS (THOUSANDS)  
Bluefield Area

|                    | <u>1950</u>  | <u>% Change</u> | <u>1960</u>   | <u>% Change</u> | <u>1970</u>   |
|--------------------|--------------|-----------------|---------------|-----------------|---------------|
| United States      | 516,311      | -20.0           | 415,512       | +40.9           | 585,500       |
| West Virginia      | 145,563      | -17.5           | 120,108       | +19.1           | 143,132       |
| Mercer Co.         | 2,634        | -74.3           | 677           | +141.5          | 1,635         |
| McDowell Co.       | 21,303       | -30.5           | 14,802        | +18.3           | 17,515        |
| Wyoming Co.        | 6,764        | +58.9           | 10,748        | +49.9           | 16,119        |
| Raleigh Co.        | 11,599       | -38.6           | 7,124         | +29.4           | 9,223         |
| Tazewell Co., Va.  | 2,935        | -83.5           | 483           | -36.2           | 308           |
| Buchanan Co., Va.. | <u>4,722</u> | +125.1          | <u>10,629</u> | +74.3           | <u>18,529</u> |
| TOTAL REGION       | 49,957       | -11.0           | 44,463        | +42.0           | 63,329        |

## 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 employment has declined.

Manufacturing has become one of the most important sectors of the City. Although the proportion of the City's labor force employed in manufacturing has increased rather slowly, from 10.9 percent in 1960 to 11.5 percent in 1970, this group displaced transportation (railroad) as the largest employer of City residents soon after 1960.

Table 17 shows changes in the manufacturing sector indicated by the 1960 and 1970 Censuses of Manufacturing. The largest concentration of manufacturing employment is in the machinery sector, including mining and electrical machinery. This group increased from 20.0 percent of total manufacturing employment in 1960 to almost 36 percent during 1970. The only other manufacturing group showing a significant increase between 1960 and 1970 was textiles and apparel. Several textile and apparel manufacturing plants have established operations in Princeton, Bluefield, Virginia and Bland County in recent years. Many of the manufacturing groups have sustained employment losses during the last decade; these include furniture, lumber, and wood products, food products and printing establishments. Bluefield is far from having a one-industry economy, but the largest manufacturing group employment - machinery - is still dependent upon the mining industry. Even though total manufacturing employment de-

TABLE 17

## MANUFACTURING EMPLOYMENT

Bluefield, W. Va.

| <u>Type of Manufacturing</u>        | <u>1960</u>   |            | <u>1970</u>   |            |
|-------------------------------------|---------------|------------|---------------|------------|
|                                     | <u>Number</u> | <u>%</u>   | <u>Number</u> | <u>%</u>   |
| Furniture, Lumber and Wood Products | 102           | 14.1       | 44            | 6.7        |
| Metal Industries                    | -             | -          | 45            | 6.8        |
| Machinery                           | 145           | 20.0       | 236           | 35.9       |
| Transportation Equipment            | -             | -          | -             | -          |
| Other Durable Goods                 | 14            | 1.9        | 41            | 6.2        |
| Food Products                       | 226           | 31.4       | 120           | 18.2       |
| Textiles and Apparel                | 34            | 4.7        | 42            | 6.3        |
| Printing & Publishing               | 162           | 22.4       | 100           | 15.3       |
| Other Non-durable                   | <u>40</u>     | <u>5.5</u> | <u>30</u>     | <u>4.6</u> |
| TOTAL                               | 723           | 100%       | 658           | 100%       |

Source: U. S. Census of Population, 1970



clined by 0.9 percent between 1960 and 1970, its proportion as part of the total labor force increased by 0.6 percent over the last decade.

For the future, manufacturing should be an area of strength for the local economy. It is expected that manufacturing growth will occur for several reasons: There will be expansion by companies manufacturing or servicing coal mining machinery; employment in softgoods, especially food and apparel is expected to increase; by utilizing local sources of wood, growth in processing of lumber and wood products could become a major industry; and, success by local development groups in attracting new industry to the area.

Recent growth in manufacturing in the Bluefield area has been made up of the gradual expansion of existing industries plus the periodical immigration of new small and moderate-sized establishments. This trend can be expected to continue, and to accelerate to some extent. Bluefield is located near Interstate 77 and on U. S. Route 460, two major highway facilities leading to large metropolitan areas in eastern U. S. Bluefield has a superior natural environment, adequate community services, and potentially good water supplies to serve new manufacturing developments.

Table 18 shows the projected manufacturing employment for the City of Bluefield. The assumption underlying this projection is that the Bluefield area manufacturing employment will grow somewhat more rapidly than during recent years, because of the area's receptiveness to new industry, its ability to provide services, the area's abundance of relatively inexpensive land and its favorable location

on the interstate highway and railroads.

TABLE 18  
PROJECTED MANUFACTURING EMPLOYMENT  
Bluefield, W. Va.

|                        | <u>1960</u> | <u>1970</u> | <u>1980</u> | <u>1990</u> |
|------------------------|-------------|-------------|-------------|-------------|
| Manufacturing Industry | 723         | 658         | 805         | 1,010       |

Railroad

During the 1940's and 1950's the Norfolk and Western Railway was the most important single employer in Bluefield. During 1957 and 1958, railroad employment in Bluefield reached a high of almost 1,500 persons, by 1960 it had decreased to 798, and by 1970 railroad employment reached a low of only 435 employees. For the period between 1958 and 1970, the reduction in railroad employment amounted to 1,065 employees or 71 per cent. The railroad industry in Bluefield is directly dependent on the mining activity. The decline in coal production and the start of a two-year change over from steam to diesel locomotives began to cut heavily into the number of railroad employment in Bluefield.

It appears now that the railroad employment is beginning to stabilize. With the development of potential manufacturing establishments and the gradual increase in coal production, the railroad should continue as a major employer in the Bluefield area.

Table 19 shows the projected railroad employment for Bluefield. At present it appears that a moderate expansion in railroad employment will take place.

TABLE 19  
PROJECTED RAILROAD EMPLOYMENT  
Bluefield, W. Va.

|                   | <u>1960</u> | <u>1970</u> | <u>1980</u> | <u>1990</u> |
|-------------------|-------------|-------------|-------------|-------------|
| Railroad Industry | 798         | 435         | 530         | 665         |



## Wholesale Trade

Wholesale trade has long been one of the most important economic functions in Bluefield. The major wholesale concerns are located on Bluefield Avenue near the Mercer Street intersection. Rail and truck facilities are easily accessible in this location making this area excellent for merchant wholesaling purposes.

Wholesale employment in Bluefield has shown moderate losses while wholesale trade is increasing. Table 20 shows the dollar volume of wholesale trade and numbers of employees for the years 1958 through 1970. From 1958 to 1967 the wholesale employment decreased from 575 to 516, a loss of 59 or 10.3 percent over the period. More recently the employment dropped from 516 during 1967 to about 455 in 1970. This represents a loss of 61 employees or 12 percent. Sales increased by \$14.9 million or 19.3 percent between 1958 and 1967. Between 1967 and 1970 wholesale sales increased by \$7.3 million or 7.9 percent. The annual sales increase from 1958 to 1967 was 2.1 percent, whereas the 1967 to 1970 annual sales gain was 2.4 percent. This compares with the national annual increase of approximately 8.0 percent between 1967 and 1970. The State of West Virginia realized an annual gain in sales of about 6.0 percent between 1967 and 1970. This shows that wholesale trade in Bluefield is falling behind the nation and also the state in sales gained per annum.

TABLE 20  
WHOLESALE TRADE AND EMPLOYMENT  
Bluefield, W. Va.

|             | 1958     | 1963     | 1967     | 1970      |
|-------------|----------|----------|----------|-----------|
| Sales (000) | \$77,309 | \$83,800 | \$92,200 | \$99,500* |
| Employment  | 575      | 547      | 516      | 455       |

\*Estimated Wholesale trade, 1970.

Note: The wholesale employment includes only residents of Bluefield working in wholesale establishments.



Table 21 shows wholesale trade for Bluefield after the latest annexation. Very little wholesale activity is conducted within the newly annexed area. For projection purposes, 1970 has been used as the base year and includes all wholesale trade for the entire City. The wholesale trade dollars in Table 21 and Table 22 include all wholesale activity in Bluefield, eventhough some establishments distribute, produce, or sell merchandise in other areas, such as small coal company offices, and oil bulk plants. For tax purposes, the City of Bluefield collects business and occupation taxes on merchant wholesale trade within the City only. For 1971-1972 the City collected business and occupation tax on an estimated \$46.5 million merchant wholesale gross business. As shown on Table 21 the total sholesale trade activity for that fiscal year was between \$96 million and \$97.8 million. Between 1970 and 1973, total wholesale trade increased by 3.9% and whole-sale employment increased by 0.7%.

TABLE 21

WHOLESALE TRADE AND EMPLOYMENT  
Bluefield, W. Va.

|                           | 1970   | 1971   | 1972   | 1973   | % Change<br>1970-73 |
|---------------------------|--------|--------|--------|--------|---------------------|
| Wholesale Sales (million) | \$95.5 | \$96.6 | \$97.8 | \$99.2 | +3.9%               |
| Constant 1973 Dollars     | \$96.5 | \$97.7 | \$98.1 | \$99.2 | +2.7%               |
| Employment                | 455    | 467    | 479    | 490    | +0.7%               |

Source: City of Bluefield and estimates by Balzer and Associates.

Estimates of future wholesale trade are shown in Table 22. It is felt that the most accurate wholesale trade projection should be based on 1973 constant dollars. The wholesale trade for Bluefield in 1973 was approximately \$99.2 million, this is expected to increase at a rate of slightly less than

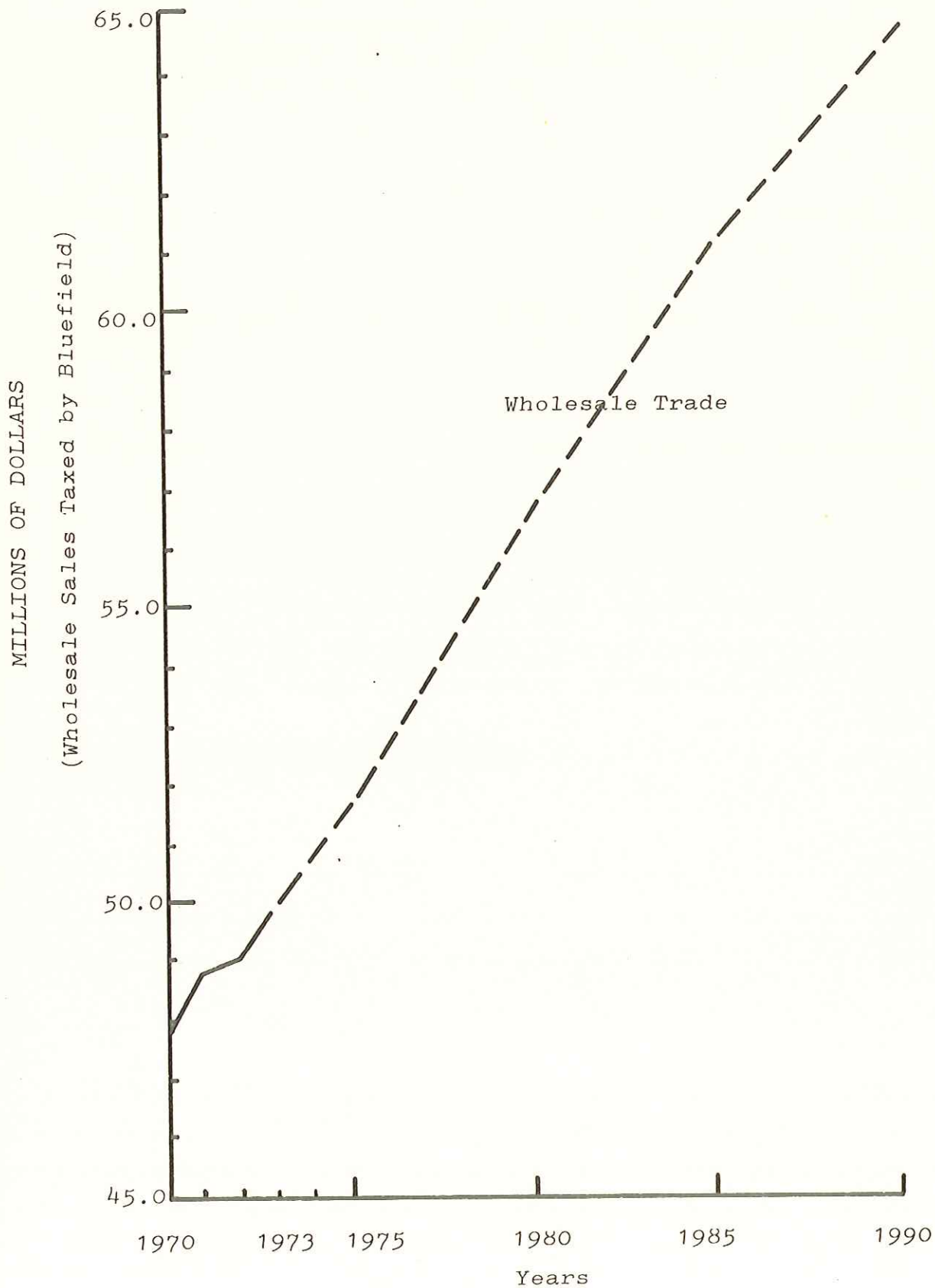
1 percent per year. By 1980, wholesale trade should reach \$105.8 million and increase to approximately \$115.0 million by 1990. Wholesale trade employment is expected to increase at a rate of 10 -12 employees per year and is expected to reach 705 by 1990, an increase of 47.0 percent over a total of 478 during 1973.

TABLE 22  
PROJECTED WHOLESALE TRADE  
Bluefield, W. Va.

|                           | <u>1973</u> | <u>1975</u> | <u>1980</u> | <u>1985</u> | <u>1990</u> | <u>% Change<br/>1973-90</u> |
|---------------------------|-------------|-------------|-------------|-------------|-------------|-----------------------------|
| Wholesale Sales (million) | \$99.2      | -           | -           | -           | -           | -                           |
| Constant 1973 Dollars     | \$99.2      | \$101.8     | \$105.8     | \$11.5      | \$115.0     | +16.0%                      |
| Employment                | 478         | 505         | 558         | 630         | 705         | +47.0%                      |

Source: City of Bluefield and Estimates by Balzer and Associates.

WHOLESALE TRADE TRENDS AND PROJECTIONS  
(Constant 1973 Dollars)  
BLUEFIELD, WEST VA.





## Retail Trade

Bluefield's retail stores have long served as a strong attraction for area residents. Retail establishments are largely concentrated in the central business district. In recent years several supermarkets and small convenience stores have developed in South Bluefield, and there are now three nearby shopping centers (Blue Prince Shopping Center, Bluefield Plaza and Westgate Shopping Center) to compete with the stores in downtown Bluefield.

As shown on Table 23, Bluefield's total retail volume has increased slightly, about 12.9 percent or 1.1 percent per annum since 1958. Between 1958 and 1963 retail sales increased by 7.6 percent whereas retail employment declined drastically by 581 employees or 35 percent. This was brought about by the depressed condition of the coal mining industry. Between 1967 and 1970 retail sales increased by almost 3.0 percent and at the same time retail employment increased very slightly. Prior to 1960 retail trade was the largest employment sector for Bluefield with over 1,665 employees. After 1960, the professional services gained in employment and retail jobs began to decline.

TABLE 23

### RETAIL TRADE AND EMPLOYMENT

Bluefield, W. Va.

|               | <u>1958</u> | <u>1963</u> | <u>1967</u> | <u>1970</u> | <u>% Change</u><br><u>1958-70</u> |
|---------------|-------------|-------------|-------------|-------------|-----------------------------------|
| Sales (000)   | \$34,948    | \$37,627    | \$38,377    | \$39,472    | +12.9%                            |
| Shopper Goods | 24,716      | 26,027      | 25,513      | 25,718      | + 4.1%                            |
| Conven. Goods | 10,232      | 11,600      | 12,864      | 13,754      | +34.4%                            |
| Employment    | 1,665       | 1,084       | 1,106       | 1,111       | -33.2%                            |
| Shopper Goods | NA          | NA          | NA          | 704         | -                                 |
| Conven. Goods | NA          | NA          | NA          | 407         | -                                 |



A breakdown of retail sales and retail employment by shopper goods and convenience goods is shown on Table 23. Retail employment by shopper goods and convenience goods is not available prior to 1970. Since 1958, shopper goods sales have increased by only 4.1 percent and convenience goods sales have increased by 34.4 percent. These percentages are reflected by the greater number of convenience goods establishments that have developed throughout the City in recent years. Especially eating and drinking places, food stores, and drug establishments. The 1970 Census of Population indicates that for Bluefield there were 704 shopper goods employees and 407 convenience goods employees, for a total of 1,111 retail employment. This represents a ratio of 63.4 percent of total retail employment in shopper goods and 36.6 percent in convenience goods. This compares with the national ratio of 65 percent for shopper goods and 35 percent for convenience goods.

New retail facilities that have been built outside Bluefield in recent years have undoubtedly taken away part of Bluefield's retail business. Additional commercial development outside Bluefield in the future could cut into Bluefield's retail sales volume even further. These facilities would compete with retail stores inside Bluefield especially downtown.

As Table 24 shows Bluefield is gradually losing it's importance as the retail center within its market area. Since 1963, Bluefield's percentage as part of the areas total retail sales has decreased by 12.9 percent, from 35.2 percent in 1963 to 22.3 percent during 1970. Other significant commercial centers in the area and small shopping centers are becoming somewhat stronger than during past years and consequently are strong competition to Bluefield merchants.

TABLE 24  
RETAIL SALES  
Bluefield, W. Va.

|                            | <u>1963</u> | <u>1967</u> | <u>1970</u> |
|----------------------------|-------------|-------------|-------------|
| Total Sales (000)          | \$37,627    | \$38,377    | \$39,472    |
| % of Total Area-Mercer Co. | 35.2        | 31.3        | 22.3        |
| Population                 | 18,275      | 16,967      | 15,375      |
| Sales Per Capita           | \$2,050     | \$2,260     | \$2,560     |

Source: Sales Management and Estimates by Balzer and Associates.

Sales per capita for Bluefield from 1963 to 1970 increased by 24 percent. This increase would have been much greater

except for high unemployment, population declines and below average income growth. The constant decline in sales for Bluefield as a proportion of total area sales is partially due to retailers moving out of the City and relocating in other areas and other parts of Mercer County, and from increased competition from other retail sectors throughout Mercer County, Princeton, Beckley, Charleston and Roanoke.

The recent loss of one of the largest retail stores in Downtown Bluefield is something that Bluefield must not let continue. It is extremely important to the merchant and retail establishments that Bluefield continue to improve and revitalize retail facilities throughout the City and especially downtown.

With the completion of U. S. Route 460 and Interstate 77, major retail trade cities such as Charleston and Roanoke could increase their relative power to attract consumer purchases from Bluefield and surrounding areas. Bluefield must continue to strengthen its retailing attraction if it wishes to remain as the area's trade center.

Because of adverse economic conditions, Bluefield has been unable to strengthen its retailing attraction during the 1960-73 period. The Montgomery Ward store closed and now only provides for a small catalog facility. Leggett's closed one of its two stores located on Federal Street. Woolworth's closed its variety store on Princeton Avenue. Two large furniture stores closed their facilities on Princeton Avenue and Raleigh Street. Several small retail outlets were destroyed by fire and not replaced.



Numerous small retail stores have closed on Princeton Avenue and Bluefield Avenue because of age, going out of business, or relocating to other parts of the City or area.

During this same period, several new retail facilities have developed throughout various sections of the City. Particularly along Bluefield Avenue and Cumberland Road. These include Grant's Department Store, Krogers, Super X, several restaurants and motels and other small retail establishments along Cumberland Road. New developments on Bluefield Avenue include Hecks Department Store, Firestone Automotive Service, food store and proposed development of several new establishments.

Table 25 shows that since the Cumberland Road area annexation, based on constant 1973 dollars, retail trade in Bluefield has increased by 20.9 percent between 1970 and 1973, or approximately 7.0 percent per year. As stated earlier, retail sales between 1958 and 1970 increased by about 1.1 percent per year. The Cumberland Road area is expected to develop as the primary growth area in Bluefield. The annexation of the Cumberland Road area has bolstered retail trade for Bluefield considerably. Had it not been for this additional economic gain by Bluefield, the overall City retail trade picture would appear rather weak, or following the same pattern as realized between 1958 and 1970.

TABLE 25  
RETAIL TRADE AND EMPLOYMENT  
Bluefield, W. Va.

|                        | <u>1970</u> | <u>1971</u> | <u>1972</u> | <u>1973</u> | <u>% Change<br/>1970-73</u> |
|------------------------|-------------|-------------|-------------|-------------|-----------------------------|
| Retail Sales (Million) | \$39.5      | \$46.0      | \$48.8      | \$52.0      | +31.6                       |
| Constant 1973 Dollars  | \$43.0      | \$50.4      | \$51.8      | \$52.0      | +20.9                       |
| Employment             | 1,111       | 1,147       | 1,182       | 1,217       | + 9.5                       |

Source: City of Bluefield and Estimates by Balzer & Associates.



Table 26 below shows the projected retail sales in 1973 constant dollars and projected retail employment by shopper goods and convenience goods for the years 1973 to 1990 in 5 year increments. The retail employment by shopper goods and convenience goods is projected to increase by approximately 46 percent by 1990. This forecast is based on the 1970 ratio of shopper goods and convenience goods employment to total retail employment - a ratio of 63.4 percent for shopper goods employment and 36.6 percent for convenience goods employment. Shopper goods sales and convenience goods sales are projected to increase by the equal amount of 33 percent to 1990. This percentage is based on the 1970 ratio of 65 percent of total retail sales for shopper goods and approximately 35 percent for convenience goods sales. Retail sales per capita are projected to increase from \$2,880 in 1973 to \$3,080 in 1990.

TABLE 26

PROJECTED RETAIL TRADE AND EMPLOYMENT

Bluefield, W. Va.

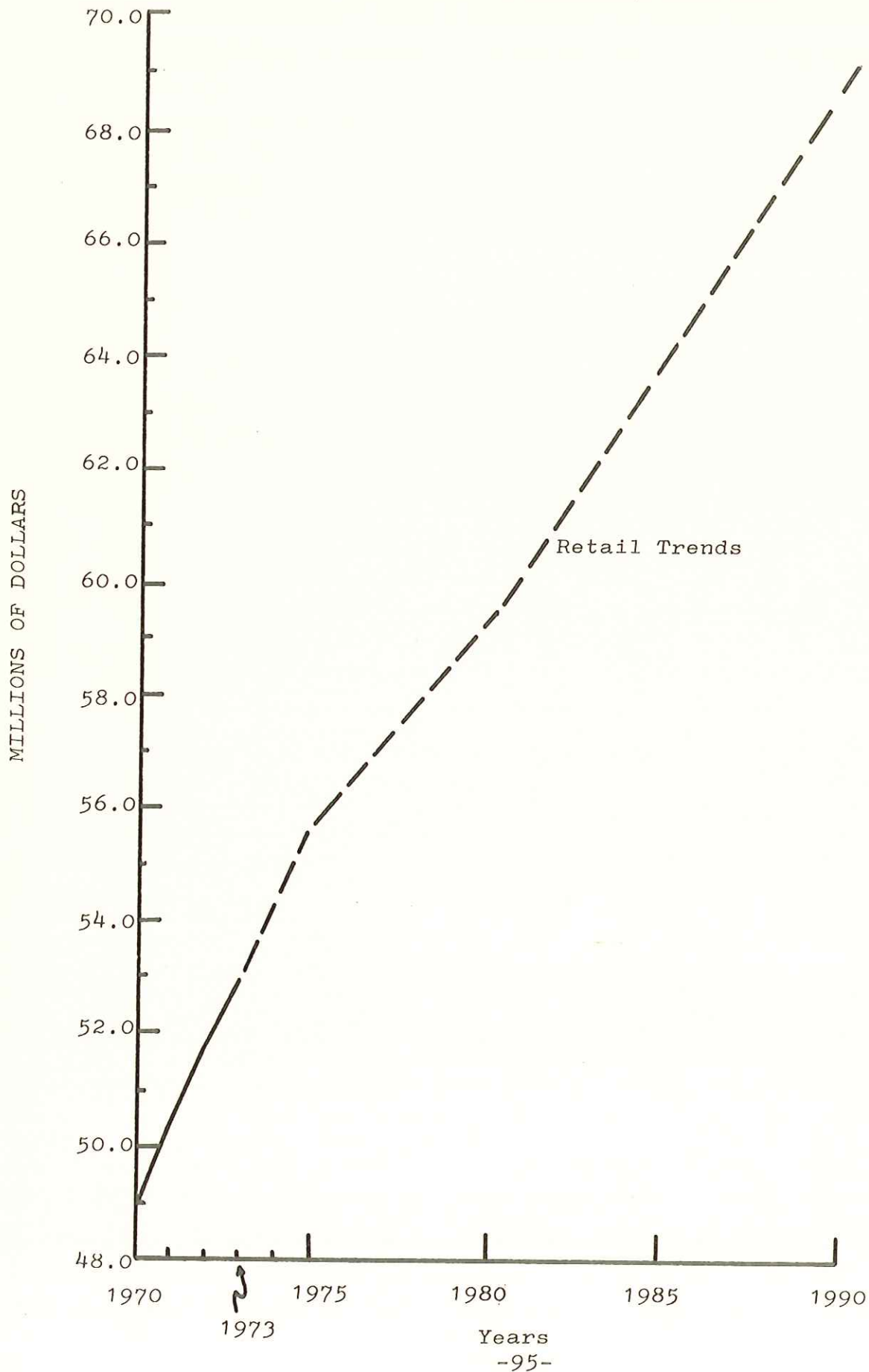
(in 1973 Constant Dollars)

|                        | <u>1973</u> | <u>1975</u> | <u>1980</u> | <u>1985</u> | <u>1990</u> | <u>% Change<br/>1973-90</u> |
|------------------------|-------------|-------------|-------------|-------------|-------------|-----------------------------|
| Retail Sales (million) | \$52.0      | \$55.4      | \$59.3      | \$64.2      | \$69.2      | +33.1                       |
| Shopper Goods          | \$33.8      | \$36.0      | \$38.5      | \$41.7      | \$45.0      | +33.0                       |
| Conven. Goods          | \$18.2      | \$19.4      | \$20.8      | \$22.5      | \$24.2      | +33.0                       |
| Employment             | 1,217       | 1,315       | 1,665       | 1,725       | 1,778       | +46.0                       |
| Shopper Goods          | 730         | 789         | 999         | 1,035       | 1,067       | +46.1                       |
| Conven. Goods          | 487         | 526         | 666         | 690         | 711         | +46.0                       |
| Sales Per Capita       | \$2,880     | -           | \$3,121     | -           | \$3,080     | +07.0                       |

Source: City of Bluefield and Estimates by Balzer & Associates.

RETAIL TRADE TRENDS AND PROJECTIONS  
(Constant 1973 Dollars)  
BLUEFIELD, WEST VA.

CHART 10



### SELECTED SERVICES

Service trades and facilities include personal services such as banking, insurance, repairs, private household; and business services such as hospitals, entertainment, schools, colleges, professional services, hotels, motels, etc. Service activity has expanded significantly in Bluefield during recent years. Because of Bluefield's regional attraction, medical facilities, motels, professional offices, and business and repair services have had substantial growth.

Table 27 shows the selected services employment and receipts for past years.

TABLE 27

#### SERVICES EMPLOYMENT AND SALES

Bluefield, W. Va.

|                                       | <u>1970</u> | <u>1971</u> | <u>1972</u> | <u>1973</u> | <u>% Change<br/>1970-1973</u> |
|---------------------------------------|-------------|-------------|-------------|-------------|-------------------------------|
| Services Receipts<br>Volume (million) | \$19.1      | \$20.8      | \$19.4      | \$20.8      | + 8.9                         |
| Employment                            | 2,322       | 2,365       | 2,407       | 2,449       | + 5.5                         |

Source: City of Bluefield and Estimates by Balzer & Associates.

Between 1970 and 1973, which includes the new annexed area, Bluefield's service receipts increased by 8.9 percent or \$425,000 per year. This represents an annual increase of about 2.2 percent. Total selected services employment increased by 5.5 percent over the four year period or 1.4 percent per year. The 1970 actual services employment in Bluefield by the 1970 Census is estimated at 2,322.



Table 28 shows the projected selected services receipts and employment to 1990.

TABLE 28

PROJECTED SERVICES RECEIPTS AND EMPLOYMENT

Bluefield, W. Va.

|                                      | <u>1973</u> | <u>1975</u> | <u>1980</u> | <u>1985</u> | <u>1990</u> | <u>% Change<br/>1973-90</u> |
|--------------------------------------|-------------|-------------|-------------|-------------|-------------|-----------------------------|
| Service Receipts<br>Volume (million) | \$20.8      | \$21.2      | \$22.3      | \$23.6      | \$25.2      | +21.1                       |
| Employment                           | 2,449       | 2,569       | 2,744       | 3,045       | 3,435       | +40.1                       |

Source: City of Bluefield and Estimates by Balzer & Associates.

For projecting purposes it is expected that selected services receipts will increase at an annual rate of 1.2 percent or approximately \$260,000 per year. By 1990 Bluefield can expect services receipts of \$25.2 million dollars. The forecast for 1990 service receipts is projected at a rate slightly lower than 1970 to 1973 growth because of the annexed area impact on past trends.

Selected services employment is projected to increase from 2,449 employees during 1973 to 3,435 by 1990. This is an increase of 986 employees during the period at a rate of 2.4 percent per year.



## FLOOR SPACE PROJECTIONS FOR RETAIL, WHOLESALE AND SERVICES

This section presents projections of retail, wholesale, and service floor space requirements to 1990. Such statistics are very important in allocating land uses in preparing the Land Use Plan.

During March, 1974 the consultants conducted a field survey to determine retail trade, personal service, and wholesale trade floor space for the City of Bluefield. Each of the three categories was then broken down by store group in order to give a more distinctive sub-category for types of stores such as general merchandise, food, apparel, eating and drinking places, finance, legal, business, and all types of wholesale trade activities. The field survey included all establishments within the City of Bluefield and also all business and service activities immediately outside the City.

Table 29 shows the total retail trade, personal service, and wholesale trade floor space within the City as of March 1974.

TABLE 29  
RETAIL, PERSONAL SERVICES, AND WHOLESALE FLOOR SPACE  
Bluefield, W. Va.  
March, 1974

| <u>Category</u>  | <u>Space Sq.Ft.</u> | <u>% of Total</u> |
|--|---------------------|-------------------|
| Retail   |                     |                   |
| <u>Shopper goods</u>                                   |                     |                   |
| General Merchandise                                    | 460,975             | 33.2              |
| Building Materials, Hardware                           | 280,800             | 20.2              |
| Automotive Dealers                                     | 157,000             | 11.3              |
| Apparel and Accessory                                  | 66,775              | 4.7               |
| Furniture, Home Furnishings                            | 154,950             | 11.0              |
| Other  | <u>68,000</u>       | <u>4.9</u>        |
| Subtotal (Shopper)                                     | 1,188,500           | 85.3              |
| <u>Convenience</u>                                     |                     |                   |
| Food Stores  | 62,700              | 4.4               |
| Eating & Drinking Establishments                       | 79,750              | 5.7               |
| Drug and Proprietary                                   | 18,325              | 1.3               |
| Gasoline Stations                                      | 34,100              | 2.4               |
| Other  | <u>13,375</u>       | <u>0.9</u>        |
| Subtotal (Conven.)                                     | 208,250             | 14.7              |
| TOTAL RETAIL   | 1,396,750           | 100.0             |
| <u>Personal Services</u>                               |                     |                   |
| Finance  | 87,950              | 26.9              |
| Medical  | 69,370              | 21.2              |
| Insurance  | 34,050              | 10.3              |
| Legal  | 19,375              | 5.9               |
| Business   | 112,325             | 34.3              |
| Real Estate  | <u>4,675</u>        | <u>1.4</u>        |
| TOTAL PERSONAL SERV.                                   | 327,745             | 100.0             |
| <u>Wholesale Trade</u>                                 |                     |                   |
| All Wholesale Activities                               | <u>1,073,850</u>    | <u>100.0</u>      |
| TOTAL RETAIL, PERSONAL SERVICES<br>AND WHOLESALE SPACE | 2,798,345           | 100.0             |

Source: "Windshield Survey" by Balzer and Associates, March 1974

## RETAIL FLOOR SPACE

As shown in Table 29 on the previous page, retail sales space in the City of Bluefield consists of 1,396,750 square feet. Based on retail sales figures furnished to the consultant by the City of Bluefield, this space produced \$52 million in retail sales during 1973 or an average of \$37.23 per square foot per year. Since the average shopping center in southeastern United States should yield an average of \$50 to \$60 in retail sales per square foot per year the above yield of \$37.23 appears weak. However, when one considers that this yield is city-wide and includes vacant space as well as businesses with low yields per square foot, such as furniture stores, variety stores, etc., the figure indicates fairly good strength in retail sales.

In projecting the floor space required to support the projected retail sales for the City of Bluefield from 1974 through 1990, we feel that a figure of \$40 in retail sales per year per square foot of space would be the best relationship. This slightly higher figure would pick up the slack on vacant, deteriorating buildings and allow for some increased retail sales volume in existing retail establishments.

Table 30 below shows the projected retail sales per year for the City of Bluefield in constant 1973 dollars and the floor space needed to support the projected retail sales on the basis of \$40 per square foot. In addition, the projected floor space is broken down into shopper goods space and convenience goods space on the basis of 85%-15% as determined by the survey of existing floor space set out in Table 29 above.



TABLE 30

## PROJECTED FLOOR SPACE NEEDS FOR PROJECTED RETAIL SALES

Bluefield, W. Va.

|  | <u>1973</u> | <u>1975</u> | <u>1980</u> | <u>1985</u> | <u>1990</u> |
|--|-------------|-------------|-------------|-------------|-------------|
| Retail Sales (million)<br>In 1973 constant<br>dollars                | \$52.0      | \$55.4      | \$59.3      | \$64.2      | \$69.2      |
| Floor Space Needed<br>on Basis of \$40/sq.ft.<br>(000)               | -           | 1,385       | 1,482       | 1,605       | 1,730       |
| Floor Space Needed<br>for Shopper Goods<br>on Basis of 85% (000)     |             | 1,177       | 1,260       | 1,364       | 1,470       |
| Floor Space Needed<br>for Convenience Goods<br>on Basis of 15% (000) | -           | 208         | 222         | 241         | 260         |

On the basis of the above projections we conclude that the City of Bluefield will need an additional 333,000 square feet of floor area for retail purposes by the year 1990 with an estimated breakdown of this additional space into 283,000 square feet for shopper goods and 50,000 square feet for convenience goods.



### PERSONAL SERVICES FLOOR SPACE

As indicated in Table 29 previously presented, our windshield survey in March 1974 showed that 327,745 square feet of floor space in the City of Bluefield is devoted to personal services. Based on Business and Occupation Tax returns received by the City of Bluefield, this floor space produced \$20,800,000 in personal services in 1973.

Since the dollars of business in personal services tend to increase in proportion to population and the floor space would increase accordingly, we have projected floor space requirements for personal services at a growth rate of 1 percent per year through 1990. The population annual growth rate for the City of Bluefield has already been projected previously at about 0.9 percent through 1990.

Table 31 below shows the projected floor space requirements for personal services in five-year increments to the year 1990.

TABLE 31

PROJECTED FLOOR SPACE REQUIREMENTS FOR PERSONAL SERVICES  
Bluefield, W. Va.

|   | <u>1973</u> | <u>1975</u> | <u>1980</u> | <u>1985</u> | <u>1990</u> |
|---|-------------|-------------|-------------|-------------|-------------|
| Floor Space<br>Requirements for<br>Personal Services<br>(000) | 328         | 334         | 349         | 366         | 386         |

Source: Estimates by Balzer and Associates.

Based on the above projections the City of Bluefield should need an additional 58,000 square feet of floor space for personal services by the year 1990.

## WHOLESALE FLOOR SPACE

As discussed previously in this report, the City of Bluefield is expected to increase its wholesale trade sales volume from \$99.2 millions in 1973 to \$115.0 millions in 1990. Since a large percentage of the physical bulk of this business takes place outside Bluefield we do not feel that these figures should be the ones used to project floor space. We feel it would be more accurate to relate floor space requirements to the portion of wholesale trade that actually takes place within the City of Bluefield.

Table 32 below indicates the actual wholesale trade (taxed by City of Bluefield) in dollars for the years 1971 through 1973. These dollar figures have in turn been converted by the price index into 1973 constant dollars so that a trend of physical volume can be noted. This trend in dollars of wholesale trade has then been projected in five-year increments to the year 1990. Based on the floor space existing in 1974 which supported the 1973 wholesale trade volume, floor space requirements have been projected on that ratio in five-year increments to the year 1990.

TABLE 32

WHOLESALE TRADE FLOOR SPACE REQUIREMENTS  
Bluefield, W. Va.

| <u>Year</u> | <u>Wholesale<br/>Trade Taxed<br/>in Bluefield<br/>(millions) *</u> | <u>Price<br/>Index</u> | <u>Constant 1973<br/>Dollars of Sales<br/>(millions)</u> | <u>Floor Space<br/>Requirements<br/>(millions)</u> |
|-------------|--|------------------------|--|--|
| 1971        | 45.7   | 93.6                   | 48.8   |  |
| 1972        | 46.7   | 96.0                   | 48.6   |  |
| 1973        | 49.9   | 100.0                  | 49.9   | 1,074**  |
| 1975        |  |                        | 51.8   | 1,115  |
| 1980        |  |                        | 56.8   | 1,222  |
| 1985        |  |                        | 61.5   | 1,323  |
| 1990        |  |                        | 64.4   | 1,386  |

Source: \*City of Bluefield

\*\*"Windshield Survey" - Balzer and Associates

Projection estimates - Balzer and Associates

Based on the above projections, the City of Bluefield will need an additional 312,000 square feet of floor area to support the increase in wholesale trade expected by 1990.



**community facilities**

---



## COMMUNITY FACILITIES

The quality of community facilities is the best indication of the quality of life in any community. Facilities for education, recreation, health care, and other basic public services are essential components of a viable community.

As centers of common use, community facilities both provide for basic needs and serve as centers and symbols of community life. Good community facilities enhance residential values as well as add to the corporate image, thereby attracting more industries and strengthening the tax base on which community facilities are created and maintained.

A survey of the existing community facilities in Bluefield was undertaken in the Fall of 1971 to examine each facility in terms of size, location, type and capacity and to determine the physical condition of each building. The inventory was performed by physically surveying each facility and personal interviews. An analysis of each facility system was made by measuring the facility system against standards for size, location and capacity.

The facility systems included in this study are:

1. Education including public schools, colleges, and libraries.
2. Recreation including city parks, playgrounds and playfields,
3. Governmental Services including city municipal building, police and fire departments and other administrative offices.

## EDUCATION

The school system in the City of Bluefield is administered by the Mercer County Board of Education. It is considered appropriate, however, to include a general survey and analysis for school facilities within Bluefield because of the obvious importance of the public schools to the City's development. The Board of Education supervises the public school system by determining all school policies, and the school construction and maintenance program. The Board of Education appoints a Superintendent of Schools, who is responsible for the direction of the school system.

Establishment and maintenance of a public school system is one of the most important functions of the county government, as well as one of the most expensive. For fiscal 1971, it is estimated that the Board of Education budget will be slightly over \$9 million. The school plant serves the community not only as an educational center, but also as a local recreational area and a meeting hall for civic or community actions. Traditionally, the school has been a focal point of community pride and a major component in community development.

### Buildings

There are presently 1 high school, 2 intermediate schools and 6 elementary schools in the City of Bluefield. The majority of the buildings predate World War II.

The County Board of Education feels that the construction of new buildings is a dire need. The need for a major building program is evident, that will permit the reduction of the number of high schools, replace very old buildings, and construct some modern "open space" buildings for



action-oriented elementary schools. With the recent development of the kindergarten program, the building program becomes more apparent.

### Enrollment

The Bluefield schools house grades 1 through 6 in elementary schools, 7 through 9 in intermediate schools and grades 10 through 12 in high schools. The kindergarten program is currently being housed in the elementary school building.

The accompanying Table 33 presents the total enrollments by grades for 1960, 1970 and 1971.

Table 33  
Grade Enrollment  
City of Bluefield, W. Va.

| <u>Elementary</u>  | <u>1960</u> | <u>1970</u> | <u>1971</u> |
|--------------------|-------------|-------------|-------------|
| 1st Grade          | 444         | 350         | 316         |
| 2nd Grade          | 478         | 336         | 307         |
| 3rd Grade          | 415         | 342         | 320         |
| 4th Grade          | 430         | 320         | 317         |
| 5th Grade          | 427         | 341         | 322         |
| 6th Grade          | <u>425</u>  | <u>337</u>  | <u>332</u>  |
|                    | 2,619       | 2,026       | 1,914       |
| <u>Junior High</u> |             |             |             |
| 7th Grade          | 661         | 457         | 419         |
| 8th Grade          | 556         | 488         | 446         |
| 9th Grade          | <u>443</u>  | <u>424</u>  | <u>443</u>  |
|                    | 1,660       | 1,369       | 1,308       |
| <u>Senior High</u> |             |             |             |
| 10th Grade         | 420         | 424         | 392         |
| 11th Grade         | 307         | 380         | 385         |
| 12th Grade         | <u>322</u>  | <u>374</u>  | <u>341</u>  |
| Totals             | 1,049       | 1,178       | 1,118       |
| Total Enrollment   | 5,328       | 4,573       | 4,340       |

Source: Mercer County Board of Education.

Table 34 shows the 1971 enrollment and pupil/teacher ratio by respective school in City of Bluefield.

Table 34  
School Enrollment  
City of Bluefield, W.Va.

| <u>School</u>      | <u>1971 Enrollment</u> | <u>Pupil/<br/>Teacher Ratio</u> |
|--------------------|------------------------|---------------------------------|
| <u>Elementary</u>  |                        |                                 |
| Cumberland Heights | 182                    | 23/1                            |
| Memorial           | 324                    | 23/1                            |
| Preston            | 176                    | 24/1                            |
| Ramsey             | 448                    | 23/1                            |
| Wade               | 533                    | 20/1                            |
| Whitethorn         | <u>312</u>             | <u>24/1</u>                     |
| Total              | *1,975                 | 23/1                            |
| <u>Junior High</u> |                        |                                 |
| Central            | 705                    | 20/1                            |
| Fairview           | <u>603</u>             | <u>21/1</u>                     |
| Total              | 1,308                  | 21/1                            |
| <u>Senior High</u> |                        |                                 |
| Bluefield          | <u>1,118</u>           | <u>22/1</u>                     |
| Total Enrollment   | 4,401                  | 22/1                            |

\*Includes Kindergarten Children.

Source: Mercer County Board of Education.

#### Analysis

An analysis of the school system is best accomplished by comparing the individual schools with the accepted state standards.

Table 35  
School Standards  
West Virginia Department of Education

| <u>High Schools</u>                       | <u>Junior High</u>                        | <u>Elementary</u>                         |
|---|---|---|
| <u>Service Area</u>                       |   |   |
| 60 minutes maximum desirable travel time. | 60 minutes maximum desirable travel time. | 30 minutes maximum desirable travel time. |
| <u>Site Size</u>                          |   |   |
| 15 acres plus<br>1 acre/50 pupils         | 10 acres plus<br>1 acre/50 pupils         | 5 acres plus<br>1 acre/100 pupils         |
| <u>Pupil/Teacher Ratio</u>                |   |   |
| 25 to 1                                   | 25 to 1                                   | 30 to 1                                   |

Analysis of individual high schools and junior high schools are as follows:

1. Bluefield High School

Size: 32 classrooms plus music room, auditorium, cafeteria, and gym.

Capacity: 1,200

1971 Enrollment: 1,118

Age: 14 years, constructed in 1957

Site: 21.0 acres

Condition: excellent

This is a relatively new, modern high school located on a 21 acre site on the south side of the city. The school serves the entire city plus some outlying areas.

Facilities provided are excellent. The high school is not at maximum capacity. This can be attributed to the apparent loss of population by the City and County in recent years. About 340 out-of-town students attend Bluefield High School.

2. Central Junior High

Size: 35 classrooms

Capacity: 800

1971 Enrollment: 705

Age: 61, constructed in 1910

Site: 1.0 acres

Condition: deteriorating

This 60-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. The building is located on a relatively steep slope. Approximately 170 students from outside the city attend this school.

3. Fairview Junior High

Size: 30 classrooms

Capacity: 800

1971 Enrollment: 603

Age: 56 years, constructed in 1915

Site: 3.0 acres

Condition: deteriorating

This school serves part of the South Bluefield area. The building generally is in fair condition, although some signs of deterioration are noticeable. Outdoor play space is limited.

This Junior High enrollment also includes about 160 students from outside the City.



Overall, the high school and junior high schools in Bluefield are adequate, however, the following deficiencies should be noted:

1. Service Areas: Some students in Bluefield High, Central Jr. High, and Fairview Jr. High have long travel distances to and from school due to extended length of bus trips for students outside the City. Buses from high schools and junior highs also serve elementary schools thus extending the length of bus trips.
2. Site Size: Both junior high schools fall below the satisfactory minimum state standards for site size. Only Bluefield High School does not fall below the recommended standards.
3. Pupil/Teacher Ratio: Bluefield High and both junior highs meet the standards established by the state. The average pupil/teacher ratio for the two junior highs are about 21/1. For Bluefield High the ratio is 22/1.

Analysis of individual elementary schools are as follows:

1. Ramsey Elementary School  
Size: 24 classrooms  
Capacity: 540  
1971 Enrollment: 448  
Age: 44 years, constructed in 1927  
Site: 0.4 acres  
Condition: Good

This is a large, substantial, 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 signs of deterioration are noticeable.

The school is used to less than its actual capacity, due primarily to its location in the older section of the City which has lost substantial amounts of population.

2. Wade Elementary School

Size: 24 classrooms

Capacity: 600

1971 Enrollment: 533

Age: 51 years, constructed 1920

Site: 2.3 acres

Condition: deteriorating

Wade School serves the west end area, is showing signs of deterioration with inadequate playground facilities. The school formerly served also as a junior high. Some pupils are brought in from outside the city by bus. Enrollment is not at capacity.

3. Memorial Elementary School

Size: 14 classrooms

Capacity: 350

1971 Enrollment: 324

Age: 46 years, constructed in 1925

Site: 1.16 acres

Condition: good

This school serves the higher-income residential area in the southeast section of the City. It is of excellent construction and design and an addition was constructed in 1962. The school has an outdoor playground which is not large but is effectively used. The school enrollment trend is nearing capacity.

4. Whitethorn Elementary School

Size: 9 classrooms  
Capacity: 360  
1971 Enrollment: 312  
Age: 43 years, constructed in 1928  
Site: 1.2 acres  
Condition: good

This school serves the higher-income southwest section of the City. Construction is generally excellent. A new addition was constructed in 1962. The site is sloping and difficult, but a small playground is provided. The enrollment is nearing capacity.

5. Cumberland Heights Elementary School

Size: 8 classrooms  
Capacity: 240  
1971 Enrollment: 182  
Age: 16 years, constructed in 1955  
Site: 5.6 acres  
Condition: excellent

The area in which this school is located was recently annexed into the City. This school also serves areas outside the City. 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 developing rapidly as commercial use. A motel and bowling alley and other commercial development nearby are potential adverse influences because of traffic and noise.



6. Preston Elementary School

Size: 7 classrooms

Capacity: 210

1971 Enrollment: 176

Age: 51 years, constructed in 1920

Site: 0.9 acres

Condition: Good

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

As the case with the high school and junior highs, the elementary schools in Bluefield are adequate. The following deficiencies should be noted:

1. Service areas: The extensive population shift which has taken place in Bluefield over the past twenty years has exerted a considerable change in school service areas throughout the City. South Bluefield schools are all at or near their capacities while the schools in the central, east end and west end areas, such as Ramsey and Wade have excess space. Various adjustments have already been made, such as changes in use between elementary, junior high, and high schools. In recent years, the following changes were necessary to delineate new service areas:

- . Park Central High School was closed and is now being used for special education programs.
- . Genoa Junior High--closed.
- . East End Elementary--closed.
- . Hancock Elementary--closed.
- . Jones Street Elementary--closed.



- . Stinson Elementary--closed.
- . Lawson Elementary--closed.
- 2. Site Size: Nearly all the older elementary schools in Bluefield suffer from extremely inadequate sites and lack of outdoor play area. This can be attributed partly to the lesser emphasis put on the importance of outdoor play space in the era when the older schools were built. There are six elementary schools in the City and only one (Cumberland Heights) meets the minimum site size standard (5 acres).
- 3. Pupil/Teacher Ratio: In all cases, the elementary schools are within the limits set by the State of one teacher for every thirty pupils. The average for Bluefield elementary schools is one teacher for 23 pupils.

### Colleges

Bluefield State College, located within the City limits, offers degrees in liberal arts, education, and business administration. Also, the college offers two-year technical courses in architecture, electronics, and diesel engines, etc., as well as two-year preparatory courses in pre-medicine and pre-engineering. This college is in the midst of major remodeling and expansion. Bluefield State was established in 1875, has a student enrollment of 1,503 and sixty-nine faculty members.

Bluefield College, located in Bluefield, Virginia, is a two-year junior college offering courses in arts, engineering, and business administration. The college recently completed a new dormitory and a new gymnasium. Bluefield College was established in 1922, and the student enrollment is 350 with a twenty-three member faculty.

## RECREATION

Local recreational facilities, owned and operated by the City serve the immediate areas in which they are located. The local recreational facilities of Bluefield consist of the public school playgrounds and playfields. Map 7 indicates the location of the local recreational facilities. The elementary school playground provides open space and simple playground equipment for use by young children living in the vicinity of the schools. The high school playfield is used for field sports and games of young adults. The City has a City Park which is used by adults for field sports, picnicking and other recreational activities.

### Parks and Playgrounds

Bluefield has been seriously handicapped in developing a modern system of outdoor recreation facilities because of steep topography and the lack of consideration given to recreation space when the City began to develop in the early 1920's. Considerable progress has been made in recent years, especially in the development of the City Park and other small neighborhood playgrounds.

Existing recreation facilities are as follows:

1. 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, small ball field, sliding and swinging apparatus are included. Site consists of less than one (1) acre. It does not appear that this facility is being used, probably because of topographic conditions and inadequacy of existing facilities.
2. East River Playground: This playground is on a level and usable site, and has toilet facilities as well as a wading pool, small ballfield, basketball and small tot lot. Area consists of less



than one (1) acre. Condition is good.

3. Midway Playground: Located in the extreme west end of the City, includes a playfield with sufficient amount of play apparatus. The playground is in good condition and consists of slightly more than one (1) acre. The residential area served by this playground is sparsely populated, therefore, limiting the usefulness of this facility.
4. Hardy Street Playground: This playground serves the entire North Side area. It includes an indoor recreation hall used for certain activities. Facilities include small ballfield, wading pool, and play apparatus within one (1) acre area.
5. Wade Playground: This playground is part of the site of the Wade Elementary School. Facilities include wading pool, ball field, and basketball court. Area includes about 1.5 acres.
6. Preston Playground: This intensively used school playground serves the entire Valley Ridge area. It includes facilities such as basketball court, swings, sliding boards, area for court games and small ballfield. The area consists of approximately one-half acre. Facilities are considered excellent, but area is much too small for intense recreation use.
7. Montvale Park: This area in Southeast Bluefield was donated by a private individual for park purposes. The Park consists of more than 1.5 acres, but has not developed as a playground although it is occasionally used informally for this purpose.
8. Memorial Playground: This school playground serves the Southeast Bluefield area. This

intensively used playground includes facilities such as basketball, swings, sliding boards, and area for court games. The playground area is very small but all facilities are excellent.

9. Bluefield High Playfield: This playfield area consists of approximately ten acres and includes a football and baseball field. These facilities are used mostly by high school students during school hours for physical education programs. Very few adult age groups use this area after school hours.
10. Northside Mini Playground: This play area is currently under construction. When completed the playground will consist of one-quarter acre, but will include basketball court, area for court games and small tot lot.
11. Edgewood Park: This small park serves the Southeast residents, and consists of open space only. Park benches, walkways, fountain and other park facilities are lacking and should be developed for future park use.
12. City Park: The most used and best furnished park and playground facilities are provided in the City Park. Part of the City Park is located in Virginia but is property of the City of Bluefield. The 320 acre facility includes a series of individual recreational facilities. The City Park now includes Mitchell Football Stadium, Bluefield Auditorium, Bowen Field, softball fields, little league baseball fields, exhibition locomotive, police pistol range, tennis courts, picnicking, tot lot, fishing, ice skating, hiking trails, and open space. The City Park is considered excellent due to city interest and willingness to expend financial capabilities for complete development of the



Park. The existing parks and playgrounds with acreage and types of facilities are shown below:

Table 36  
Recreation Facilities  
City of Bluefield

|                     |              | <u>Type of Facilities</u> |   |   |   |   |   |   |
|---------------------|--------------|---------------------------|---|---|---|---|---|---|
|                     |              | <u>Acreage</u>            |   |   |   |   |   |   |
| <u>Playgrounds:</u> |              | A                         | B | C | D | E | F | G |
| East End            | 0.8          | X                         |   | X | X |   |   |   |
| East River          | 0.9          | X                         | X | X | X |   |   |   |
| Midway              | 1.0          |                           |   | X | X |   |   |   |
| Hardy Street        | 0.7          | X                         | X | X | X |   |   | X |
| Wade                | 1.6          | X                         | X | X | X |   |   |   |
| Preston             | 0.5          |                           | X | X | X |   |   |   |
| Memorial            | 0.5          |                           | X | X | X |   |   |   |
| *Northside Mini     | 0.5          |                           |   |   |   |   |   |   |
| Montvale            | <u>1.8</u>   |                           |   | X |   |   |   |   |
| Total               | 8.3          |                           |   |   |   |   |   |   |
| <u>Playfields:</u>  |              |                           |   |   |   |   |   |   |
| Bluefield High      | <u>10.0</u>  |                           |   | X |   |   |   |   |
| Total               | 10.0         |                           |   |   |   |   |   |   |
| <u>Parks:</u>       |              |                           |   |   |   |   |   |   |
| Edgewood            | 1.0          |                           |   |   |   |   |   |   |
| City Park           | <u>320.0</u> |                           | X | X | X | X | X | X |
| Total               | 321.0        |                           |   |   |   |   |   |   |
| Total City          | 339.3        |                           |   |   |   |   |   |   |

\*Under Construction

- A. Wading Pool
- B. Court Games
- C. Field Games
- D. Tot Lot
- E. Picnicking
- F. Hiking
- G. Meeting Place

Source: Survey by Balzer and Associates.

## Analysis

Standards prepared by the Urban Land Institute will be used to evaluate the adequacy of existing park and recreational facilities in Bluefield. Standards simply provide guidelines for evaluation and are not intended for rigid application. The following Table 37 displays space requirement standards for different types of recreational facilities.

Table 37  
Space Standards for  
Recreational Facilities

| <u>Type of Facility</u> | <u>Acres per 1000 pop.</u> | <u>Size of Site (Acres)</u> |                | <u>Radius of Area Served (miles)</u> |
|-------------------------|----------------------------|-----------------------------|----------------|--------------------------------------|
|                         |                            | <u>Ideal</u>                | <u>Minimum</u> |                                      |
| Playgrounds             | 1.5                        | 4                           | 2              | 0.5                                  |
| Neighborhood Parks      | 2.0                        | 10                          | 5              | 0.5                                  |
| Playfields              | 1.5                        | 15                          | 10             | 1.5                                  |
| Community Parks         | 3.5                        | 100                         | 40             | 2.0                                  |

The types of recreational facilities in above table are defined and analyzed below:

Playground: A playground is a play area of at least 2 acres furnished with play apparatus designed for children from 5 to 12 years of age. Generally, adjacent to elementary schools, playgrounds should be within safe walking distance (0.5 miles) of user's home. The City of Bluefield has six city operated playgrounds other than those adjacent to the public elementary schools. There are six elementary schools located in Bluefield and all have small play areas. None of the elementary school playgrounds meet standards. Wade Elementary has the largest play area with only 1.6 acres. Eventhough, the elementary schools are widely separated and furnish adequate

play facilities, they are not large enough to support the large number of children living within the service radius of 0.5 miles.

The playgrounds that are not adjacent to an elementary school (East End, East River, Midway, Hardy Street, and Montvale) are furnished with only a few swings, wading pool and possibly one other piece of equipment. The East River Playground is well equipped, but lacks room for needed expansion. Rarely is a playground equipped with a blacktop. The playgrounds are safely located, when considering the topography and street layout, with respect to surrounding land uses and streets.

Neighborhood Parks: A neighborhood park is an open space area designed to provide a pleasant break in land uses and opportunities for active and passive recreation for all age groups. Located within a neighborhood or adjoining a school, it is within walking distance of its user's. There is one very small one acre neighborhood park in the City. Edgewood Park is located in Southeast Bluefield near the Edgewood Road and Mountain View Avenue intersection. It is owned and maintained by the City but has no facilities. If provided with benches, walks and other park apparatus, this neighborhood park would adequately serve the surrounding high-income residential area.

Playfields: A playfield is a large play area of at least 10 acres which will accommodate diversified active sports for older children and adults. A playfield should be within 1.5 miles of user's home. The only playfield in Bluefield, (excluding the playfield facilities at the City Park), is adjacent to Bluefield High School. The high school playfield is located in a suburb of Bluefield and more readily accessible to surrounding neighborhoods. This site has at least 10 acres of land which may be used for active sports.



The residential areas north of the Valley Ridge are without any type of playfield. Although the football field at Bluefield State College is available for permissible uses.

Community Parks: Located in larger urban centers within 5-10 minutes driving time of user's home, a community park should provide a variety of active and passive recreational opportunities, such as swimming pool, ball fields, tennis courts, and pleasant walks and drives. A community park should range from 40 to 100 acres in size. Bluefield City Park is located in the extreme southwest section of the City and offers excellent outdoor and indoor sports activities for all age groups. Eventhough the park is located more than 10 minutes from the city's population center, direct access by major streets is relatively easy. During summer months, the Park is used extensively for warm weather activities such as baseball, softball, tennis, picnicking, hiking, fishing, and a meeting place. In fall and winter months, Mitchell Stadium and Bluefield Auditorium are used for high school and college football and basketball and city recreational programs, respectively.

The population of Bluefield is currently about 17,521. Application of the standard of 3.5 acres of park per 1000 population reveals that there should be 61.32 acres of park for the city population. The City Park is composed of about 320 acres of which about one-half is currently being used for recreation activities. The City has a plan for future development of the existing open space that would provide facilities for camping, trails, look out tower, ski slope, and possible zoo. Within the standard two mile radius, the City Park does serve most of the residential neighborhoods of Bluefield.



## GOVERNMENTAL SERVICES

### City Hall

Bluefield's City Hall is located on Bland Street near the City's central business district. The number of employees and amount of office floor space of each department are given below:

Table 38  
Bluefield Government Offices  
within City Hall

| <u>Office</u>           | <u>Employees</u> | <u>Office Space Sq. Ft.</u> |
|-------------------------|------------------|-----------------------------|
| City Manager            | 2                | 680                         |
| City Engineer           | 3                | 1,400                       |
| Building Inspector      | 3                | 300                         |
| City Clerk              | 1                | 520                         |
| City Treasurer          | 6                | 950                         |
| Sanitary Board          | 2                | 260                         |
| Urban Renewal Authority | 5                | 1,575                       |
| Police Dept. and Jail   | 26               | 3,250                       |
| Court and Board Rooms   | 2                | 1,850                       |
| Other                   | —                | <u>27,215</u>               |
| Total                   | 50               | 38,000                      |

Source: City of Bluefield.

The government building is not wholly satisfactory either as functional office space or as a symbol of a forward-looking city. The inefficiency of the structure is indicated by the low proportion of usable office space in the building, the small public meeting room, and the necessity of walking to reach the third floor. The structure has not been maintained well and there are numerous minor and major repairs left undone. 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 lacks adequate lighting and provisions for servicing. The Bluefield Urban Renewal Authority has recently renovated its offices with considerable success. 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. The auditorium on the first floor has been demolished and is now being used for much needed parking space.

The City Hall requires a thorough renovation if it is to continue as a useful structure housing the city administration and personnel.

#### 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. The acceptable level is an average of five books annually circulation per person. The existing circulation is 23,560. Based on accepted standards and present volume the level of circulation should be 87,500. For a city of Bluefield's size, library standards call for a circulation of books per month of about 8,000. The actual monthly circulation of books from Bluefield's library is only 1,970 which is extremely low even taking into account the nature of the national standards of a goal rather than actuality.

Library personnel consider the floor space (2,500 sq. ft.) inadequate for any expansion in the near future. Based on a generally accepted guideline, 5 books per gross sq. ft. of floor area, the building could accommodate 12,500 volumes. The current volume inventory is estimated at 12,500. This would indicate that the present floor space is used at full capacity and signs of overcrowdedness

are apparent. The following Table 39 reflects past and present circulation, volume, and the annual net increase in books.

Table 39  
Existing Circulation, Volume and  
Annual Percent Increase of Books  
Bluefield Public Library  
October, 1971

|               | <u>1970</u> | <u>1971</u> | <u>Average Annual<br/>Percent of Change</u> |
|---------------|-------------|-------------|---|
| Total Volumes | 11,538      | 12,500      | 8.3%  |
| Circulation   | 23,143      | 23,560      | 1.8%  |
| Books Added   | 962         | 1,089       | 13.2%                                       |

Source: Bluefield Public Library.

Several conclusions can be drawn from the investigation of present library facility:

1. The library is not located in the most accessible or suitable area that affords maximum use.
2. Lack of financial support to provide an adequate and up-to-date collection of books.
3. Present facility is much too small and inadequate, lack of available parking for visitors within a reasonable distance, and outside appearance of building does not "advertize" itself as a library as it should.
4. Publicity and active programs are not adequate to attract the local population.

Each of these problems has had some influence on library use.

The library is financed by annual appropriations from the City of Bluefield, the County Board of Education, and by private contributions. The current employment consists of one chief librarian and one clerical assistant. The present library was founded in 1913.



### 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. The Central Station serves areas north of the Valley Ridge and the Bland Street Station serves all areas south of Valley Ridge.

General data of the Fire Department's personnel and equipment are shown in the following list:

Table 40  
Fire Department  
Bluefield, W. Va.

| <u>Employment</u> | <u>Equipment</u>          | <u>Condition</u> |
|-------------------|---------------------------|------------------|
| 1 Fire Chief      | Station (2)               | Satisfactory     |
| 2 Dispatcher      | 3 class A-1000 gal.pumper | Excellent        |
| 5 Drivers         | 1 75' Ladder Pumper       | Excellent        |
| 21 Call and       |                           |                  |
| Volunteer Firemen | 2 750 gal. pumper         | Good             |
|                   | 1 1,200 gal. tanker       | Good             |
|                   | 1 utility truck           | Good             |
|                   | 1 station wagon           | Excellent        |

Source: City of Bluefield.

Both fire stations are old with crowded space and inadequate facilities for present-day use. Though the location of 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 Mercer Street Bridge. A new bridge has been built which provides much better access than did the old bridge.

During 1970, the Fire Department made 314 calls, all were scattered throughout the City. Through September, 1971, the department had made 222 calls.



Both Bluefield fire stations compare favorably with the "protection standards" outlined by the American Insurance Association. Each station serves a radius of at least 2 miles, which would cover almost all of the City. Both located generally near the intersection of major traffic arteries.

#### Police Department

Bluefield's Police Department is staffed by 25-full-time officers. The department makes use of 6 radio-equipped patrol cars, one motorcycle, and a paddy wagon in performing police patrols. The Police Department is located in the north-wing of the City Hall. During 1970 the department recorded approximately 1,400 major offenses and over 8,000 traffic violations. Police protection is limited to residents of the City and includes a 24 hour patrol service. Police department requirements are projected in the Community Facilities Plan section of this report.





# major thoroughfares

---





## MAJOR THOROUGHFARES

In any urban or rural area, the transportation system to move goods and people is a critical element in development. Past growth has depended upon the development of this system both qualitatively and quantitatively; future growth will in the same manner depend on the expansion of transportation facilities. Planning for future development necessitates a thorough study of transportation needs.

The purpose of this section is to examine and evaluate existing traffic conditions and patterns to provide the basis for a thoroughfare plan. The sufficiency of the existing thoroughfare system was evaluated in relation to the existing traffic volume and street capacities.

Bluefield's past growth has been accompanied by an increase in vehicular traffic. The increase in traffic can be attributed to the increased population within Bluefield and the surrounding areas, the economic activity within and around the City, and to the increased rate of vehicle ownership in the same area.

The present thoroughfare system has evolved as the City expanded from the initially settled area and was not specifically planned to handle the type and volume of traffic currently imposed on it. Past efforts to improve the traffic handling capacity of the existing thoroughfare system have involved: the widening and improvement of existing streets, the adoption of a number of one-way streets, the improvement of parking conditions, the installing of traffic signals and other traffic engineering techniques.

According to current population projections, it is estimated that by 1990 the Bluefield population will rise to about 22,000. This estimate is based on the City's success, or lack of success, in creating new basic employment. However, since 1960, the population has dropped from 19,256 to 17,521 in 1970. Employment in the Bluefield Market Area (Mercer County) is expected to increase from 17,220 (estimated in 1960) to 18,700 by 1980. These figures are significant since they indicate that an increasing number of vehicles will be required to move people throughout the Bluefield area. The number of vehicles in the Bluefield area is expected to increase from 20,000 in 1970 to 42,000 in 1990, an increase of approximately 110 per cent.

The problem from a traffic standpoint is apparent. Traffic congestion is a deterrent to healthy growth and must be eliminated if the Bluefield area is to realize its full potential.

#### PREVIOUS STUDIES

Valuable background information and basic data utilized in this section were obtained from previous studies of the area conducted by the West Virginia Department of Highways, and a 1966 Traffic & Parking in Downtown Bluefield prepared by Alan M. Voorhees & Associates, Inc.

#### Components of Transportation System

There are four components in the Bluefield transportation system; local streets, feeder streets, trunkline, and expressways. Each functions in a unique manner--each necessitates certain general requirements. The major functional requirements are provided in the following outline.



Local Streets - Localized arterial and spur roads which provide land access and socio-economic benefits to abutting properties.

Feeder Streets - Serves community to community travel and/or collects and feeds traffic to the higher systems.

Trunkline - Serves major city to city travel.

Expressways - Serves major intrastate and interstate travel including federal interstate routes.

#### EXISTING TRAFFIC CONDITIONS

Factual information on existing street use, traffic service and the physical features of the thoroughfare system is essential in determining existing conditions and to estimate future travel needs.

Table 41 illustrates the mileage for the City by the classified components.

Table 41  
Existing Mileage Summary  
City of Bluefield

| <u>Classification</u> | <u>Mileage</u> | <u>Per Cent</u> |
|-----------------------|----------------|-----------------|
| Expressway            | 7.7            | 8.3             |
| Trunkline             | 7.2            | 7.8             |
| Feeder                | 15.5           | 16.7            |
| Local Streets         | <u>62.2</u>    | <u>67.2</u>     |
| Total                 | 92.6           | 100.0           |

Source: Estimates by Balzer and Associates.



Map 8 illustrates the thoroughfare system as it existed in 1970.


The conditions on each individual thoroughfare are analyzed below:

- Bluefield Avenue - This facility follows a east-west corridor from the west corporate limits to the intersection at Mercer Street. The traffic volume on Bluefield Avenue varies from 13,000 vehicles per day between W. Corporate Limits and Spruce Street to a high of 18,000 vehicles per day near Mercer Street intersection.

Bluefield Avenue is predominately a two-way, two-lane street from W. Corporate Limits to Spruce Street with four-lane segment between Spruce Street and Mercer Street. The operating speed on this street averaged 23 miles per hour.

With the widening and improvement of Bluefield Avenue within the Bluefield Avenue Urban Renewal Project area, greater traffic movement is provided without undue traffic congestion. (Expressway classification)

- Princeton Avenue - Another east-west major street leading from the intersection of Bluefield Avenue and Mercer Street to the north-east corporate limits. It is a two-lane street with average daily traffic volumes ranging from 14,000 vehicles per day near the central business district, to 12,000 vehicles per day near the east corporate limits. The average operating speed on Princeton Avenue is 23 miles per hour. Because of topography this street is lined with retainer walls throughout much of the entire distance.



Both Bluefield Avenue and Princeton Avenue serve as major arterial streets to the central business district. (Expressway classification)

- Federal Street - Is a north-south street paralld to Bland Street. It is a northbound one-way street and carries approximately 8,000 vehicles per day through the central business district. The average operating speed is low for the entire length of the street, averaging about 5 miles per hour between Bland Street and Princeton Avenue. The lower speeds are created by delays incurred at the traffic signals at Scott Street and Raleigh Street. (Trunkline classification)
- Bland Street - Bland Street is a high volume street traversing a corridor from the central business district to its intersection with College Avenue. The average daily traffic volume increases from 10,000 vehicles at College Avenue to 19,100 vehicles at the Federal Street intersection. The average operating speed decreases from 20 miles per hour at College Avenue to 12 miles per hour at Federal Street near the central business district. (Trunkline classification)

A short segment of Bland Street is paralld to and one block west of Federal Street. This segment is one-way southbound serving as part of circulation system for central business district. From Federal Street to Rogers Street this facility can provide for three-lane traffic during peak volume hours.

- Bland Road - Serves as an important artery from the residential areas in the southeastern portion of the City to the central business district. It is a two-lane street with adequate right-of-way.

The operating speed between College Avenue and Cumberland Road is approximately 23 miles per hour.



Future traffic volume is expected to increase substantially because of growing commercial development along Cumberland Road. (Trunkline classification)

- College Avenue - Another important artery from residential areas in the southwestern portion of the City to the central business district. It is a two-lane street with average daily traffic volumes ranging from 7,000 vehicles per day from west corporate limits to Cherry Street, 7,000 vehicles per day on the short segment between Cherry Street and Walton Avenue, to 6,000 vehicles per day near the Bland Street intersection. (Feeder classification)

The operating speed is relatively low for the entire length of the street, averaging about 17 miles per hour.

- Route 52 (Couch Street, Highland Avenue, and Spruce Street) - Serves as the only major route into the City from the surrounding areas to the north. The average daily traffic volume increases from 12,000 vehicles at the north corporate limits to almost 13,000 at the Cherry Street intersection and is approximately 8,000 at the Bluefield Avenue intersection. (Trunkline classification)
- Cherry Street, Maryland Street - Serves as an important connector of Route 52 and College Avenue. It is a two-lane street with steep grades, carrying over 5,500 vehicles per day at an average operating speed of 17 miles per hour. (Feeder classification)
- Cumberland Road - An east-west street leading from the intersection of Routes 52 and 21 to the northeast corporate limits. It is a two-lane street with average daily traffic volumes at 5,500 vehicles per

day. The average operating speed is low for the entities length, averaging about 21 miles per hour. The operating speed is continually decreasing because of new commercial development causing traffic congestion. (Trunkline classification)

- Grassy Branch Road - An important connector between Cumberland Road and Princeton Avenue. Serves somewhat as a by-pass around central business district for traffic movement between Route 52 and Route 460. This is a two-lane facility with average operating speed of 32 miles per hour. (Trunkline classification)

#### TRAFFIC VOLUMES

Estimated traffic volumes on Bluefield's major thoroughfares are shown in Table 42 . These are derived from 1970 State Department of Highways traffic counts and apply to "average daily traffic," meaning traffic on a normal weekday. The figures shown are taken from counts at particular points along the streets listed and the volumes may vary somewhat at other points.

Bland Street between Federal Street and High Street is shown to have the highest traffic volume--19,100 vehicles per day while Princeton Avenue between Mercer Street and Bland Street is second with 18,000 vehicles per day.

Other streets with relatively high volumes are Bluefield Avenue from west corporate limits at 13,000 increasing to about 18,000 at the Mercer Street intersection, Princeton Avenue from 12,000 at east corporate limits to 14,000 near Federal Street and Bland Street from High Street to College Avenue ranging from 19,000 to 10,000.

Bluefield Avenue and Princeton Avenue carries the main northeast-southwest traffic flow along Bluefield's





central valley plus the traffic between Route 52 and the central business district.

Traffic volumes on Cumberland Road and Grassy Branch Road has increased considerably in recent years because of commercial development along Cumberland Road and both facilities being used by motorists as east-west by-pass around the inner city.

#### STREET CAPACITY

Estimated street capacities are shown in Table 42 . These represent volumes that the streets can carry without congestion, defined as a situation in which a driver will not have to wait longer than one traffic light change at an intersection. 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 comparison in Table 42 between street capacity and traffic volume gives a general indication of congested conditions. Bland Street between Federal and Union Streets is shown as most seriously over its rated capacity, with an actual flow of 19,000 vehicles per day as against a capacity of 12,900. The remainder of Bland Street is overcapacity to a somewhat lesser extent, as is Princeton Avenue from Scott to Bland Streets and Highland Avenue at Route 52. Federal Street and Bland Street from Princeton Avenue to point where both intersect are slightly overcapacity. The remaining streets are within their rated capacities.

With the completion of the Corridor Q extension from Interstate 77, present overcapacity streets such as Bland Street and Cumberland Road would have additional overloading and Princeton Avenue and Bluefield Avenue

Table 42  
Existing Major Thoroughfares  
City of Bluefield

| Facility                                  | Pavement<br>Width | Right-of-<br>Way Width | Pavement<br>Condition | Hourly<br>Capacity | Capacity 1970 |        |
|---|-------------------|------------------------|-----------------------|--------------------|---------------|--------|
|   |                   |                        |                       |                    | ADT           | ADT    |
| <u>Bluefield Avenue (Expressway)</u>      |                   |                        |                       |                    |               |        |
| City Limits - Spruce St.                  | 36                | 60                     | Good                  | 720                | 10,000        | 13,500 |
| Spruce St. - Mercer St.                   | 48                | 74                     | Excellent             | 2,000              | 20,000        | 17,000 |
| <u>Princeton Ave. (Expressway)</u>        |                   |                        |                       |                    |               |        |
| Mercer St. - Bland St.                    | 48                | 74                     | Excellent             | 1,500              | 15,000        | 17,500 |
| Bland St. - Federal St.                   | 35                | 50                     | Fair                  | 900                | 12,800        | 14,000 |
| Federal St. - Scott St.                   | 35                | 50                     | Good                  | 900                | 12,800        | 13,000 |
| Scott St. - City Limit                    | 36                | 50                     | Good                  | 1,100              | 15,000        | 12,000 |
| <u>Federal St. (Trunkline)</u>            |                   |                        |                       |                    |               |        |
| Bland St. - Princeton Ave.                | 34                | 50                     | Fair                  | 600                | 8,500         | 8,000  |
| <u>Bland St. (and Road) (Trunkline)</u>   |                   |                        |                       |                    |               |        |
| Princeton Ave. - Federal St.              | 34                | 50                     | Good                  | 600                | 8,500         | 8,000  |
| Federal St. - Union St.                   | 42                | 60                     | Good                  | 600                | 12,900        | 15,000 |
| Union St. - College Ave.                  | 34                | 50                     | Good                  | 550                | 7,700         | 10,000 |
| College Ave. - Oakhurst Ave.              | 32                | 50                     | Good                  | 550                | 8,500         | 10,000 |
| Oakhurst Ave. - Cumberland Rd.            | 40                | 60                     | Excellent             | 740                | 10,400        | 7,000  |
| <u>College Ave. (Feeder)</u>              |                   |                        |                       |                    |               |        |
| City Limit - Cherry St. Cutoff            | 30                | 50                     | Good                  | 450                | 6,300         | 7,000  |
| Cherry St. Cutoff - Bland Rd.             | 30                | 50                     | Good                  | 450                | 6,000         | 6,000  |
| <u>Route 52 (Trunkline)</u>               |                   |                        |                       |                    |               |        |
| City Limit - Highland Ave.                | 34                | 50                     | Fair                  | 500                | 7,000         | 12,500 |
| Highland Ave. - Cherry St. Cutoff         | 24                | 50                     | Fair                  | 400                | 6,300         | 10,000 |
| Cherry St. Cutoff - Bluefield Ave.        | 24                | 50                     | Fair                  | 500                | 6,300         | 8,000  |
| <u>Cherry St. - Maryland St. (Feeder)</u> |                   |                        |                       |                    |               |        |
| Highland Ave. - Frederick St.             | 20                | 50                     | Fair                  | 300                | 4,200         | 6,000  |
| Frederick St. - College Ave.              | 20                | 50                     | Good                  | 300                | 4,000         | 5,000  |
| <u>Cumberland Rd. (Trunkline)</u>         |                   |                        |                       |                    |               |        |
| City Limit - Washington St.               | 20                | 50                     | Good                  | 300                | 4,200         | 2,500  |
| Washington St. - Bland Rd.                | 20                | 50                     | Good                  | 300                | 4,200         | 5,000  |
| Bland Rd. - Grassy Branch Rd.             | 20                | 50                     | Good                  | 400                | 4,500         | 6,000  |
| <u>Grassy Branch Rd. (Trunkline)</u>      |                   |                        |                       |                    |               |        |
| Cumberland Rd. - Princeton Ave.           | 24                | 50                     | Excellent             | 500                | 7,000         | 4,000  |



would decrease in volume, allowing them to remain within their rated capacities.

#### TRAVEL TIME

An efficient thoroughfare system will permit reasonable operating speeds under conditions that afford adequate safety. Data on operating speeds and travel time within the City is shown in Table 43 .

Average overall operating speeds of 25 to 35 miles per hour during off peak hours are an accepted desirable minimum on thoroughfare systems. These speeds normally cannot be attained on the thoroughfares within the central business district but can generally be attained on the thoroughfares outside of the central business district.

Virtually all parts of the City are within 10 minutes driving time of the central business district. As would be expected, Bland Street, and Princeton Avenue in and near the central business district are shown to cause travel delays, with average speeds well under the recommended standards. The travel times also show, however, heavy congestion on Federal Street, as well as delays on Route 52 and the Cherry Street cutoff attributable to the Spruce Street-Highland Avenue connection.

#### ORIGIN-DESTINATION AND TRAVEL DESIRES

The traffic volume on a given street depends on the number of drivers who select the street as a route or a portion of a route between their origin and destination. In selecting a route for a trip in an urban area, the average driver, who is familiar with the area, gives consideration to such factors as trip length, driving



Table 43  
Travel Time and Speed  
Bluefield, W. Va.

| <u>Thoroughfares</u>                  | <u>From</u>    | <u>To</u>      | <u>Miles</u> | <u>Hours</u> | <u>Minutes</u> | <u>M.P.H. Speed</u> |
|---------------------------------------|----------------|----------------|--------------|--------------|----------------|---------------------|
| Bluefield Ave.                        | City Limit     | Spruce St.     | 1.30         | 0.065        | 3.90           | 20                  |
| Bluefield Ave.                        | Spruce St.     | Mercer St.     | 0.58         | 0.023        | 1.38           | 25                  |
| Princeton Ave.                        | City Limit     | Bland St.      | 1.75         | 0.076        | 4.56           | 23                  |
| Princeton Ave.                        | Bland St.      | Mercer St.     | 0.18         | 0.007        | 0.42           | 25                  |
| Federal St.                           | Bland St.      | Princeton Ave. | 0.25         | 0.050        | 3.00           | 5                   |
| Bland St.                             | Princeton Ave. | Federal St.    | 0.25         | 0.050        | 3.00           | 5                   |
| Bland St.                             | Federal St.    | College Ave.   | 0.66         | 0.055        | 3.30           | 12                  |
| Bland Rd.                             | College Ave.   | Cumberland Rd. | 0.70         | 0.030        | 1.80           | 23                  |
| College Ave.                          | Bland Rd.      | City Limit     | 1.60         | 0.094        | 5.64           | 17                  |
| Route 52                              | City Limit     | Bluefield Ave. | 0.61         | 0.051        | 3.06           | 12                  |
| Cherry St.                            | Highland Ave.  | College Ave.   | 1.10         | 0.065        | 3.90           | 17                  |
| Cumberland Rd.                        | W. City Limit  | Bland Rd.      | 1.69         | 0.080        | 4.80           | 21                  |
| Cumberland Rd. &<br>Grassy Branch Rd. | Bland Rd.      | Route 19-460   | 2.70         | 0.084        | 5.04           | 32                  |

Source: Estimates by Balzer and Associates.

time, operating speed, congestion and driving comfort. Bluefield has not had an origin-destination survey for traffic disposition within the City since 1959. During 1970 the West Virginia Department of Highways conducted a transportation study for the Bluefield-Princeton area to determine travel pattern characteristics of the area. using the basic data from that study, an update of the 1950 report will evaluate present traffic patterns and present proposals regarding future highway facilities within Bluefield and surrounding areas. These surveys were of the Exterior Cordon type; that is, a series of survey stations were set up at the City Limits on the significant roads leading out of the City and all drivers were interviewed during a set survey period as to the origin and destination of their trip.

By reviewing the 1959 Traffic Survey Report and the 1970 Area Transportation Study, the following conclusions are indicated by these surveys:

- Six points of access to the City of Bluefield were considered by the Highway Department in the origin and destination of traffic in 1959 and 1970. Table 44 shows the comparison of the two studies for each external station as related to the central business district and other points within the City.
- Access to the central business district itself is from three directions -- east, south, and west -- and concentrated on two streets -- Princeton Avenue and Bland Street. Table 45 summarizes the origin and destination data in these three major categories.
- From 1959 to 1970, traffic to and from Bluefield

Bluefield increased by 12% while traffic between the central business district and points beyond Bluefield decreased by 17%.

- Through traffic, made up of trips which do not stop within the City, was 27.2% of all traffic crossing the City boundary in 1950 and 30.6% in 1970.
- Of the total external-internal traffic crossing the City boundaries, according to 1959 counts, 68% was on Bluefield and Princeton Avenues and Route 52 at the northern City line. This percentage had decreased considerably by 1970 on both Bluefield and Princeton Avenues and increased slightly on Route 52 at north City limits.
- A shift is beginning to occur in external-internal traffic into the City. In recent years points of entry such as College Avenue, Cumberland Road, Grassy Branch Road and with the opening of Corridor Q, traffic moving into the City will shift primarily to points of entry in southern routes of the City. The reason for this shift in traffic patterns is best explained by the development of new shopping and retail establishments in southern areas of the City and primary residential development within the City.



- Traffic consisting of trips entirely inside the City creates a heavy concentration especially on Bland Street, the main connector between north and south Bluefield. This internal traffic does not appear to have increased between 1959 and 1970, unlike the external and through traffic. The 1959 and 1970 traffic surveys indicate that internal trips from south Bluefield to the central business district actually decreased by about 20% in this 10-year period. The reason for this decrease may be explained partly by the City's population loss and partly by the growth of new shopping facilities and the building of the new Post Office in south Bluefield reducing the amount of travel to the central business district.
- Eventhough population has decreased in recent years and new developments have occurred in south Bluefield, it is felt that with increasing vehicular ownership, increasing traffic volume throughout the City and increasing origin--destination trips since 1959, the number of internal trips within the City have increased also, but a shift is occurring from the central business district to points in southern areas of the City.

#### DEFINING TRAFFIC PROBLEMS

After reviewing and analyzing the present major thoroughfare system, Bluefield's problems in arterial roads may be more serious than was presented in the 1962 Master Plan. There is a problem of major through-traffic flow needing to be by-passed or otherwise treated.



Several major areas of the City are served by inadequate arterial routes. There is a requirement for new major bridges or interchanges. A number of the major thoroughfares are badly overloaded and have inadequate connections and intersection characteristics. Listed below are the major problems associated with the arterial roads:

- The sector of Princeton Avenue between Monroe Street and Bland Street is narrow and inadequate to carry present traffic volumes.
- Bland Street and Federal Street intersection is congested during peak hour traffic. Some of this congestion is caused by conflict between curb parking and moving traffic.
- The streets that provide the circulation system for the central business district: Bland Street, Federal Street, Princeton Avenue, Scott Street, and Raleigh Street, are inadequate to serve the motorists. The circulation network forces concentration of turning movements and limits circulation.
- The Highland Avenue-Route 52 facility is inadequate to carry increasing traffic movement.
- The Cherry Street Cutoff-Highland Avenue, and Bland Street-College Avenue intersections are a major problem because of steep grades and narrow pavement.
- The Washington Street-Route 21 and 52 intersection is inadequate because of narrow width.
- Pavements are excessively narrow on Cumberland Road, Cherry Street Cutoff and Grassy Branch Road.
- Hale's Culvert on the Bramwell Road is inadequate and hazardous.
- Three bridges crossing the railroad in the East End

section of the City are old, narrow and deteriorating.

#### CONCLUSION

The analysis of basic data and evaluation of problems as presented above has been determined within the limitations of the present Master Plan and of available data from the State Department of Highways, Division of Advance Planning and other available sources to develop all the details of the analysis, but it is considered that the major transportation elements are adequately covered to permit the City of Bluefield to continue the planning objective for developing a Major Thoroughfares Plan.

TABLE 44

## SUMMARY OF TRIPS FROM OUTSIDE BLUEFIELD

## TO AND THROUGH THE CENTRAL BUSINESS DISTRICT

| FROM EXT.<br>STATIONS                     | Station I<br>Princeton<br>Ave. at East<br>City Limits |        | Station II<br>U.S. 21, U.S. 52<br>at South City<br>Limits |      | Station III<br>College Ave.<br>at West City<br>Limits |      | Station IV<br>Bluefield<br>Ave. at West<br>City Limits |        | Station V<br>Bramwell<br>Rd. at North<br>City Limits |      | Station VI<br>U.S. 52 at<br>North City<br>Limits |        |
|---|---|--------|---|------|---|------|--|--------|--|------|--|--------|
|   | 1959  | 1970   | 1959  | 1970 | 1959  | 1970 | 1959   | 1970   | 1959   | 1970 | 1959   | 1970   |
| To Central Business District              | 1920  | 2663   | 200   | 216  | 476   | 849  | 1556   | 2699   | 170  | 191  | 1784   | 3040   |
| Thru Central Business Dist.               | 6542  | 8771   | 874   | 945  | 66  | 117  | 3530   | 5123   | 222  | 249  | 2738   | 3666   |
| To Bluefield<br>But Not to or<br>Thru CBD | 192   | 566    | 1240  | 1339 | 3378  | 6032 | 2696   | 5678   | 1078   | 1210 | 2812   | 5794   |
| TOTALS                                    | 8,654   | 12,000 | 2314  | 2500 | 3920  | 7000 | 7782   | 13,500 | 1470   | 1650 | 7334   | 12,500 |
| % Increase<br>1959 to 1970                | 39%   |        | 10%   |      | 79%   |      | 42%  |        | 12%  |      | 70%  |        |

Source: 1959 &amp; 1970 West Va. Department of Highways.



TABLE 45

SUMMARY OF TRIPS FROM OUTSIDE BLUEFIELD  
TO AND THROUGH THE CENTRAL BUSINESS DISTRICT

| <u>From The</u> |              | <u>1959</u> | <u>1970</u> | <u>% Increase</u> |
|-----------------|--------------|-------------|-------------|-------------------|
| East            | To CBD       | 1,920       | 2,663       |                   |
| (Princeton)     | Thru CBD     | 6,542       | 8,771       |                   |
| Avenue          | To Bluefield | 192         | 566         |                   |
|                 | but not CBD  |             |             |                   |
|                 | Total        | 8,654       | 12,000      | 39%               |
| South           | To CBD       | 1,126       | 1,623       |                   |
| (Bland)         | Thru CBD     | 1,556       | 2,243       |                   |
| Street          | To Bluefield | 7,724       | 11,134      |                   |
|                 | but not CBD  |             |             |                   |
|                 | Total        | 10,406      | 15,000      | 44%               |
| West            | To CBD       | 3,510       | 3,703       |                   |
| (Princeton)     | Thru CBD     | 6,490       | 6,848       |                   |
| Avenue          | To Bluefield | 6,586       | 6,949       |                   |
|                 | but not CBD  |             |             |                   |
|                 | Total        | 16,586      | 17,500      | 06%               |
| TOTAL           | To CBD       | 6,556       | 7,989       |                   |
|                 | Thru CBD     | 14,588      | 17,862      |                   |
|                 | To Bluefield | 14,502      | 18,649      |                   |
|                 | but not CBD  |             |             |                   |
|                 | Total        | 35,646      | 44,500      | 25%               |

Source: 1959 & 1970 W. Va. Dept. of Highways.



# GENERAL GUIDE PLAN





# goals and objectives





## GOALS AND OBJECTIVES

The process of planning involves the determination of actions that must be taken in order to achieve the goal that is desired. The first step in any planning is to state the goals that are sought to be achieved, and, in community planning, those goals, once adopted, become the policy framework within which all governmental decisions are made. Once government has expressed its goals and objectives publicly in the form of an adopted comprehensive plan, decisions by the private sector can be made that will compliment and reenforce the goals of the community. With local government and the community at large continually evaluating their proposed actions by the goals and objectives of the plan, the plan becomes a continuing expression of the direction in which the community should be moving physically, economically, and socially.

The general goals and objectives which have guided the individual elements of this plan are expressed as follows:

### RESIDENTIAL GOAL

Every resident of Bluefield should have the opportunity of living in housing that is within his means, suitable for his needs, and in a good condition. The environment of residential areas in Bluefield should be protected as a critical resource and improved, where necessary, by additional public facilities and by preventing incompatible development. Good housing represents a precious commodity in Bluefield and every possible step should be taken to enlarge the supply

of good housing and to preserve and improve residential neighborhoods.

It is the goal of this plan that Bluefield shall contain a wide range of housing types, styles, and price ranges in order that all people, regardless of family size, income level, age, race, or preference can find a decent, safe, and sanitary living unit in an attractive environment.

- It is intended that zoning be granted and utilities be made available to serve land planned for all types of residential uses, specially multi-family housing for which there is a present demand considerably greater than the supply.
- Housing that needs improvement and is capable of being improved will be brought up to a desirable standard.
- Every house in good condition will be preserved from replacement by other uses or public facilities unless a greater public need is served by such an action.
- Housing that has deteriorated to a point beyond feasible improvement will be removed.
- New housing that is built in Bluefield will furnish adequate space at feasible rents or prices with first priority given to meeting the needs of families which are attracted to the City by new employment.
- Residential sections that are determined to have long-term suitability for residential purposes, especially in South Bluefield, will be preserved from invasion by undesirable uses, and improved by satisfactory maintenance of public facilities and

provision of additional facilities where necessary.

- A program of building curbs, gutters, and sidewalks and installing street lights in older neighborhoods will be continued and that they will be required in all new developments.
- Residential development throughout Bluefield will be closely related to supporting commercial, industrial, and recreational activities.

#### COMMERCIAL GOAL

Actions by the City to stimulate the development of commercial areas should have two principal aims: to provide needed commercial services at suitable locations for residents of the City and of each neighborhood, and to obtain region-serving businesses in downtown Bluefield which represent an economic asset to the City.

A goal of this plan is to maintain and support community and neighborhood commercial activity, and to revitalize and strengthen the central business district of Bluefield in accordance with the present adopted "Plan for Downtown Bluefield" as the business and commercial center of the region.

- Heavy commercial and general retail uses shall be concentrated at predetermined locations and not allowed to pop-up as spots or strips along streets or thoroughfares where such commercial development is a hazard to traffic and a nuisance to neighboring residential development.
- The downtown commercial center of Bluefield will be strengthened as the focal point of business and



community activities in order to remain as the regional trade and business center.

- In developing areas and in redevelopment areas neighborhood commercial centers will be provided for serving designated neighborhoods at high access locations on major streets. Groups of stores in suitable locations to serve a neighborhood or designated section of the City will be encouraged by City actions to improve access and to allow expansion where necessary.
- Commercial use of frontage along Cumberland Road will be expanded as the economic market warrants, and this development will be designed to maintain good traffic movement on Cumberland Road and to relate compatibly with adjoining residential areas.

#### INDUSTRIAL GOAL

Families in Bluefield now having low and moderate low incomes should be given the possibility of increasing their economic well-being. The objective of City government should be to encourage the increase of the general level of employment and incomes throughout the City, which in return means more revenue and capital gains for Bluefield.

It is a goal of this plan that adequate space be provided for all types of industrial uses in order that there be a wide variety of job opportunity for residents of the City and the area in relatively close proximity to their homes.

- Efforts to attract new industries to Bluefield and

the area will be expanded, and will concentrate on those with higher-paying jobs, continuous employment, and low or moderate requirements for City services.

- Areas suitable for industrial development - Corridor Q between Bluefield and Interstate 77 - should be planned with adequate capacity in public utilities and transportation facilities to absorb the projected impact of industrial growth.
- A program for the purpose of improving and expanding the existing industrial sector of the economy should be promoted and implemented. The development of a small industrial park in the north side section of Bluefield is feasible with construction of access road and site improvements that would increase industry expansion inside the City.
- With industrial expansion, employment programs will focus on upgrading employer skills in order to increase incomes and to attract higher-wage industries.

#### TRANSPORTATION GOAL

With the construction of Interstate 77 and Corridor Q, Bluefield recognized that efficient transportation and good transportation facilities are basic factors in the economic and physical development of the community. Because of topography and the economic depression in recent years Bluefield has had minimal road construction. With new major highway construction, railroad facilities and airport, Bluefield needs to capitalize on these advantages by improving the systems and facilities.

It is the goal of this plan to have a functional system of



arterial thoroughfares, public transit service, railways and airport facilities that will allow for the safe and expeditious movement of goods and people from their origins to their destinations.

- The West Virginia Department of Highways and Virginia Department of Highways will be sought to increase the accessibility of the City to and from all sections of southern West Virginia and southwestern Virginia - Corridor Q to Route 460 in Tazewell County, Route 52 north and Bluefield-Princeton Road.
- A modern system of arterial streets will be developed in Bluefield to provide for movement of traffic throughout the City, for improved access to downtown Bluefield (Bland Road, Bluefield Avenue, Princeton Avenue, and Mercer Street - Airport Road Connector), and for better movement between various sections of the City, including new industrial areas.
- Neighborhood streets will be built, maintained, or repaired as necessary to meet modern standards of neighborhood development.
- Other forms of transportation will be maintained and enlarged as necessary to meet future needs; in particular, the Mercer County Airport will be improved to meet modern standards for prospective air traffic, rail service will be supported as an aid to industrial development, and bus service will be maintained as a needed inter-city and Bluefield-Princeton area public service.

#### PUBLIC FACILITIES GOAL

Although the Mercer County Board of Education has first



responsibility for school programs, the City has a major interest in the relationship that schools have to other elements of the City. Proposals for schools and school playgrounds should receive close attention by City officials, even to the point of City actions to influence their location, size, and programs offered. The hospitals, parks, libraries, fire stations, and other facilities provided by the City of Bluefield or Mercer County play a major part in the life of the community. Bluefield recognizes the importance of these facilities to residents of the City and to the future development of Bluefield by seeking to influence their construction or operation.

It is the goal of this plan to provide public facilities necessary to serve the residents of the City in the most modern and efficient manner possible.

- Future school location, construction and renovation should be directed to improving the efficiency of school plant use throughout the City, especially in view of limitation on site size or location.
- The existing school facilities available to Bluefield residents must be upgraded to meet modern standards for quality education and to provide for more neighborhood and community use of the facilities.
- The City will establish a continuing liasion with the Mercer County Board of Education so that each can dispense its responsibility for implementing the master plan for schools.
- Recreation and playground facilities should provide needed recreation space and equipment in every neighborhood, make better use of school playground

TABLE 46  
FUTURE LAND USE ALLOCATIONS  
AND 1974 COMPARISONS  
Bluefield, W. Va.

| <u>Land Use</u>                     | <u>Acres</u>    |                 | <u>Change</u>  | <u>Percent<br/>Change</u> |
|-------------------------------------|-----------------|-----------------|----------------|---------------------------|
|                                     | <u>1974</u>     | <u>1990</u>     |                |                           |
| Residential                         | 1,268.27        | 1,618.27        | +350.00        | +27.6                     |
| Commercial and<br>Personal Services | 98.28           | 128.28          | + 30.00        | +30.5                     |
| Wholesale and Storage               | 10.83           | 35.83           | + 25.00        | +230.8                    |
| Industrial                          | 16.35           | 47.14           | + 30.83        | +188.6                    |
| Public and Community<br>Services    | 1,014.53        | 1,244.90        | +230.37        | + 22.7                    |
| Vacant                              | <u>2,789.02</u> | <u>2,122.86</u> | <u>-666.16</u> | <u>- 23.8</u>             |
| Total                               | 5,197.28        | 5,197.28        | -              | -                         |

Source: 1974 Land Use Survey by City of Bluefield.  
1990 Estimates by Balzer and Associates.

responsibility for school programs, the City has a major interest in the relationship that schools have to other elements of the City. Proposals for schools and school playgrounds should receive close attention by City officials, even to the point of City actions to influence their location, size, and programs offered. The hospitals, parks, libraries, fire stations, and other facilities provided by the City of Bluefield or Mercer County play a major part in the life of the community. Bluefield recognizes the importance of these facilities to residents of the City and to the future development of Bluefield by seeking to influence their construction or operation.

It is the goal of this plan to provide public facilities necessary to serve the residents of the City in the most modern and efficient manner possible.

- Future school location, construction and renovation should be directed to improving the efficiency of school plant use throughout the City, especially in view of limitation on site size or location.
- The existing school facilities available to Bluefield residents must be upgraded to meet modern standards for quality education and to provide for more neighborhood and community use of the facilities.
- The City will establish a continuing liasion with the Mercer County Board of Education so that each can dispense its responsibility for implementing the master plan for schools.
- Recreation and playground facilities should provide needed recreation space and equipment in every neighborhood, make better use of school playground



facilities, and be developed in newly developing areas.

- The greatest single asset to a continuing recreation program in Bluefield is to offer and support a wide range of recreational facilities that will meet some of the park and recreation needs of Bluefield residents. The most pressing need is the financial support of the City to upgrade and improve existing playgrounds, playfields, and equipment. School playgrounds should be used to the maximum extent.
- The location of other facilities in Bluefield - County, State, and Federal - should recognize the fact that Bluefield is the population center of the area and therefore that facilities to be used by people should be in or near the City.
- In situating new facilities or improving existing ones, the City should place a high priority on potential effects - both beneficial and adverse - that the facilities and services can have on nearby residents.

**future land use**

---

adequacy of community facilities to serve the needs of the expanded population. The addition and improvement of educational facilities and playgrounds appears as the City's most urgent need in the area of community facilities.

- Bluefield's downtown area must continue to be viewed as the economic, political, cultural and social center in the region. Every available method of enhancing the downtown must be investigated and considered.
- Development of increased residential density in certain areas of the City without disturbing the existing social environment through the implementation of more public housing programs designed to accommodate families of low income and senior citizens.
- Direct the bulk of the residential development toward single-family homes, since this manner of living is the obvious desire of the bulk of the population in Bluefield. The development of multi-family units are also needed to provide relatively inexpensive housing for young people who cannot afford the more expensive single-family unit.
- Elimination of strip commercial development where possible to produce a more homogeneous and economical land use pattern.



- Continue the enforcement of codes and ordinances to help protect the existing wholesome City environment from existing blight and incompatible land uses.
- Adoption of zoning and subdivision measures as important steps toward implementing the ultimate land use proposals.

### Principles

Planning considerations must be based on such items as the City's traffic circulation patterns, spatial arrangements of the various land use activities, population distribution and density, and locations of community facilities. The following principles are designed to accomplish the land use objectives.

- Consideration of physical and topographic features, especially slope, in formulating land use patterns. In general, level land should be reserved for industrial and other business uses, while steeper land is more suited to residential development.
- Arrangement of the various land uses in a manner capable of protecting each use from the incompatible effects of the others.
- Utilization of appropriate population distribution and density standards to achieve residential patterns comparable to those in existing areas.

- The development of future community facility sites in accordance with recommended service area and location standards.
- Proper apportionment of the amount of each land use category throughout the City.
- Location of future industrial sites in proximity to highway, rail and utility facilities and not effect the utilization of other adjacent land uses.

## LAND USE PROJECTIONS

### Residential

By 1990 Bluefield's population is expected to increase from 17,500 (1970 population, including newly annexed area) to 22,500. This means residential land use allocations for future development should be geared to accommodating 5,000 people. Based on a national average of 3.2 persons per household that would mean approximately 1,560 dwelling units.

Since very little multi-family housing has been constructed in Bluefield during the past ten years, with the exception of the Hill Street Public Housing Project, about twenty (20) percent of the projected dwelling units should be of multi-family, townhouse, and duplex type. The remaining projected dwelling units would be single-family.

Based on normal, gross land area requirements for the projected dwelling units needed the land area allocation for residential use, by acres, is calculated as follows:

| <u>Dwelling Units</u> | <u>Type</u>   | <u>Gross Density</u> | <u>Acreage Required</u> |
|-----------------------|---------------|----------------------|-------------------------|
| 320                   | Multi-family  | 15/Acre              | 21                      |
| <u>1240</u>           | Single-family | 4/Acre               | <u>310</u>              |
| <u>1560</u>           |               |                      | <u>331</u>              |

Therefore, 325 to 350 acres of residential land use should be programmed into the 1990 Land Use Plan.



## Commercial

The Economic Base Study undertaken as part of the Comprehensive Plan projected a need for an additional 283,000 sq. ft. of floor area for shopper goods and 50,000 sq. ft. for convenience goods by 1990. These floor space needs can be easily translated into land area needs by adding twice the floor area for parking and an additional twenty-five (25) percent for off-street loading, landscaping, rights-of-way, and unusable or lost area. The calculations for additional land area for commercial use to be programmed into the 1990 Land Use Plan are as follows:

|  | <u>Type of Commercial</u> |                          |
|--|---------------------------|--------------------------|
|  | <u>Shopper Goods</u>      | <u>Convenience Goods</u> |
| Floor Space Required   | 283,000 sq.ft.            | 50,000 sq.ft.            |
| Parking Space (2 x floor)  | 566,000 sq.ft.            | 100,000 sq.ft.           |
| Additional for landscaping,<br>off-street loading, etc.<br>(25% x floor space) | <u>70,750 sq.ft.</u>      | <u>10,000 sq.ft.</u>     |
| Total Land Area Needed   | 919,750 sq.ft.            | 160,000 sq.ft.           |
| (express in acres)   | <u>21.1 Acres</u>         | <u>3.7 Acres</u>         |

The 1990 Land Use Plan should therefore include about 20 to 25 additional acres of land for shopper commercial and about 4 additional acres for land for convenience commercial.

## Personal Services

The Economic Base Study undertaken as part of the Comprehensive Plan projected a need of an additional 58,000 sq. ft. of floor space for personal services. As in the case of

projecting land area needs for commercial uses, the land area needs for personal services can be projected similarly as follows:

|                                 | <u>Personal Services</u> |
|---------------------------------|--------------------------|
| Additional Floor Space          | 58,000 sq.ft.            |
| Required by 1990                |                          |
| Parking Space (2 x floor space) | 116,000 sq.ft.           |
| 25% for landscaping, etc.       | <u>14,500 sq.ft.</u>     |
| Total Land Area Required        | 188,500 sq.ft.           |
| In Acres                        | <u>4.3 Acres</u>         |

The 1990 Land Use Plan should therefore include about an additional 4 or 5 acres of land for personal services.

#### Wholesale Trade

The Economic Base Study undertaken as part of the Comprehensive Plan projects a need for an additional 312,000 square feet of floor space for wholesale trade by 1990. The floor space needs can be easily translated into land area needs by adding twice the floor area for truck loading and automobile parking plus 20% for street rights-of-way, setbacks, etc., as follows:

|                                  |                      |
|----------------------------------|----------------------|
| Additional Floor Space Projected | 312,000 sq.ft.       |
| for Wholesale Trade by 1990      |                      |
| Parking Space and Truck Loading  | 624,000 sq.ft.       |
| Space (2 x floor area)           |                      |
| 20% for Streets, etc.            | <u>62,400 sq.ft.</u> |
| Total Additional Land Area       |                      |
| Required for Wholesale Trade     | 998,400 sq.ft.       |
| In Acres                         | <u>22.9 Acres</u>    |

The 1990 Land Use Plan should therefore include an additional

22 to 25 acres to meet Wholesale Trade space needs.

### Industry (Manufacturing)

In the analysis and projections of employment sectors of the economy outlined in the Economic Study, Bluefield is expected to have approximately 1,010 manufacturing workers by 1990. Manufacturing employment is expected to comprise about 12 percent of total work force in the City by 1990. The manufacturing industry is expected to grow rapidly in coming years.

Based on 1970 industrial acreage and employment Bluefield has about 24.2 workers per industrial acre. The national standard for cities comparable to Bluefield is about 20 workers per gross industrial acre. For projecting purposes the existing figure of 24.2 workers per gross industrial acre will be used. This means that industrial land use allocations for future development should be geared to accommodating over 350 additional workers. Based on the existing workers per gross industrial acres, Bluefield should plan for 40 to 45 acres of total industrial space as calculated below.

| <u>Employment</u> | <u>Acres</u> | <u>Workers Per<br/>Acre</u> | <u>Acreage<br/>Required</u> |
|-------------------|--------------|-----------------------------|-----------------------------|
| 1970 --- 658      | 27.14        | 24.2                        | 27.14                       |
| 1990 ---1,010     | -            | 24.2                        | 41.70                       |

The 1990 Land Use Plan should therefore include about an additional 15 to 20 acres for future industrial use.

### Public and General Community Services

Since the space requirements for parks, schools, libraries,



government buildings, playgrounds and other community facilities are projected on the basis of special analysis, acreage requirements for these uses for 1990 are determined by individual needs of each facility and the site size dictated by these needs. The type of special analysis involved in arriving at accurate space requirements for each community facility are more appropriately covered in the Future Community Facilities Plan of this report.

During the analysis of community facilities each was investigated in terms of its adequacy for the population area served and the sufficiency of the site size. These findings were then applied to general standards adapted to the local situation in order to derive total acreage requirements for the correction of existing deficiencies and the accommodation of future growth. The Future Community Facilities Plan depicts these corrections and distributes the total acreage to best meet accepted standards.

Based on community facility requirements and standards, the projected land area allocated for community service use, by acres, is calculated as follows:

| <u>Type of Facility</u> | <u>Existing Acres</u> | <u>1990 Acres</u> |
|-------------------------|-----------------------|-------------------|
| High Schools            | 21.0                  | 21.0              |
| Jr. High Schools        | 4.0                   | 14.0              |
| Elementary Schools      | 11.6                  | 16.6              |
| Playgrounds             | 8.3                   | 13.3              |
| Playfields              | 10.0                  | 20.0              |
| Parks                   | 75.0                  | 235.0             |
| Government Buildings    | 7.0                   | 10.0              |
| Transportation          | 848.3                 | 860.0             |
| Other Services          | 29.3                  | 55.0              |
| TOTAL                   | 1,014.5               | 1,244.9           |

Source: Estimates by Balzer and Associates.

The 1990 Land Use Plan includes an additional 230 acres

for community facilities use. The largest amount of which would be designated for highway, schools, parks and hospital construction. This increase in acreage represents a 22.7 percent growth in community facilities and transportation use.

#### Vacant Land

As mentioned earlier, much of the vacant land in Bluefield is steep and may not be suited for development. Even though the 1990 Land Use Plan does not designate a great deal of this land for future use, it is proposed that with proper controls, many steep areas can be developed. By developing these slopes with proper controls, large lots, or even multi-family units in many areas, would substantially increase the much needed residential space and in return would allow more suitable land for industrial and commercial use.

#### AREAS OUTSIDE THE CITY

In addition to Bluefield's primary problem of the redevelopment and renewal of its older neighborhoods, and the future expansion of new residential, commercial and industrial areas, a problem of importance is the control of development outside the City's boundaries. Much of the development now taking place in these areas is on sub-standard streets with inadequate utilities, and haphazard development that has not taken advantage of the terrain and natural beauty of the Bluefield area. These areas can be extremely desirable in the future and would do much to encourage residential and industrial expansion needed for future economical growth of Bluefield.



## FUTURE LAND USE ALLOCATIONS AND 1974 COMPARISONS

Table 46 shows a comparison of 1974 Existing Land Use with the land use allocations as shown in the 1990 Future Land Use Plan. It must be pointed out, the 1990 Future Land Use Plan illustrates a greater degree of development than shown in Table 46. The Plan includes vacant land and is intended to illustrate only the extent of development. It shows a 40 percent vacancy by 1990 in the City because of steep and undevelopable land. Total 1974 vacancy percentage for Bluefield is about 53 percent.

Single-family housing units comprise the largest portion of the residential land use category, accounting for 1,618.27 acres by 1990. This indicates an increase of 27.6 percent or 350 acres of residential growth since 1974. Because of the increasing demand for multi-family units in Bluefield, the 1990 Future Land Use Plan provides for a greater increased proportion of the residential land to be devoted to this type of development. The proposed higher-density residential areas have been located along the major arteries serving the City, adjacent to the Downtown area and in close proximity to the various hubs of commercial activity.

In an effort to correct existing problems and to guide future commercial growth, the 1990 Future Land Use Plan provides for commercial and personal services facilities to be located with respect to population so as to achieve convenience for the residents and continuity in the neighborhood's visual image. It is hoped that by distributing the commercial facilities throughout the City, some of the undesirable effects that strip commercial activity afford the adjacent property may be alleviated. A prime example



of strip commercial and the effects on adjacent properties would be the intrusion of commercial land uses on the north side of Cumberland Road.

The Downtown section of the City of Bluefield is proposed to serve as the central business district; its major function is to act as the regional market place for the exchange of retail consumer goods and to provide business, professional, and financial services to the surrounding region. Several convenience and shopper goods centers have been spaced throughout the City, located adjacent to neighborhood areas. These commercial centers have been located so as to best serve the major population concentrations and to function smoothly with the pattern of vehicular circulation. These centers would include the area around North Street and Bland Street; Cherry Street Cutoff, Stadium Drive and Frederick Street; Grassy Branch Road and Edgewood Drive; Corridor Q Exit and Maryland Avenue; and Corridor Q Exit and Grassy Branch Road.

In an area that is expecting steady population growth, it is necessary to provide space for industrial and wholesale development. The 1990 Future Land Use Plan has proposed several industrial areas to serve the City and region. These have been located primarily with respect to access onto the major transportation facilities, so as to require only minimal use of the arteries serving the residents of the City. Two significant areas for industrial development in Bluefield are proposed between Old Bramwell Road and U.S. Route 52, and in the extreme northeast section of the City near Wayne Street and Old Princeton Road. Industrial and wholesale space is expected to increase by almost 56 acres by 1990.

Approximately 1,244.90 acres of land in Bluefield have been proposed for public and community use. This would be an increase of 230 acres over 1974 usage. The various uses of public and community services include the transportation facilities, schools, parks and recreation, public utilities, government buildings, libraries, and parking. A more detailed explanation of these various uses is presented in the sections devoted to community facilities and proposed transportation system.

TABLE 46  
FUTURE LAND USE ALLOCATIONS  
AND 1974 COMPARISONS  
Bluefield, W. Va.

| <u>Land Use</u>                     | <u>Acres</u>    |                 | <u>Change</u>  | <u>Percent<br/>Change</u> |
|-------------------------------------|-----------------|-----------------|----------------|---------------------------|
|                                     | <u>1974</u>     | <u>1990</u>     |                |                           |
| Residential                         | 1,268.27        | 1,618.27        | +350.00        | +27.6                     |
| Commercial and<br>Personal Services | 98.28           | 128.28          | + 30.00        | +30.5                     |
| Wholesale and Storage               | 10.83           | 35.83           | + 25.00        | +230.8                    |
| Industrial                          | 16.35           | 47.14           | + 30.83        | +188.6                    |
| Public and Community<br>Services    | 1,014.53        | 1,244.90        | +230.37        | + 22.7                    |
| Vacant                              | <u>2,789.02</u> | <u>2,122.86</u> | <u>-666.16</u> | <u>- 23.8</u>             |
| Total                               | 5,197.28        | 5,197.28        | -              | -                         |

Source: 1974 Land Use Survey by City of Bluefield.  
1990 Estimates by Balzer and Associates.





# **community facilities plan**

---



## COMMUNITY FACILITIES PLAN

The following section is a plan for the future development of community facilities in the City of Bluefield and is based on existing and future needs as determined during the inventory and analysis of community facilities within the Comprehensive Plan. The Community Facilities Plan will coordinate development of all community facilities with respect to one another and in accordance with the proposed Future Land Use Plan. Consideration will be given to individual neighborhood needs as well as to community-wide facilities.

### SCHOOLS

The inventory and analysis section of public schools indicated that decreasing enrollment is but one of the existing problems confronting the City's educational system. This means that overall population is decreasing and existing school facilities must be utilized even though they may be inadequate for a progressive educational program. A number of schools have been closed and several existing schools are found with inadequate sites. Substandard construction, inadequate utilities, and lack of recreational facilities were added deficiencies found in Bluefield's public school system.

The West Virginia public school system is structured on the County level. For this reason, plans for improving schools in the City of Bluefield must be coordinated with the overall needs of Mercer County.

A projection of school age population for Bluefield is best determined by studying past migration trends, birth rates, and



death rates. Past enrollment data will not produce accurate enrollment estimates. It does not reflect abnormal changes in the population composition, such as age distribution, and it is based on the average enrollment of a short period. If the school age population (5 to 17 years) increased substantially because of an increase in births and an in-migration of young people, such estimates would be low in comparison to actual enrollment.

For Bluefield, several conclusions must be drawn before determining method of projecting future school age population.

- The death rate of approximately 1.6% per annum will remain relatively constant throughout much of the twenty year period. This is primarily due to the high percentage of persons over 65 years and increasing. Those 65 and over increased by 5.5% between 1960 and 1970.
- The out-migration rate will decrease from the annual average of 1.8% to an equalization point that would offset the declining birth rate of 1.8% per annum, which is slightly higher than state and national averages.
- The natural rate of decreasing population is expected to equalize gradually over the next twenty years. The birth rate will continue to decline as the death rate remains constant. However, the net migration is expected to equalize within the twenty year period with an in-migration trend developing.
- As mentioned in the population section earlier, the migration patterns and rates are directly related to employment levels, which in return is a good basis for projecting population and forecasting future school age population.

- Based on employment forecasts as related to future migration patterns, an optimistic population projected for Bluefield by 1990 will be about 22,500. This forecast would bring the school age population to 5,200, near the 1960 level.

Once the net migration, birth and death rates are established, and total school age population is forecasted, the age distribution for future years can be determined. Table 47 shows the projected school age population and age distribution by elementary, junior, and high schools.

The projected educational statistics shown on Table 48 were determined by adequacy of existing facilities, enrollment projections evaluated with respect to population distribution, school capacity and structural conditions of the various schools within Bluefield.

Table 47  
EDUCATIONAL STATISTICS  
1990  
Bluefield, W. Va.

|                      | <u>Elementary</u> | <u>Junior</u> | <u>High School</u> | <u>Total</u> |
|----------------------|-------------------|---------------|--------------------|--------------|
| Projected Enrollment | 2,060             | 1,485         | 1,655              | 5,200        |
| Existing Capacity*   | 2,300             | 1,600         | 1,200              | 5,100        |
| Seats Needed         | + 240             | + 115         | - 455              | - 100        |

\*Existing capacity is based on number of classrooms times 30 students per classroom for elementary and junior, and 25 for high school.

Source: Estimated by Balzer and Associates.

Converting the above data into student per room standards, it is anticipated that an additional 18 high school classrooms

TABLE 48

SCHOOL AGE POPULATION PROJECTIONS  
Elementary, Junior High, Senior High  
Bluefield, W. Va.

| <u>Year</u> | <u>Population</u> | <u>Approx.<br/>5-17 yrs.</u> | <u>5 to 17 yrs.<br/>as % of Pop.</u> | <u>Elementary</u>   |                      | <u>Junior</u>        |                      | <u>Senior</u>        |                      |
|-------------|-------------------|------------------------------|--------------------------------------|---------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
|             |                   |                              |                                      | <u>5 to 12 yrs.</u> | <u>% of<br/>5-17</u> | <u>13 to 15 yrs.</u> | <u>% of<br/>5-17</u> | <u>16 to 17 yrs.</u> | <u>% of<br/>5-17</u> |
| 1960        | 19,256            | 5,328                        | 27.7                                 | 2,619               | 49.1                 | 1,660                | 31.2                 | 1,049                | 19.7                 |
| 1970        | 17,521            | 4,573                        | 26.1                                 | 2,026               | 44.3                 | 1,369                | 29.9                 | 1,178                | 25.8                 |
| 1980        | 19,100            | 4,720                        | 24.7                                 | 1,975               | 41.9                 | 1,365                | 28.9                 | 1,380                | 29.2                 |
| 1990        | 22,500            | 5,200                        | 23.1                                 | 2,060               | 39.6                 | 1,485                | 28.6                 | 1,655                | 31.8                 |

Source: Mercer County Board of Education  
Estimates by Balzer and Associates



will be needed by 1990. Both the elementary and junior school facilities are provided with enough classrooms to adequately provide for 1990 enrollments.

Even though ample classrooms are available for anticipated school age population, several existing school facilities are outmoded and inadequate to serve future demands. Advanced age, poor structural conditions, inadequate site and general facilities deficiencies were noted in many of the Bluefield schools.

The net effect of the school plant structure is that additional facilities are needed to replace several existing structures and to accommodate the anticipated enrollment growth within the City of Bluefield. These new facilities should be located in such a manner as to serve the anticipated growth trends. Sufficient land should be acquired to permit the proper functioning of related activities and to assure ample space for school plant development. Location and site size standards are those recommended in the inventory and analysis section by the West Virginia Department of Education.

The following proposals are recommended for the future improvement and development of school facilities in Bluefield.

- Bluefield High School - This school is now only 82 students short of its rated capacity of 1,200. As indicated by the total school age population projections, there will be about 455 additional high school students in Bluefield by 1990, creating a substantial excess over present capacity. During 1971, about 340 out-of-town students attended Bluefield High School. The Mercer County Board of Education

has contemplated the possibility of re-distributing high school districts within the County. One possibility would provide for a two high school designation to serve the entire County, and another re-distribution plan would require a four high school program. The Board of Education will have a choice, in either case, of building an addition to Bluefield High School, or it can construct a new high school in another section of the City or County. This is an important decision which will require considerable study at the County level. A new junior high school is being considered for future development adjacent to Bluefield High School to replace Fairview Junior High.

- Central Junior High - This facility should be replaced with a new school plant. The 1990 school age projection indicates that this section of the City, with urban renewal efforts in North Side, Bluefield Avenue Urban Renewal Area, and other possible areas for future redevelopment and revitalization, will increase junior high school enrollment to about 750 to 800 students. The present school capacity is 800 but is outmoded and shows signs of deterioration with complete lack of outdoor recreation space. The School Board has plans to improve and remodel this facility in the near future in order to prolong the use of this building. Long-range plans should provide for a new junior high school that would serve the entire City.
- Fairview Junior High - A new junior high school is recommended to replace the existing building. Even though the school is not at capacity of 800 students, it does not meet standards to adequately serve as a junior high educational facility. Signs of deterioration are noticeable and outdoor recreation space is not available. If a new junior high



were constructed this school site could be used for future playground area, or future elementary school, depending on amount of residential growth along Cumberland Road.

- Ramsey Elementary School - Even though this school is under the enrollment capacity, its continued use as an elementary school appears to be necessary to serve the residential areas within its service district. It is expected that a gradual increase in enrollment will occur over the next twenty years because of anticipated population growth. However, very little growth will occur within the central city, but nevertheless an elementary school must be provided for existing residential areas. The most pressing need for Ramsey Elementary School is that the County School Board acquire a small parcel of property on the south side of Russell Terrace for play and recreation area. This property is located at the south end of Russell Street as it intersects with Russell Terrace. The proposed site is fairly steep but at least some space could be developed for the much needed outdoor play area. The School Board has proposed that a cafeteria be constructed adjoining this building to serve students and faculty.
- Wade Elementary School - This building adequately serves the West End area although some modernization and improvements are needed. Because of projected elementary student decrease, this facility will not reach capacity of 600. Plenty of play space is available but playground apparatus are not adequate. It is proposed that this school plant be revitalized and improved for continued use. Playground furniture and court game facilities should be provided.



- Memorial Elementary School - This school will be adequate for the foreseeable future except that it would be desirable to provide for additional playground space. It is expected that by 1990 this facility could become overcrowded at which time an addition will be required.
- Whitethorn Elementary School - This school is adequate for future needs. The present enrollment is nearing capacity and additional space may be required within the twenty year period. The playground area is limited, but because of the sloping site, no addition appears feasible. With possible future residential development south of Cumberland Road, this school may become overcrowded, at which time a new elementary school would be needed to serve the growth areas along Cumberland Road.
- Cumberland Heights Elementary School - This school is adequate to serve future needs. Here again, with projected future growth in the extreme southern and southeastern portion of Bluefield, this school will need some expansion to serve anticipated growth.
- Preston Elementary School - This school facility is also adequate to serve future needs. Additional playground space should be provided. This building should be modernized and improved, both interior and exterior to present a progressive educational facility. This would hold true for all school plants in the City of Bluefield.
- Proposed Elementary (Fairview) - The Fairview Junior High School is recommended to be razed and replaced with a new facility adjacent to Bluefield High School. A new elementary

school is recommended to be constructed on this site as residential growth along Cumberland Road makes a new elementary school feasible.

- Proposed Elementary (Northside) - With possible revitalization and improvement of the Northside neighborhood, a new elementary school is recommended to be constructed adjacent to Pulaski Street to serve long-range needs.

In summary, the following is the list of recommended improvements or modifications to the City school program.

- Construct new addition to Bluefield High School to support proposed re-distribution plan for Mercer County.
- Raze Fairview Junior High and preserve site for recreation use or a new elementary school. Fairview students would attend the new junior high adjacent to Bluefield High School.
- Improve and refurbish Central Junior High for immediate future (five years). Long-range plans would provide for one junior high to serve entire City.
- Acquire additional land for playground space at Ramsey Elementary, Memorial Elementary, and Preston Elementary Schools.
- Remodel and upgrade, both interior and exterior, Ramsey Elementary, Wade Elementary, Memorial Elementary, White-thorn Elementary, and Preston Elementary.
- Provide playground or playfield furniture, game apparatus, and court games for all school plant facilities.
- Construct new elementary school on Fairview site as future growth indicates.
- Construct new elementary school adjacent to Pulaski Street to serve Northside as revitalization and improvement strengthens this neighborhood.



## PARKS AND RECREATION

The responsibility for providing recreational facilities rests primarily with the City much as the provision of educational facilities is a County function. Recreation and education, however, are closely associated; therefore, the park and playground proposals are based to a large extent on the school proposals. A basic assumption to be employed in the recreational proposals is that a school site will also be a recreational site for children during after-school hours. Coordination of Mercer County's Board of Education policy with the plans of the City of Bluefield Recreation Department must be viewed, therefore, as a major step towards implementing the City's recreational program.

Recreation is becoming an increasingly important part of an individual's life. The increased amount of leisure time and the greater degree of mobility demands available constructive recreational facilities so that this spare time may be more fully enjoyed. One of the goals of this study is to demonstrate to City officials that the number and character of a community's recreational facilities are an important aspect in determining the overall desirability of a City. The adequacy of recreational facilities may determine an industrial firm's willingness to locate in the Bluefield area.

Standards and definitions provide a base for applying specific proposals to the various recreational facilities needed. These standards include area requirements, effective service areas, and the age group to be served. In general, the standards are outlined in the inventory and



analysis section of this report, and were derived from various publications of the Urban Land Institute.

The recreational proposals are based on the necessity to fulfill minimum needs within each neighborhood and the City as a whole. The proposals are also based on findings developed in the inventory and analysis section and the previously presented standards. The proposed Community Facilities Plan Map shows the location of each proposed facility.

The inventory and analysis section demonstrated that recreational facilities within the City are relatively limited. City facilities are small and ill-equipped, largely because of topography, but also due to limited funds and lack of interest. Many of the City recreation facilities are associated with very limited school sites, particularly with elementary schools. Other recreational facilities at the neighborhood level are sparse.

In Bluefield, several problems exist that impede the development and improvement of recreation areas: (1) neighborhood recreation facilities have been constructed on largely inadequate and limited sites in connection with the schools, and there is insufficient space for the variety of recreational activities which ought to be available to the residents of the neighborhood; (2) the very fine city-wide facilities which are located in the large and extremely adequate City Park are located far from those neighborhoods in the north and central sections whose residents most need better recreational facilities; and (3) the steep topography characterizing Bluefield makes it difficult to find adequate sites for an expansion of neighborhood recreation facilities.

In order to better serve residential areas with recreation facilities both city-wide and neighborhood conditions must be improved. On a city-wide basis, the most important consideration is that the City Park be developed and improved to its full potential. In recent years, considerable progress has been made developing recreational facilities in the City Park. On the North Side and Central areas, the most necessary actions involve installation and improvement of playground facilities available to residents of those neighborhoods. Recreation needs in other sections of Bluefield, especially in the south section of the City, are not as pressing.

Existing and proposed facilities are as follows:

City Playgrounds - Areas of this type are generally intended to serve the 5 to 12 year age group and should be capable of serving a particular neighborhood and be located within one-half mile radius of its potential users.

- East End Playground - Due to the steep topography, it does not appear feasible to enlarge this playground. It is recommended that additional facilities and landscaping of the area be implemented.
- East River Playground - This playground is adequate to serve future neighborhood needs. It is recommended that existing play facilities be improved and upgraded for more active use.
- Midway Playground - This playground is adequate to serve future play space needs for that section of Bluefield. Site space is adequate for ballfield and small tot lot.



- Wayne Street - With the future development of single and multi-family residential uses in this area, it is recommended that a 2 acre playground be considered adjacent to proposed commercial development on Wayne Street.
- Hardy Street Playground - It is recommended that the size of this playground be enlarged by the clearance of adjoining substandard buildings. Additional play facilities and landscaping should be provided.
- Northside Mini Playground - This playground is programmed for development with sufficient tot lot play facilities. With the future development of proposed Hill Avenue and Pulaski Street Connector this playground may be removed for right-of-way.
- Proposed Playground for North Side Urban Renewal Area - Located between Mercer Street and Carroll Street. This play area is developed as part of the neighborhood urban renewal project. Facilities include tennis court, basketball court, tot lot, and open space with rest benches, etc. With the development of this play area, the Hardy Street playground may not be needed to serve future recreation requirements.
- Jones Street Playground - In the Jones Street area, there is no existing playground facility. It is recommended that a playground with play apparatus and tot lot be developed.
- Montvale Park - It is recommended that this park be developed as neighborhood park and playground. Court games and ball-field should be developed with combination play area for small children, and also benches and walkways for adults. This park and playground area could be developed as one of the most attractive and useable recreation facilities in the City. Except for the Memorial Elementary School playground, there is no other recreation facility within the neighborhood.



- Genoa Playground - There is currently no existing playground facility in this neighborhood. With possible future multi-family growth in this area, a small playground space is recommended.
- Edgewood Park - It is recommended that this area be retained as open space with development of park benches and walkways for leisure walking.

School Playgrounds and Playfields - These play areas are intended for school hour use but are used for playground and playfield recreation needs during after-school hours by children and adults within the immediate neighborhood.

- Wade School Playground - It is proposed that additional playground facilities be provided for this area. New installation of basketball court, tennis court, tot lot apparatus, and landscaping would convert this relatively large area into a facility that not only serves as a playground, but would have a substantial positive impact on the neighborhood appearance.
- Preston School Playground - This play area should be enlarged to more fully serve the immediate neighborhood. This school playground is used intensively and includes adequate playground apparatus. With future expansion, this playground would more adequately serve the recreation needs of nearby residents.
- Memorial School Playground - It is recommended that this play area be expanded if possible. Because of adjacent

high property values, future expansion may not be feasible. With the development of Montvale Park, the Memorial School playground would be used less intensively.

- Ramsey School Playground - It is recommended that the County Board of Education acquire a small parcel of land on Russell Terrace for school playground. This proposed site is not adjacent to school property, but would serve as recreation space for school children or nearby residents.
- Fairview School Playground - If a new elementary school facility were constructed on this site, or if this school were demolished, a playground and park facility should be developed. This neighborhood is densely populated and lacks nearby recreation space. If the existing school site is retained, a playground area should be developed more fully on available space.
- Whitethorn School Playground - This school playground is adequate to serve school hour needs. Because of steep topography, it does not appear that playground expansion is feasible.
- Cumberland School Playground - This play area is adequate to serve future recreation needs.
- Bluefield High School Playfield - This playfield is excellent and appears to be adequate for future needs. The school proposals recommend that Bluefield High School

be enlarged and a new junior high school be constructed on the adjacent property. This would allow both school facilities to use the existing playfields as well as nearby neighborhood residents.

Community Parks - This type park facility should be located within 5-10 minutes driving time of user's home. The community park should provide a variety of active and passive recreational opportunities for all age groups. Bluefield is provided with an excellent City Park composed of about 320 acres of which one-half is now being utilized. It is recommended that the existing Site Plan of Proposed City Park Expansion be implemented. Extensive progress has been accomplished in recent years, developing recreational facilities within the City Park. Even though the City Park is not ideally located to serve all residents of Bluefield in the same capacity, it is used quite intensively during summer months.

Because of travel and distance to the existing City Park and lack of active outdoor recreation facilities within the southeastern and northeastern sections of Bluefield, it is recommended as a long-range proposal that future consideration be given to those areas of the City for the development of another City Park to serve that area. The Cumberland Heights, Old Cumberland Road section appears to be the potential growth area for Bluefield.

Within the scope of this twenty year plan, a full consideration and implementation of playgrounds and neighborhood parks are recommended to serve the existing and potential residential areas of Bluefield.



The recommended playground and park proposals are based on the recreation opportunities of sites in Bluefield and coordinated with existing recreation facilities, and areas of extreme need. Specific design considerations for playgrounds and parks are beyond the scope of this study and are the responsibility of the site designer.

The proposed recreation facilities for Bluefield includes approximately 350 acres of developed playground, playfields, and park areas. This is more than 160 acres of recreation area than exists today. This figure includes the full development and implementation of the entire City Park and expansion of existing playgrounds.

## GOVERNMENTAL SERVICES

A guide for the immediate and long range development of specialized public buildings and more efficient public services is the primary objective and content of this study. The following study presents proposals and recommendations based on the inventory and analysis of governmental services, including condition of public buildings, government spatial needs, the extent and type of services and the effectiveness and efficiency of existing services. The Plan for future public buildings and municipal services is derived from this analysis. The major priorities include location of new buildings, identification of structures to be abandoned, required building expansions and functional changes in city government. The Community Facilities Plan Map shows recommended public buildings.

"New" City Hall - A new government building is currently being planned for construction on the corner of Bluefield Avenue and Mercer Street. The City recently purchased land from the Urban Renewal Authority as part of the Bluefield Avenue Urban Renewal Project. All governmental services will be housed in the new structure, including city administrative offices, municipal courts, fire station, and police department. The new facility should be capable of accommodating the expanded administrative structure necessary for efficiently operating the services proposed within the twenty year planning period.

"Old" City Hall - The present Municipal Building is inadequate for today's governmental functions. Crowded conditions and old building design are outmoded for modern day

use. This building should be sold or possibly used for storage space.

City Library - A new library has recently been constructed, located on Commerce Street adjacent to the West Virginia Hotel. The inventory and analysis section determined that the library located in the City Hall building is extremely inadequate to serve residents of Bluefield. The new library will become the Craft Memorial Library and designated a Mercer County service library. The new library is expected to house at least 30,000 volumes, quite a jump from the 12,500 now inventoried in the City Hall library. The Craft Memorial Library will include the main lending library, meeting rooms, public restrooms, special children's library and study corrals.

Fire Stations - The fire protection recommendations are based on the expected land use patterns and the location, type and degree of development in and around Bluefield. With the development of a new City Hall, which will house a new fire station replacing the old Roanoke and Mercer Street station located in the North Side neighborhood, more adequate service can be provided for the central city, west end and east end sections.

The fire station located on Bland Street should be replaced with a new facility. This station serves a densely populated area of the City and should be provided with a more efficient building. Crowded conditions are apparent at this facility.



The 1990 Land Use Plan recommends that a new fire station be located on Cumberland Road near Corridor Q interchange. With future residential and commercial growth in this area, a new fire station must be provided. The Bland Street Station is too far removed to adequately serve this area of the City.

Through these three proposals, the entire City of Bluefield would be within three-mile or three-minute service, generally accepted fire protection standards. New fire stations should consist of a two-stall facility with living quarters and at least 2,500 square feet of floor area. Each fire station should have access to thoroughfares or collector streets leading to all parts of the City. The site should include where possible, both rear and front entrances and adequate off-street parking. Traffic signal controllers should be coordinated with alarm systems to permit uninterrupted movement of fire vehicles. The existing fire protection equipment is in good condition and with the addition of a new pumper truck should be adequate to serve future City needs.

Police Department - Based on the existing relationship between number of policemen required per person in Bluefield and based on the effectiveness of the existing force, the following departmental needs were established:

Table 49  
Police Department Requirements  
Bluefield, W. Va.

|                    | <u>Year</u> |             |             |             |             |
|--------------------|-------------|-------------|-------------|-------------|-------------|
|                    | <u>1972</u> | <u>1975</u> | <u>1980</u> | <u>1985</u> | <u>1990</u> |
| City Population    | 17,600*     | 18,164      | 19,100      | 20,800      | 22,500      |
| Required Personnel | 25          | 26          | 27          | 30          | 32          |
| Patrol Cars        | 6           | 6           | 7           | 7           | 8           |
| Motorcycles        | 1           | 1           | 2           | 2           | 2           |

\*Estimated 1972 population.

The present police staff is adequate to serve the City of Bluefield. However, any expansion in Bluefield's land area and any increase in population will place a strain on both equipment and personnel. The above table shows departmental requirements to serve the entire City. Based on these estimates, two additional patrol cars and eight policemen will be needed by 1990 to adequately enforce the law. The police department will be housed in the new City Hall.

National Guard Armory - The Armory is relatively new and excellently equipped facility. Parking accommodations, however, are somewhat inadequate with regard to the seating capacity of the arena at 3,500. Ample amount of land is available for the expansion of additional parking space. It is recommended that existing parking area be paved, new parking space be constructed and landscaping be developed throughout the Armory grounds.

This Armory facility is used at almost scheduled capacity by schools, organizations, clubs and other entertainment activities throughout much of the year. Bluefield State College and Bluefield High School use this arena for basketball activity during school session.

City Garage - Adequate with major repairs. This building is old and in need of improvements. Additional storage space should also be increased. This building is far removed from the center of Bluefield's governmental functions, but because of lack of adequate space elsewhere, this



building is sufficient for future requirements.

Bluefield Auditorium and Mitchell Stadium - These facilities are discussed more fully in the inventory and analysis section. Both are considered as facilities within the City Park and appear adequate to serve future recreation needs. A long-range plan should be considered to replace the Auditorium with a more modern and larger civic center complex.

Federal Office Building - As the result of major remodeling efforts several years ago, the Federal Building is capable of accommodating all Federal regional offices serving the Bluefield area. Located on Federal Street, the building is in the core of the downtown area. This building is also located very close to the Municipal Parking Building, therefore, providing plenty of parking for Federal employees and visitors.

Municipal Parking Building - This structure will provide for approximately 875 parking spaces. The Parking Building is in good condition and should provide functional parking for downtown shops and offices for many years. The Downtown Plan for Bluefield projects that downtown parking space should more than double after implementation of parking proposals. No expansion or improvement is recommended for the Municipal Parking Building within the twenty year planning period. A new parking building is being proposed for future construction between Princeton Avenue and Raleigh Street.



Bluefield Post Office - The present Post Office is located on North Street in South Bluefield. This is a very modern and efficient building to support postal requirements for the City. This building is almost in the geographic center of Bluefield.

Since any major growth should occur in South Bluefield, long range planning considerations include a post office substation to serve expected development along Cumberland Road. The proposed post office substation could be located in or adjacent to Bluefield Plaza Shopping Center.

Hospitals - Although hospitals are not administered by the local government, it is important to consider future health needs and requirements of Bluefield residents. All hospitals and health facilities within Bluefield and surrounding areas are considered as excellent facilities. With projected future population growth for Bluefield and Mercer County, it may become necessary for some health facilities to expand and broaden medical care functions. The Bluefield Sanitarium is a major hospital in the Bluefield region and possible expansion to this facility is recommended as medical needs are required in future years. The 1990 Land Use Plan recommends that a hospital site be reserved on Cumberland Road to serve future medical and health care requirements. Approximately 15-25 acres should provide ample space for future hospital needs.





# **major thoroughfare plan**

---





## MAJOR THOROUGHFARE PLAN

As in any city, the future growth and development of Bluefield depends largely on the street system, its design and function. Streets provide the necessary assessability, open space and means by which goods and services are transported. They are a vital element in the city's economic prosperity. The relative importance given to the thoroughfare plan will be reflected in the extent of economic growth and the overall success of future physical development proposals.

Based upon an extensive analysis of existing traffic conditions and future land uses, the proposed arterial improvements are recommended that will satisfy traffic needs until 1990. These recommendations are specifically designed to accomplish previously stated goals and objectives. The location and improvement of each proposed facility is based on a projection of the existing volumes and on potential volumes because of the location, density and character of land use development as shown in the Future Land Use Plan.

These arterial improvements are also based on origin and destination surveys and an analysis of travel trends and projections by the West Virginia Department of Highways.

### MAJOR THOROUGHFARE IMPROVEMENTS

Plan proposals as shown on Map 12 are intended to provide an adequate level of service both for present traffic volumes and those expected in the future to 1990. The individual proposals are discussed in the following paragraphs.

Corridor Q - The primary purpose of this facility is to transmit traffic from Bluefield and surrounding communities to Interstate 77 and U. S. Route 460. Corridor Q, located in the extreme southern portion of the City and extending from Cumberland Road at the southwest corner of Bluefield City limits east-southeast to Interstate 77 will serve the purposes enumerated below.

1. Provide access to I-77 from Bluefield and will also serve local major arterials such as Routes 52, 460, 21 and 19.
2. Open space for future development will be made available for intensive land uses in the path of general development trends.
3. Provision of an improved east-west artery in the southern section of the City will relieve the dual function that Cumberland Road, Bluefield Avenue, and Princeton Avenue has been required to serve, accommodating thru traffic movements and providing access to local residential development throughout Bluefield.

Three new access roads from Corridor Q are recommended. One at the intersection of Grassy Branch Road and another at the intersection with Maryland Avenue. These two access roads are at different locations than presented by preliminary site drawings by the West Virginia Department of Highways. Another access road is proposed to be constructed from Corridor Q to the intersection with Bland Road.

Bluefield Avenue - From West City limits to Spruce Street.



This street is adequate to serve 1990 traffic volume of over 10,000 vehicles per day. Normal maintenance with minor repairs will be required as future volume increases. From Lynn Street to Spruce Street on-street parking should be eliminated. This portion of Bluefield Avenue will carry the largest traffic volume in future years. Bluefield Avenue between Spruce Street and Mercer Street is newly constructed as implemented by the development of the Bluefield Avenue Urban Renewal Project.

Princeton Avenue - From Scott Street to East City Limits. This portion of Princeton Avenue is also adequate to serve future traffic demands. The 1990 traffic volume is expected to be about 10,000 vehicles per day. This projection is somewhat lower than 1970 traffic counts. With the construction of Corridor Q in the extreme southern portion of Bluefield, this facility will relieve thru traffic movement that now must use Princeton Avenue, Bluefield Avenue, and Cumberland Road. Normal maintenance with minor repairs will be necessary just to keep this facility in good condition for future demands. Future improvements to Princeton Avenue will include reconstruction of sidewalks, possible widening of pavement in some sections, and repair or reconstruct retaining walls along much of this street.

Route 52 - From North City Limits to Highland Avenue. Improve and construct four-lane facility. This segment of Route 52 is projected to carry over 12,000 vehicles per day by 1990. Some of this volume will be destined to Bluefield State College. A four-lane facility would control entrance onto the highway from adjacent development, including the College and the newly developed public housing project.

A new bridge over Bluefield Avenue and railroad should be considered. The present structure is deteriorating and in need of major repairs. A four-lane bridge is recommended.

Hill Avenue - From Old Bramwell Road to Route 52. New construction is recommended to connect Bramwell Road and Route 52. This extension would provide access to possible future industrial or residential land. Existing streets within the Hill Avenue Public Housing Project would be utilized as part of this proposal.

Hill Avenue and Pulaski Street - From Route 52 to Mercer Street. These streets should be widened and improved to serve as major carry of vehicles from communities north of Bluefield to the downtown area. This facility would help reduce congestion on Highland Avenue and Bluefield Avenue. This would provide for a major connection to the downtown for areas north of railroad. New construction will be required to connect these two facilities.

Old Bramwell Road - From Bluefield Avenue to North City Limits. Possible improvements to this facility should include widening, curb, gutter, and sidewalks. The 1990 traffic volume is expected to be approximately 2,000 vehicles per day. This street serves a relatively sparse residential area but is often used as thru-way to communities north of Bluefield.

Hale's Culvert - This one-lane railroad underpass is narrow, low, hazardous and inadequate for volume of traffic using the Old Bramwell Road. In order to provide access to recommended industrial area in this neighborhood, this underpass should be reconstructed to adequately serve truck vehicular movement.



Highland Avenue - From Beech Street to Spruce Street. This facility should be widened and improved. Right-of-way is adequate, pavement should be widened by doing away with green strips on both sides. Almost all portions of existing green strip is used for off-street parking and in recent years very little maintenance and care has been provided for these areas. Better vehicular movement could be provided by eliminating all on-street parking.

Beech Street - From Highland Avenue to Bluefield Avenue. This street is very steep and should be widened and improved to permit better access from Route 52-Highland Avenue to Bluefield Avenue for vehicular movement to western portions of the City.

Spruce Street - Widened, improved with new sidewalks, curb, gutter and street lighting.

Cherry Street Cutoff Connector - New construction from Route 52 to Cherry Street Cutoff. Because of sharp curves and steep grades from Highland Avenue onto Cherry Street Cutoff, a new two-lane facility should be constructed from Route 52 bridge to top of hill to the south on Cherry Street Cutoff. This would also improve the traffic capacity on Highland Avenue.

Cherry Street Cutoff - From Cherry Street Cutoff Connector to College Avenue. This facility is projected to serve over 8,500 vehicles by 1990. This street should be widened and improved within existing right-of-way, with curb, gutter, lighting, and sidewalk.

Maryland Avenue - From College Avenue to Cumberland Road.



Improve and widen on existing right-of-way. Provides for better access from Cherry Street Cutoff to Cumberland Road and Corridor Q. These improvements would include pavement widening to 30 feet with curb, gutter and sidewalk on one side. The projected 1990 average daily traffic for Maryland Avenue is 3,800.

Stadium Drive - From Cherry Street Cutoff to College Avenue. Appears to be adequate to serve 1990 traffic volume of 2,240. However, minor improvements will be necessary as future volume increases. These would include wider pavement, curb and gutter, sidewalks, and street lighting.

Frederick Street - Roy Street - From Cherry Street Cutoff to North Street. Will require improvements to serve 1990 traffic volume of over 2,000. Pavement widening, curb and gutters, and prohibit on-street parking will be necessary.

East River Avenue - Between Cumberland Road and Pearl Street. New construction is recommended that would provide for direct access from Cumberland Road to College Avenue and North Street.

Augusta Street - North Street - From Maryland Avenue to Bland Street. This facility is adequate to serve 1990 traffic volume. The elimination of on-street parking may become necessary throughout some sections of both Augusta Street and North Street.

College Avenue - From West City Limits to Bland Street. This street is adequate to handle future traffic volume, even though some sections of this facility are narrow and restrict movement. All on-street parking should be eliminated.

Union Street - The 1990 projected traffic volume is less than 1,000 vehicles per day. This facility is adequate to serve future needs. On-street parking should be prohibited.

Oakhurst Avenue, Edgewood Road - From Bland Street to Grassy Branch Road. Adequate to serve future traffic needs. A section of Edgewood Road between Orchard Way and Grassy Branch Road should be widened and improved because of curves and steep grade.

Bland Street - From Federal Street to College Avenue. Even though this street is currently carrying over 15,000 vehicles per day, 2,000 over capacity, the possibility of widening and improving Bland Street will not be feasible within the next decade. Intensive development adjacent to this facility prohibits the extent of future improvements. Most of Bland Street is provided with three lanes and directional lights. By eliminating on-street parking, portions of Bland Street could be widened with four-lanes on existing right-of-way. At peak hour traffic, the intersection with North Street and Union Street becomes congested. Between Federal Street and North Street, this facility is adequate to serve future needs. From North Street to College Avenue, this street should be widened and improved to a three-lane facility with middle lane being used for turning lane. Traffic volume on Bland Street is projected to increase slightly by 1990.

The Bland Street-College Avenue intersection is inadequate for turning movements. The steep grade on College Avenue prohibits good access to Bland Street. The widening of Bland Street at this intersection would help alleviate



this problem.

Bland Street - From College Avenue to Parkway Street. Considerable improvement to this street has been accomplished in recent years. The Bland Street curve intersection with Oakhurst Avenue has been improved by widening and providing additional turning lanes. Even with this improvement, three curves still exist within a very short distance. New construction is required to eliminate these curves, by cutting through a portion of the residential block between Oakhurst Avenue and Parkway Street. This would permit easier vehicular movement on a high traffic volume street. Bland Street and Bland Road provides direct access to Downtown Bluefield from developed residential areas in South Bluefield. This segment of Bland Street is projected to carry over 10,000 vehicles per day by 1990.

Cumberland Road - From West City Limits to Grassy Branch Road. This road should be widened and improved with 40' pavement, center turning lane at major intersections, with curb, gutter and sidewalks. Additional right-of-way will be required at intersections. The Cumberland Road intersection with Washington Street is inadequate. A center turning lane for each turning movement should be provided. The 1990 traffic volume for Cumberland Road will range from 3,000 to 6,000 per day. The construction of Corridor Q will relieve thru traffic congestion on Cumberland Road.

Grassy Branch Road - From Cumberland Road to City Limits. This facility is adequate to serve future traffic needs. Minor improvements will be necessary as traffic volume in-



creases. This would include curb, gutter and sidewalks, and street lighting.

East Cumberland Road - From Grassy Branch Road to East City Limits. This road should be widened and improved with 30' pavement, curb, gutter and sidewalks. Future developable land is available in this area.

New Street (North Side Area) - Using portions of Roanoke Street, Hardy Street, and Wayne Street, a new street extending from Mercer Street east to Old Bluefield-Princeton Road should be considered, which would serve entire North Side Area. Almost all local streets in this section of Bluefield are inadequate to serve needs of residents. With the development of the proposed Hill Avenue and Pulaski Street facility connecting with this proposal, would provide for a major collector street to serve existing and/or newly developed areas within this entire section of Bluefield.

Bridges - Three new bridges are proposed to cross the railroad throughout the entire length of N & W Railway traversing the City of Bluefield. The Route 52 bridge is proposed for construction as short-range need. With increasing traffic flow on Route 52, coupled with deteriorating conditions of present structure, a new bridge facility is recommended. Until recent years, this bridge was properly maintained, well painted with good lighting and pavement.

New bridges are also proposed to replace the Grant Street bridge and the Old Bluefield-Princeton Road bridge. Both of these bridges are old, narrow and in deteriorating condition. Both of these facilities would be essential to the feasibility of the proposed new street from Mercer Street to the Old Bluefield-Princeton Road located in the North Side Area.

DOWNTOWN STREET IMPROVEMENTS - All street improvements listed below are recommendations that were proposed in the Plan for Downtown Bluefield by Marcou, O'Leary & Associates, Planning & Urban Development Consultants, dated September, 1966.

The development of the Bluefield Comprehensive Plan did not require the review and analysis of existing and future transportation facilities for the Downtown Core Area because of the completion of more recent surveys and studies specifically oriented for the development and revitalization of the Downtown.

Princeton Avenue - From Bland Street to Scott Street. This street is proposed to be widened and improved on a 72' right-of-way with a 59' pavement.

Bland Street - The basic improvement needed is a widening and reconstruction from High Street south. A right-of-way of 82' and a pavement 66' wide should be provided ultimately. Between Princeton Avenue and Jones Street, the movement of traffic can be facilitated by the removal of curb parking, which will eliminate conflicts between parking and moving traffic. Truck loading and unloading on Bland Street is also in conflict with traffic movement. Truck service should be allowed only at night or at designated times when peak traffic is not occurring.

New Street - A new street cutting through the long blocks between Raleigh Street and Scott Street is recommended. This street, by providing an alternate route for circulation in downtown, will reduce the congestion on Federal and Bland Streets. The right-of-way should be at least 50' wide with

a pavement 30' wide.

Scott Street - It is recommended that the street grade be lowered about 20' from the Municipal Parking Garage to Princeton Avenue. This will improve the intersections at Commerce and Raleigh Streets. A pavement of about 30' should be built on a 50' right-of-way where possible.

Bland Street, Federal Street, Raleigh Street and Commerce Street - These streets should be reconstructed over a period of time to repair cracked pavements, to raise curbs, and to provide new sidewalks. There are a number of places where streets or sidewalks should be widened or straightened, and much of the curbing has become too low after successive repavings of the streets. Federal Street in particular, the most heavily-traveled pedestrian route, would benefit from this reconstruction program.



TABLE 50  
MAJOR THOROUGHFARE IMPROVEMENTS  
Bluefield, West Virginia

| Facility  | Improvement Proposed   | Proposed<br>Pavement Width                    | Proposed<br>Right-of-way | 1990 Average<br>Daily Traffic |
|---|--|---|--------------------------|-------------------------------|
| • <u>Corridor Q</u>   | Programmed for construction  | -   | -                        | -                             |
| • <u>Route 52-From North City Limits to Highland Ave.</u>                           | Four lanes, curb, gutter, lighting, & new bridge over Bluefield Ave. | 48' pavement plus curb & gutter               | 80'                      | 12,000                        |
| • <u>Hill Ave., Rock St., &amp; Pulaski St.-From Route 52 to Mercer St.</u>         | Two lanes, curb, gutter, sidewalks, street lighting                  | 40' pavement plus curb, gutter & 5' sidewalks | 60'                      | 4,500                         |
| • <u>Hale's Culvert-Old Bramwell Rd.</u>  | New railroad underpass   | 30' width with side-walk and lighting         | 30'                      | 2,500                         |
| • <u>Highland Ave.-From Beech St. to Spruce St.</u>                                 | Two lanes, curb, gutter, street lighting & sidewalks                 | 40' pavement plus curb, gutter & 5' sidewalks | 60'                      | 10,000                        |
| • <u>Beech St.-From Highland Ave. to Bluefield Ave.</u>                             | Two lanes, curb, gutter, street lighting, & sidewalks                | 30' pavement plus curb, gutter & 5' sidewalks | 50'                      | 2,400                         |
| • <u>Cherry St. Cutoff Connector-From end of Rt. 52 Bridge to Cherry St. Cutoff</u> | Two lanes, curb, gutter, street lighting, & sidewalks                | 40' pavement plus curb, gutter & 5' sidewalks | 60'                      | 8,500                         |
| • <u>Cherry St. Cutoff-From Cherry St. Cutoff Connector to College Ave.</u>         | Two lanes, curb, gutter, street lighting, & sidewalks                | 40' pavement plus curb, gutter & 5' sidewalks | 60'                      | 8,500                         |
| • <u>Maryland Ave.-From College Ave. to Cumberland Rd.</u>                          | Two lanes, curb, gutter, street lighting, & sidewalks                | 30' pavement plus curb, gutter & 5' sidewalks | 50'                      | 3,800                         |

MAJOR THOROUGHFARE IMPROVEMENTS  
Bluefield, West Virginia

| <u>Facility</u>  | <u>Improvement Proposed</u>  | <u>Proposed<br/>Pavement Width</u>                     | <u>Proposed<br/>Right-of-way</u> | <u>1990 Average<br/>Daily Traffic</u> |
|--|--|--|----------------------------------|---------------------------------------|
| • <u>Stadium Drive-From Cherry St. Cutoff to West City limits.</u>       | Necessary normal maintenance   | 40' pavement plus curb, gutter & sidewalks             | 60'                              | 2,240                                 |
| • <u>Frederick St., Roy St.-From Cherry St. Cutoff to North St.</u>      | Necessary normal maintenance<br>Prohibit on-street parking                                       | 30' pavement plus curb, gutter & 5' sidewalks          | 50'                              | 2,000                                 |
| • <u>Augusta St., North St.-From Maryland Ave. to Bland St.</u>          | Necessary normal maintenance<br>Prohibit on-street parking                                       | 30' pavement plus curb, gutter & 5' sidewalks          | 40' to 50'                       | 3,000                                 |
| • <u>College Ave.-From West City limits to Bland St.</u>                 | Necessary normal maintenance<br>Prohibit on-street parking                                       | 40' pavement plus curb, gutter & 5' sidewalks          | 60'                              | 8,500                                 |
| • <u>Union St.-From Bland St. to Glendale Ave.</u>                       | Necessary normal maintenance<br>Prohibit on-street parking                                       | 30' pavement plus curb, gutter & 5' sidewalks          | 50'                              | 1,000                                 |
| • <u>Oakhurst Ave., Edgewood Rd.-From Bland St. to Grassy Branch Rd.</u> | Widened and improved from Orchard Way to Grassy Branch Rd.                                       | 30' pavement plus curb, gutter & side-walk on one side | 50'                              | 2,500                                 |
| • <u>East River Ave.-From Pearl St. to Cumberland Rd.</u>                | Two lanes, curb, gutter, street lighting, & side-walks   | 30' pavement plus curb, gutter & 5' sidewalks          | 50'                              | 3,000                                 |
| • <u>Bland St.-From Federal St. to College Ave.</u>                      | Four lanes, curb, gutter, lighting with sidewalks on both sides. Eliminate all on-street parking | 48' pavement plus curb, gutter & 6' sidewalks          | 60'+                             | 15,000+                               |



MAJOR THOROUGHFARE IMPROVEMENTS  
Bluefield, West Virginia

| Facility  | Improvement Proposed   | Proposed   |              | 1990 Average  |
|---|--|--|--------------|---------------|
|   |  | Pavement Width   | Right-of-way | Daily Traffic |
| • <u>Bland St.-From College Ave. to Parkway St.</u>                     | Two lanes, improve and widen existing curves   | 40' pavement plus curb, gutter & 5' sidewalks            | 60'          | 10,000        |
| • <u>Cumberland Rd.-From West City limits to Grassy Branch Rd.</u>      | Two lanes, with center turning lane at major intersections. Prohibit on-street parking           | 40'-48' pavement plus curb, gutter & sidewalks           | 60+          | 5,000         |
| • <u>Grassy Branch Rd.-From Cumberland Rd. to City limits.</u>          | Minor improvements necessary as traffic volume increases   | 40' pavement plus curb, gutter & sidewalks               | 60'+         | 4,500         |
| • <u>East Cumberland Rd.-From Grassy Branch Rd. to East City limits</u> | Two lanes, widen and upgrade   | 30' pavement plus curb, gutter & 5' sidewalks            | 50'          | 1,000+        |
| • <u>Bluefield Ave.-From West City limits to Spruce St.</u>             | Will require normal maintenance with minor repairs. Prohibit on-street parking on some sections. | 40' pavement plus curbs, gutter & sidewalks              | 60'          | 10,000        |
| • <u>Princeton Ave.-From Scott St. to East City limits.</u>             | Will require normal maintenance with some major repairs to retaining walls and sidewalks         | 40' pavement plus curbs, gutter, sidewalks and walls     | 60'+         | 10,000        |
| • <u>Old Bramwell Rd.-From Bluefield Ave. to North City limits</u>      | Two lanes, widening and up-grading   | 30' pavement plus curbs, gutter, lighting & 5' sidewalks | 50'          | 2,000         |