COMPREHENSIVE FUTURE LAND USE PLAN

COOKEVILLE, TENNESSEE

1999 - 2020

PREPARED AND APPROVED BY THE

COOKEVILLE REGIONAL PLANNING COMMISSION

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September 25, 2000

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COOKEVILLE COMPREHENSIVE FUTURE LAND USE PLAN

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CHAPTER 1

INTRODUCTION

PURPOSE OF PLAN

The purpose of this document is to provide the City of Cookeville, Tennessee with a plan for its future development. A comprehensive plan is an essential planning instrument for a municipality with the primary purpose of producing an overall development plan and identifying strategies for implementing the plan. The objective of such a plan, as outlined in Section 13-4-203 of the *Tennessee Code Annotated*, is to serve as a guide for "accomplishing a coordinated, adjusted and harmonious development of the municipality which will, in accordance with existing and future needs, best promote public health, safety, order, convenience, prosperity, and general welfare as well as efficiency and economy in the process of development." This Plan is intended to serve as a guide for the future physical development of the municipality.

It is further intended that this Plan will address the growth planning requirements specified in Sections 6-58-101 through 6-58-115 of the *Tennessee Code Annotated* as amended by Public Chapter 1101 of 1998. A specific function of this plan is to identify the anticipated Urban Growth Boundary for the City of Cookeville.

The Cookeville Comprehensive Future Land Use Plan covers a planning period of approximately twenty years, from 1999 to 2020. The information presented in this plan should be used as a framework to guide municipal and county officials, community leaders, businessmen, industrialists, and others as they make decisions that affect the future growth and development of Cookeville. The plan is not intended to supersede the responsibility or authority of local officials and department heads. Instead, it is designed to give the public and private sectors a basis to constructively use the interdependencies that exist between the various elements and organizations in the community. The development goals, objectives, and policies and the implementation strategies presented in this plan should be periodically reviewed, and when necessary, updated to reflect unanticipated occurrences or trends.

DELINEATION OF PLANNING AREA

This Comprehensive Plan covers not only the City of Cookeville but also an identified planning area outside the corporate limits. The inclusion of a study area outside the corporate limits is necessary to adequately plan for the future growth of the municipality. It is also required for the identification of the city's anticipated Urban Growth Boundary. The boundary for the unincorporated planning area utilized in this Plan is based on several factors. These factors include the existing level, current trends and the future potential for development. Other factors considered in determining the study area limits are capability and capacity for the provision of utilities and planned transportation improvements. For the purposes of this Plan the City of Cookeville and the area outside the corporate limits are together referred to as the Cookeville Planning Area.

SCOPE OF PLAN

This Comprehensive Plan is designed to formulate a coordinated, long-term development program for the City of Cookeville and its Urban Growth Boundary. The preparation of a development program requires gathering and analyzing a vast array of information. The historic events, governmental structure, natural factors, and socio-economic characteristics of Cookeville are studied to determine how these have affected and will affect land uses, utility

systems, community services, and transportation facilities. Existing land uses and transportation facilities are analyzed to identify important characteristics, relationships, patterns and trends. From these analyses, pertinent problems, needs and issues relative to land use and transportation in the Cookeville Planning Area are identified. An amalgamation of this information is utilized to identify an Urban Growth Boundary and to produce a Development Plan. The Development Plan, as presented herein, consists of two interdependent elements: the first being the identification of development goals and objectives and the establishment of policies for achieving them, and the second being the creation of a development plan concept which visually illustrates the goals, objectives, and policies. To achieve the goals and objectives identified in the development plan specific strategies or measures are outlined in an implementation schedule.

COMMUNITY GOALS, PROCESS AND METHODOLOGIES

The development of community goals and objectives is a primary product of this Comprehensive Plan. Essential to the development of these goals and objectives is citizen participation. Citizen participation is necessary to identify local needs and problems perceived by the community at large. A number of methodologies are available for obtaining citizen input. The methodologies utilized in this Plan included surveys, interviews, and study groups. From citizen participation, goals and objectives addressing the recognized needs and problems were identified.

Many of the goals and objectives contained in this Plan were obtained during "Vision Workshops" held in mid 1998 as a part of comprehensive planning process undertaken for the City of Cookeville by the RM Plan Group. Several citizens, serving on four separate focus groups, participated in these workshops.

COMPANION PLANNING DOCUMENTS

A number of companion planning documents should be used in conjunction with this Comprehensive Future Land Use Plan. These include:

1. Cookeville 2020. The RM Plan Group prepared this planning document for the City of Cookeville in 1998. Although this plan was never adopted by the city, certain findings have been utilized in this Comprehensive Plan. A specific effort was made to incorporate much of the information derived from citizen input contained in Cookeville 2020. This is particularly true of the goals and objectives contained in this Plan.

2. Cookeville Leisure Services Master Plan. Prepared by the Cookeville Department of Leisure Services in 1999, this plan contains a comprehensive inventory of existing park and recreation facilities and presents specific recommendations and priorities for major recreational facilities.

3. Cookeville Urban Growth Boundary Report. This report was completed in October of 1999 by the Department of Planning and Codes to comply with the requirements of Public Chapter 1101 of 1998.

CHAPTER 2

BACKGROUND FOR PLANNING

INTRODUCTION

To effectively plan for any community, gathering information concerning its background is necessary. The size and location of a community are important aspects of a community. Information on a municipality's early settlement and events affecting past development assists in planning for its future development. An understanding of the community's political history and governmental structure helps to reveal the atmosphere in which future planning will take place. Background data for the City of Cookeville is presented in this chapter.

Location and Size

The City of Cookeville, comprising a total land area of approximately 14,050 acres or 21.95 square miles, is situated in the center of Putnam County, Tennessee. Putnam County embraces an area of approximately 443 square miles located near the eastern center of Tennessee. It is one of fourteen counties in the Upper Cumberland Region, and is situated in Middle Tennessee some 80 miles east of Nashville, approximately 100 miles west of Knoxville, and 90 miles north of Chattanooga. The county is bounded on the south by White and DeKalb Counties, on the west by Smith County, on the north by Jackson and Overton Counties, and on the east by Cumberland County. Interstate 40 bisects Putnam County and the City of Cookeville. Highways located in Cookeville include U.S. Highway 70N, State Primary Highway 111 and State Secondary Highways 135, 136, and 290. Illustration 1 depicts the regional setting for Cookeville and Putnam County.

Early Settlement*

Many of the first settlers in what would become Putnam County came from Virginia and North Carolina via the Walton Road in the late 1700's and the early 1800's. Most of these settlers were of English and Scotch-Irish descent. Development of the area was slow, as Putnam County was not established until 1842. The county was formed from portions of White, Overton, Jackson, Smith, and DeKalb Counties. There were questions regarding the legality of the original establishment of the county and it was re-established by the General Assembly in 1854 as the eightieth county in the state. The county was named in the honor of Israel Putnam, a general in the Revolutionary Army. Also in 1854 land for the establishment of a county seat was purchased from Charles Crook. Cookeville was named for Major Richard F. Cooke, a Tennessee Senator who was active in the formation of the county.

Major Events Affecting Development*

During the last decades of the 19th century, settlement was slow in Cookeville and Putnam County. The lack of a major river route and the rough terrain of the eastern and western sections of the county restricted access for the development of the relatively level central section of the county. The Civil War and the Reconstruction also significantly affected the early development of Cookeville. The most important early event affecting growth in Cookeville was the completion of the Nashville and Knoxville Railroad, which later became the Tennessee Central Railroad. This railroad line, established in 1890, profoundly improved access, increased trade around Cookeville and provided a larger market for locally produced goods.

*Delozier, Mary Jean, Putnam County, Tennessee 1850-1970, 1979.

ILLUSTRATION 1

REGIONAL SETTING

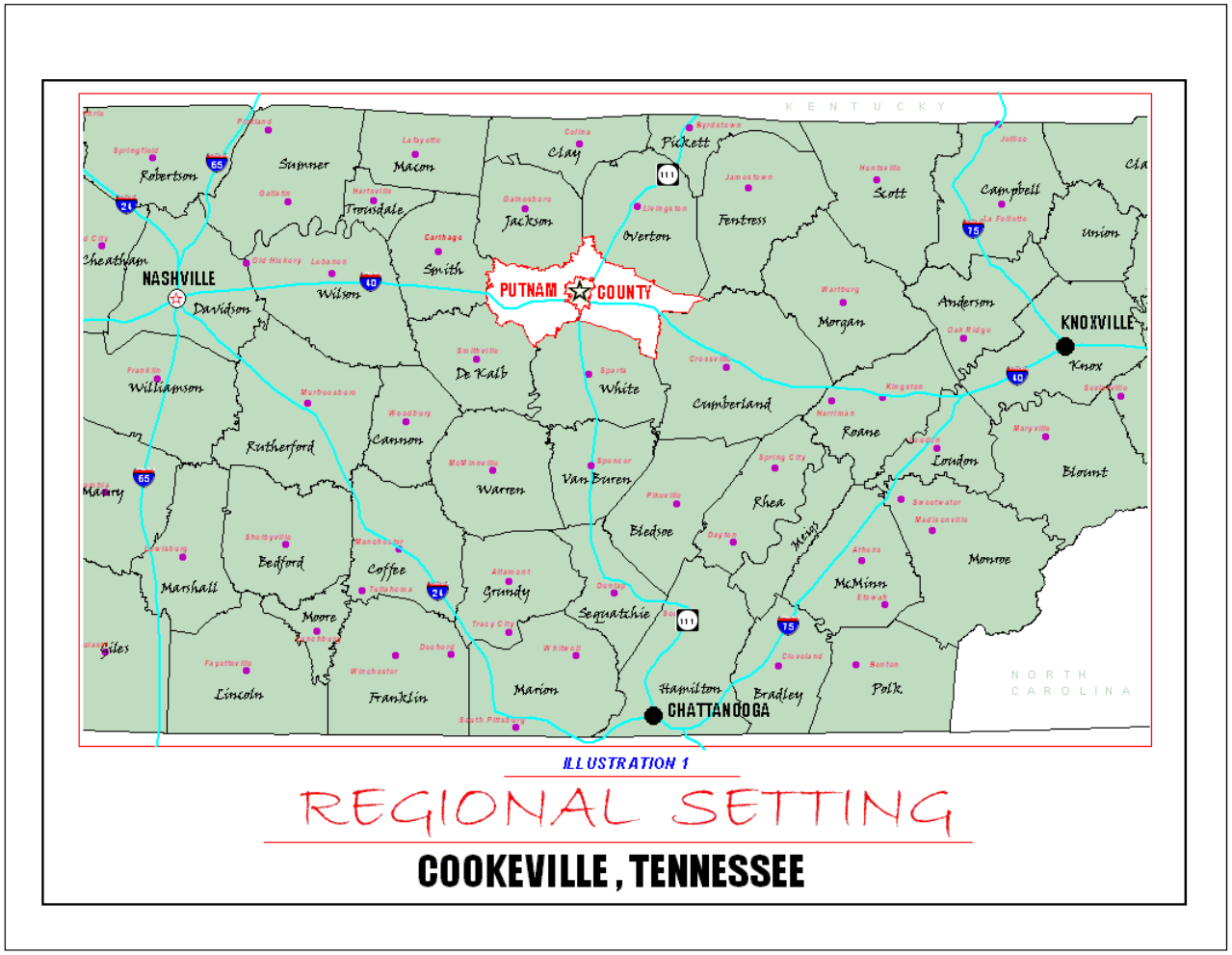


ILLUSTRATION 1

REGIONAL SETTING

COOKEVILLE, TENNESSEE

After the turn of the century there were a number of events which affected development in Cookeville and Putnam County. In 1903, a basic charter for the City of Cookeville was adopted under a private act of the State of Tennessee, Chapter 542. In 1905 the Cookeville Light and Water Department was organized and electric power was first provided to the city. Dixie College, the predecessor of Tennessee Polytechnic Institute was established in 1909. In 1910, the population of Cookeville was estimated by the United States Census to be 1,848. The United States Post Office opened in 1914. In 1921 Howard Hospital, the community's first hospital, opened. The 1920's were also the decade when the county's first textile industries were started.

According to the United States Census of 1930, the population of Cookeville was 3,738. In that year, Highway 70N was completed through Putnam County. This was the first modern highway in the county and placed the city on a major east-west transportation route.

In the 1940's and 1950's there were several major events affecting development in Cookeville. These included the construction of a dam and water filtration plant on Falling Water River in 1946, the chartering of the Putnam County Chamber of Commerce in 1949, the opening of Cookeville General Hospital in 1950, and the construction of the city's first sewage disposal plant in 1952. The 1950 Census placed the city's population at 6,924.

During the decade of the 1960's the city experienced the most significant growth in its history, almost doubling its population from 7,805 in 1960 to 14,403 in 1970. There were a number of major events affecting development in Cookeville during this time period including several annexations, the location of a number of new industries, the influx of several million federal dollars from the Department of Housing and Urban Development's Model Cities Program, and the expansion of Tennessee Technological University. The completion of Interstate 40 in 1966 was perhaps the most significant event affecting development in Cookeville and Putnam County during the second half of the 20th Century. The construction of this highway through the center of the county placed the municipality on the main east-west artery between Knoxville and Nashville. By the end of the decade, the City of Cookeville surpassed the City of McMinnville as the largest municipality in the Upper Cumberland Region.

A number of significant transportation improvements occurred in the late 1980's through the mid 1990's. Perhaps the most important of these improvements was the completion of State Highway 111, a major north-south link which is a segment of Corridor "J" of the Appalachian Development Highway System. Other important transportation improvements affecting development during this time period were the completion of Interstate Drive, Neal Street, Jeffery Circle, and West Jackson Street.

Recent major events which have the potential for affecting development include the proposed construction of an additional water supply line from Center Hill Lake, the doubling of the treatment capacity at the sewage treatment facility, announced plans for the construction of State Route 451, the formulation of plans for a fifth Interstate 40 interchange with a north-south connector to State Route 451, the expansion of the regional airport, and the proposed development of a state technical college.

Findings. Several of the major events affecting development in Cookeville in the past will continue to affect development in the future. Of these major events four transportation related events, including Interstate 40, Highway 111, the proposed construction of State Route 451, and the proposed construction of a fifth Interstate 40 interchange with a north-south connector route to State Route 451, will play an important role in the city's future development.

GOVERNMENTAL STRUCTURE

Knowledge of the governmental structure of the municipality is an important aspect in planning for its future. A municipality's form of government, Planning Commission status, and financial capability directly affect its ability to plan for growth and development. The purpose of this section is to provide a general examination of the governmental structure of Cookeville, to briefly describe its functions, and to assess its potential influence on future development.

Cookeville was established as the county seat of Putnam County in 1854. In 1903, the municipality was incorporated under Chapter 542 of the private acts of the State of Tennessee. This Charter established a three-member city commission to oversee the government of the city. Each commissioner supervised certain departments of the city. Chapter 223 of the private acts of 1961 amended the original Charter of the city. The amended Charter called for the qualified voters of the municipality to elect a city council consisting of five members elected at large. The regular meetings of the City Council are held on the first and third Thursdays of each month at the Cookeville Municipal Building.

The municipality operates under the council-manager form of government with the city manager selected by the City Council. The city manager serves as chief executive officer and is responsible to the council for the proper administration of all affairs of the city. According to the Cookeville Municipal Code it is the duty of the city manager to prepare an annual budget and to be responsible for its administration after adoption. Under the authority specified in the Municipal Code, the city manager can have significant influence on plans for future development.

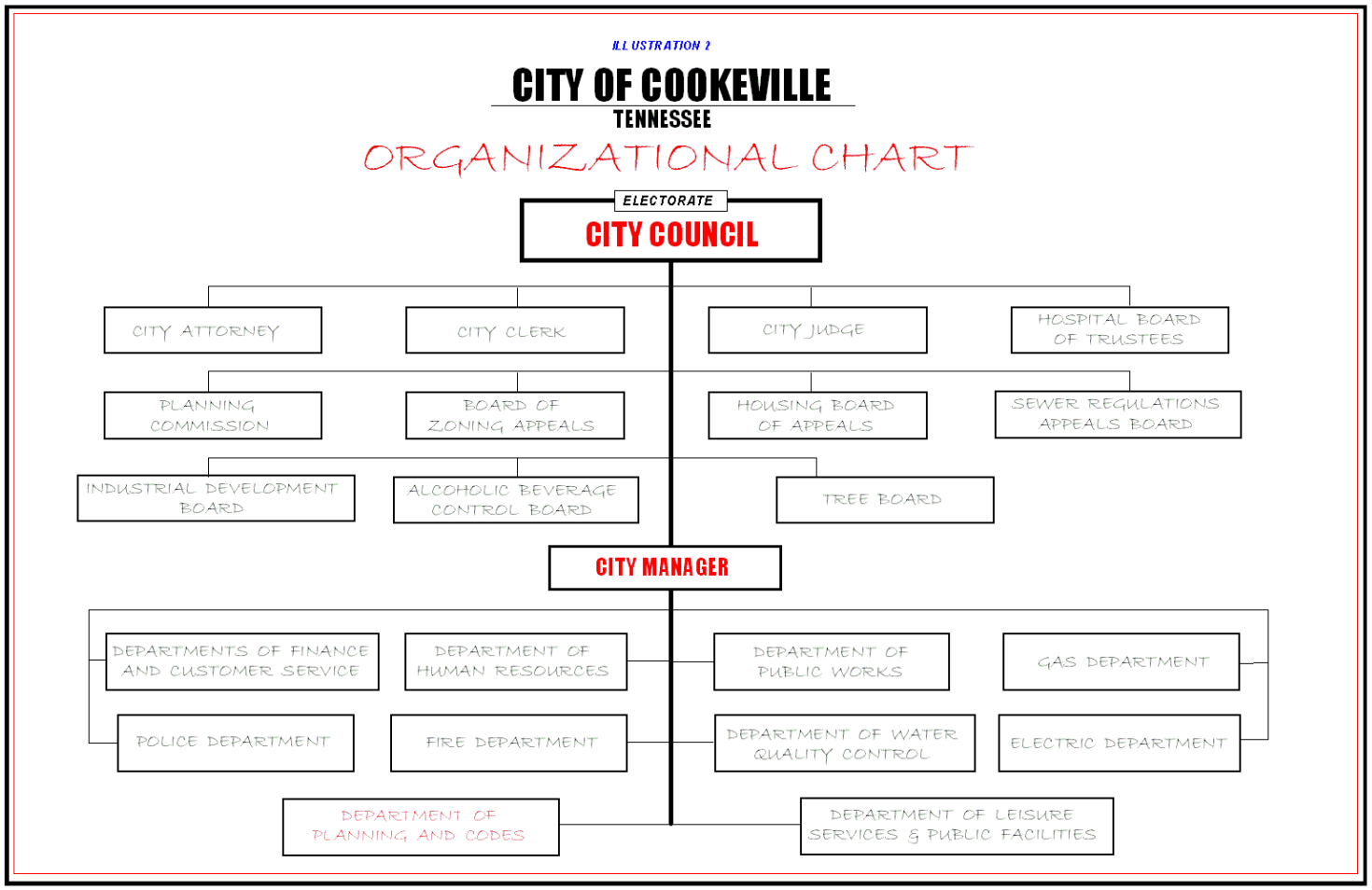
The functions of the municipality are divided into ten departments. A director who is under the supervision and control of the city manager oversees each of the departments. These departments are general government, finance, police, fire, planning and codes, public works, gas, electric, water quality control, and leisure services. Several advisory boards, including the Hospital Board and the Industrial Development Board, are appointed by the City Council. The Cookeville Planning Commission also advises the City Council. The City Council additionally appoints the Zoning Board of Appeals. Approximately 380 persons are employed by the City of Cookeville to carry out the various municipal functions. Illustration 2 depicts the governmental organization for the City of Cookeville.

Municipal-Regional Planning Commission

On February 6, 1947, the Cookeville Board of Commissioners, through Ordinance No. 366, created and established the Cookeville Planning Commission. This ordinance created an eight member Planning Commission consisting of the mayor and seven citizens appointed by the mayor. On November 22, 1949, the Tennessee State Planning Commission created by resolution the Cookeville Regional Planning Commission. This action created a planning region, which extended approximately 3.5 miles out from the Putnam County Courthouse. The city's planning region was first expanded by the Tennessee State Planning Commission in 1961 but then reduced to its present location in 1975 by the Local Government Planning Advisory Committee. In 1988, through Ordinance No. 88118, the Cookeville City Council increased the Planning Commission membership to nine, consisting of the mayor or his designee, one member of the city council selected by the council, and seven citizens appointed by the mayor.

Since its creation in 1947, the Cookeville Planning Commission has been very active in carrying out its functions, and in its role as advisor to the City Council. The officers of the Planning Commission are chairman and vice-chairman. The regular meetings of the Planning Commission are held monthly at the Cookeville Municipal Building.

ILLUSTRATION 2
GOVERNMENTAL ORGANIZATION

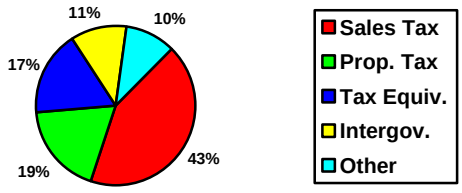


Municipal Finances

The financial stability and capability of a municipality directly affects its ability to accomplish planning goals. An analysis of the revenues and expenditures from the city's general operating fund is necessary to determine this financial stability and capability. The city's current revenues and expenditures are examined and historically compared in the following.

The city's general operating fund includes several revenue sources. The local option sales tax is by far the largest source for the city accounting for more than 40 percent of the total revenues in fiscal year 1998. This high percentage of revenues from the sales tax has allowed the city to maintain a relatively low property tax rate of $0.82 per $100.00 of assessed value. For fiscal year 1998 property tax revenues accounted for less than 20 percent of the city's total revenues. Tax equivalents, which includes in lieu of tax payments and business taxes, are the third largest source of revenue for the city at 17 percent of the total. Intergovernmental funds, which includes state shared taxes and various grant monies, account for approximately 11 percent of city's total revenues. The remaining 10 percent of revenues come primarily from charges for services, fines, and interest. A summary of the city's current revenue sources, based on the City of Cookeville Audited Financial Statement for the year ending June 30, 1998, is depicted in Graph 1.

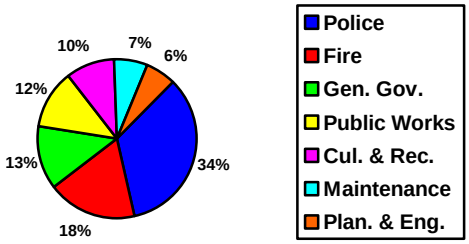
Graph 1



SUMMARY OF CITY REVENUES
FISCAL YEAR 1998

In fiscal year 1998 over 50 percent of the city's general operating fund was expended on public safety. This includes the police department at approximately 34 percent of the total expenditures and the fire department at approximately 18 percent of the total. Expenditures for general government, public works, and culture and recreation, at 13, 12 and 10 percent respectively, were the next largest expenditures. A summary of the city's expenditures, based on the City of Cookeville Audited Financial Statement for the year ending June 30, 1998 is depicted in Graph 2.

Graph 2



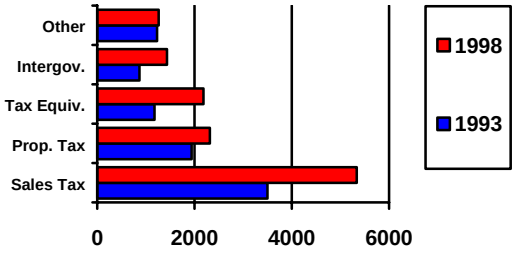
SUMMARY OF CITY EXPENDITURES
FISCAL YEAR 1998

A historical analysis of revenues and expenditures can indicate trends that may affect future planning efforts. According to the City of Cookeville Audited Financial Statements for the years ending June 30, 1993 and June 30, 1998, the municipality's total revenues increased from $8,713,826 in fiscal year 1993 to $12,536,460 in fiscal year 1998 and for the same period total expenditures increased from $8,852,613 to $12,726,456. The figures represent a total budget increase of approximately 44 percent over the five-year period or an annual average growth rate of approximately 8.8 percent.

From 1993 to 1998 the largest total increase in revenues for the city was from the local option sales tax which increased from $3,503,068 to $5,322,738. This is an increase of $1,819,670 or 52 percent over

the five-year period. The largest percentage increase in revenues from 1993 to 1998 was from tax equivalents, which includes in lieu of taxes and the business tax. Revenues from these sources increased from $1,177,558 to $2,184,549 or by 86 percent from 1993 to 1998. Local property tax revenues increased from $1,943,705 to $2,318,861. This is an increase of $375,156 or 19 percent over the five-year period. The growth in revenues by major sources for the city from fiscal year 1993 to fiscal year 1998 based on the financial statements for those years is depicted in Graph 3.

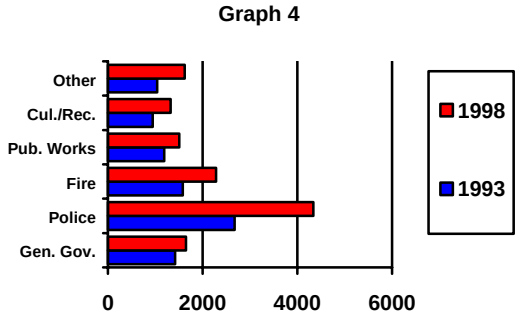
Graph 3



REVENUE GROWTH (000's)
CITY OF COOKEVILLE
1993 TO 1998

The largest increase in expenditures for the city from 1993 to 1998 was for the police department, which increased from $2,687,020 to $4,336,913. This is an increase of $1,649,893 or approximately 61 percent over the five-year period. The next highest percentage increase in expenditures from 1993 to 1998 was for culture and recreation, which increased by 46 percent or from $908,044 to $1,321,746. Expenditures for the fire department increased from $1,582,234 to $2,285,414. This is an increase of approximately 44 percent. Public works expenditures increased by $323,262 from 1993 to 1998 or approximately 27 percent. Expenditures for general government increased from $1,417,697 in 1993 to $1,649,939 in 1998, or by 16 percent. The increases in expenditures by major category for the city from fiscal year 1993 to fiscal year 1998 based on the financial statements for those years are depicted in Graph 4.

Graph 4



INCREASES IN EXPENDITURES (000's)
CITY OF COOKEVILLE
1993 TO 1998

Perhaps the most noteworthy aspect of the analysis of the financial stability and capability of the City of Cookeville is the percentage of the city's total revenues that are derived from the local option sales tax. The high percentage reflects the city's importance as a regional commercial center and has allowed it to maintain a relatively low property tax rate. However, a dependency on the sales tax makes the city susceptible to economic fluctuations. In May of 1999 a referendum was approved to increase the local option sales tax by one-half of one percent. It is anticipated that this increase will provide the city with an estimated additional 1.5 million dollars in revenue per year. Another significant aspect of the city's financial situation is the lack of a capital budgeting system. The adoption of such a system would allow the municipality to implement a Public Improvements Program.

Findings. The city manager, under the authorities granted by the Cookeville Municipal Code, can significantly influence the direction of the municipality's planning program. The current City Council is committed to a quality planning program and is fully supportive of the role of the Planning Commission. This allows the Cookeville Planning Program to operate in an atmosphere that is very conducive to effective planning. The municipality appears to be in sound financial condition and it has the capability to address public improvement needs. It is expected that the financial condition of the city will be further

improved as a result of a local option sales tax increase approved in 1999. The adoption and implementation of a Public Improvements Program and Capital Budget should be a primary goal of the Planning Commission and City Council.

SUMMARY OF FINDINGS

The City of Cookeville is the county seat of Putnam County, Tennessee, located in the Upper Cumberland Region about halfway between Nashville and Knoxville. For nearly one hundred and fifty years the community has been the center for commerce and government in Putnam County.

The proximity of the state's major east-west routes, first Highway 70N and then Interstate 40, had major effects on past development. The location of a major north-south highway, State Highway 111, and the planned construction of northern and southern loops around the municipality are expected to have positive effects on future development.

Tennessee Tech University and Cookeville Regional Medical Center have significantly impacted past development of the municipality and are expected to continue to do so in the future.

The municipality operates under a council-manager form of government with the day to day activities of the municipality overseen by a city manager. The planning program in Cookeville is effective and is fully supported by the local government. Having authority over a planning region allows the municipality to effectively plan for its projected urban growth area. Financially the municipality has the capability to address some public improvement needs; however, there is a need for a Public Improvements Program and Capital Budget.

CHAPTER 3

NATURAL FACTORS AFFECTING DEVELOPMENT

INTRODUCTION

The natural environment often dictates the pattern of land use or development in a community. The climate, air and water quality, topography, drainage and flooding, and soils are significant natural factors that affect development. Ignoring these factors can prove to be extremely costly to specific property owners as well as the entire community. Not all land is suitable for development. Natural factors, which cannot be altered, must be considered prior to land development. The limits and type of land use should be responsive to the natural factors in order to protect the welfare of the general populace. Through increased knowledge of these natural factors and the appropriate use of land, future development can avoid the mistakes of the past. The purpose of this chapter is to review and evaluate the natural factors influencing the land use patterns in the Cookeville Planning Area. Illustration 3 depicts the natural factors affecting development.

CLIMATE

The climate of Cookeville and Putnam County is described as humid-sub-tropical, characterized by relatively mild winters and warm summers. Although Cookeville is located well inland, it lies in the path of cold air moving southward from Canada and warm moist air currents moving northward from the Gulf of Mexico. These alternating currents frequently bring sharp daily changes and are chiefly responsible for seasonal variations.

There is normally an abundant amount of rainfall in Cookeville. Based on the standard United States Weather Bureau 35-year mean, the normal annual rainfall for the Cookeville area is approximately 50 inches. Precipitation is usually heaviest in late winter and early spring, as a result of frequent low pressure systems. The most widespread flooding occurs during this period; but flooding on a smaller scale can occur during any month. Putnam County is subject to locally heavy storms in which as much as five inches of rain may fall during a very short period. Precipitation is generally lightest in late summer and early fall; high pressure systems are most frequent at this time of year. Thus, the periods of drought are offset by periods of ample to excessive precipitation throughout the year.

The mean annual temperature of the Cookeville area is 59 degrees Fahrenheit, and the average relative humidity is 70 percent. Extremes in temperature are uncommon, seldom above 100 degrees Fahrenheit or below -5 degrees Fahrenheit. There is some variation in relative humidity during a given year with the highest average daily values recorded in winter. Although winters are not severe (the ground seldom freezes below four inches) they are often wet and outside work may be hampered around construction sites. The first fall freeze is usually in late October and the last spring freeze is usually in early April.

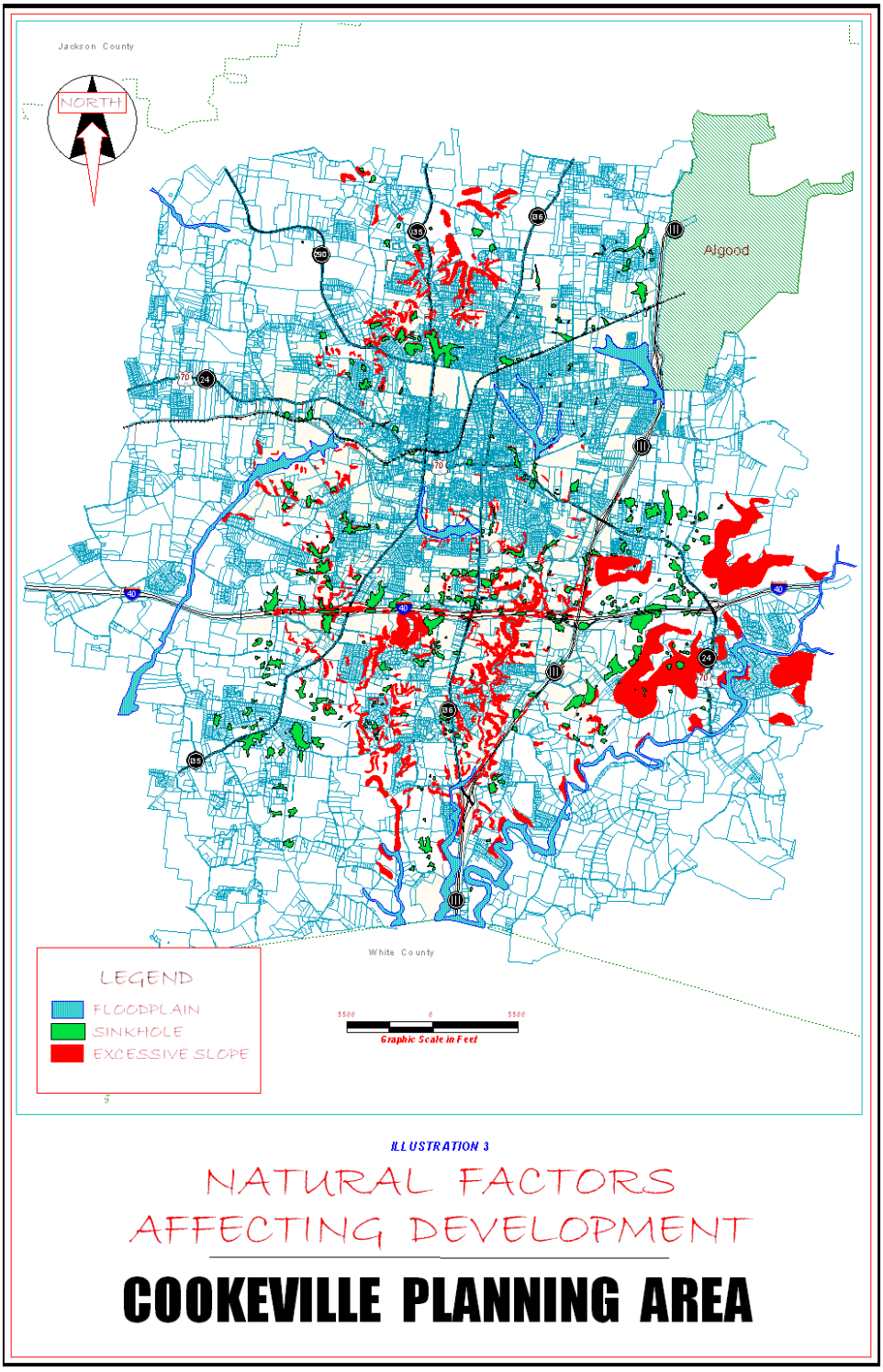
Findings. The climate of Cookeville and the affect that it has had on development can best be described as moderate. Of the various climatic factors, the periodic heavy rainfalls, which can lead to inundations of floodplain and sinkhole areas, have had the greatest impact on development. In general, however, climate has no great effect on development in the municipality.

AIR QUALITY AND WATER RESOURCES

At present, the air and water quality in the Cookeville area is excellent. Putnam County is located in a nonattainment air quality area. An abundance of open space and a lack of highly urbanized areas are conducive to the maintenance of the purity of the air.

ILLUSTRATION 3

NATURAL FACTORS AFFECTING DEVELOPMENT COOKEVILLE



The primary water source for the City of Cookeville is the Center Hill Reservoir (Mine Lick Creek). According to the latest information provided by the Tennessee Department of Environment and Conservation, the City of Cookeville is under no moratoriums due to water and wastewater treatment problems. The municipality has a National Pollutant Discharge Elimination System (NPDES) permit for discharging its treated wastewater into the Pigeon Roost Creek.

Findings. There are no air quality or water resource quality problems, which would directly affect future land use in the Cookeville Planning Area.

TOPOGRAPHY

Topography is defined as the general configuration of the earth's surface, including its slope, geological characteristics, and other natural features. Putnam County is located in three physiographic regions: the Cumberland Plateau, the Highland Rim, and the Central Basin. The Cookeville Planning Area lies almost completely within the Highland Rim region. The area has an approximate median elevation of 1,100 feet. The surface of the county varies from flat lands and gently rolling hills to rough, steep, and rocky escarpments to the levelness of the Cumberland Plateau. In Cookeville and the surrounding planning area, the surface is mostly undulating to hilly with gentle slopes and sinkholes occurring in some places. There are, however, a few areas where slopes exceed 20 percent.

Slope is a major topographic consideration impacting the developmental potential of sites. It affects access, floodability, erosion potential and soil capabilities. The rate of erosion increases exponentially with increases in the degree of slope. Slopes in the Cookeville Planning Area range from below 5 percent to over 20 percent. In areas of greater than 20 percent slope, limitations to development are severe and development should occur only under the most guarded conditions. The area with the most significant topographic constraints in the Cookeville Planning Area is located primarily around Pilot Knob, southwest of the Interstate 40 and South Jefferson Avenue interchange. Other areas with topographic constraints are located southwest of the intersection of Interstate 40 and Highway 70N, and to the southeast of the intersection of Highway 111 and Highway 70N. The areas within the Cookeville Planning Area with greater than 20 percent slope are depicted on Illustration 3, Natural Factors Affecting Development.

The varied character of Tennessee's topography is related to the rocks that underlie each section of the State and to their geological history. The Highland Rim region, in which the Cookeville Planning Area is located, is underlain by rocks of the Mississippian Age. According to Tennessee's Division of Geology, Mississippian rocks in Tennessee are dominated by limestone.

Karst topography is common in much of Putnam County where soluble limestones form the landscape. Sinkholes, collapsed sinks, springs, sinking creeks and caves; all of which are numerous in and around Cookeville, characterize this type of topography. These sinkholes play an important role in the drainage of the Cookeville area and development in and around their retention areas is significantly limited by municipal and state regulations.

Findings. The topography in Cookeville is generally characterized as undulating to slightly hilly. Primary constraints to development are steep slopes along Pilot Knob, along an area southwest of the intersection of Interstate 40 and Highway 70N, and to the southeast of the intersection of Highway 111 and Highway 70N. There are also several sinkholes scattered throughout the area. Although topography does limit the development potential of several hundred acres, there are numerous areas still available in the Cookeville Planning Area with terrain favorable for development.

DRAINAGE AND FLOODING

The Cookeville Planning Area lies entirely within the Cumberland River Drainage Basin. The area's drainage pattern is well defined, and is principally accommodated by tributary streams of the Caney Fork River. The area located within the current Cookeville corporate limits is primarily drained by the Falling Water River. The Falling Water River also drains the eastern, southeastern, and southern portions of the planning area, while Cane Creek drains areas in the west and southwest, Blackburn Fork drains areas in the west and northwest, and Spring Creek drains areas in the north and northeast. A large number of sinkholes scattered throughout the municipality and the planning area also play an important role in drainage. The municipality has experienced a number of minor floods in the past. The principal flood season for the streams in the Cookeville area extends from late winter through early spring. These floods are caused by prolonged heavy rainfall covering large areas. All streams rise rapidly following heavy rainfall and have dangerously high flow velocities. Sinkhole flooding within the Cookeville area is caused by large depressions in the ground, having little or no outlets, which simply store rainwater.

Severe flooding, that which causes significant property damage, is rare in Cookeville. Minor flooding occurs periodically. With no solution for preventing flooding, the only remaining alternative for the municipality has been the practice of sound floodplain management techniques.

Cookeville has been a participant in the National Flood Insurance Program since December of 1977. This program identifies potential flood hazard areas within the community and provides the residents with the opportunity to purchase flood insurance. Putnam County entered the program in 1998. According to the latest information provided by the Federal Emergency Management Agency dated August 1999, there are a total of 29 flood insurance polices in effect in Cookeville providing coverage of over 1.1 million dollars. No insurance claims have been paid since 1978.

Floodable areas in the City of Cookeville and its planning area have been delineated by the Federal Emergency Management Agency. Identified flood hazard areas within the current Cookeville corporate limits are located primarily along Cane Creek, Burton's Branch, Pigeon Roost Creek, a number of unnamed drainageways, and several sinkhole areas. Floodable areas identified in the planning area are primarily located along Falling Water River, Cane Creek, and a number of sinkhole areas. These flood hazard and sinkhole areas are depicted on Illustration 3, Natural Factors Affecting Development.

General flood boundaries may be obtained from the Flood Insurance Rate Maps prepared for Cookeville by the Federal Emergency Management Agency (FEMA) and dated August 19, 1986 and from the Flood Hazard Boundary Maps prepared for Putnam County by FEMA and dated October 21, 1977. These maps depict the 100-year floodplain (1-percent chance of annual exceedence) which serves as the base flood for floodplain management purposes. Unfortunately, base flood elevations have not been determined by FEMA. The lack of base flood elevations creates difficulties in determining exact floodplain elevations. A request for updating the city's Flood Insurance Rate Maps was submitted to FEMA in 1998.

Development in the identified flood hazard areas is regulated by the Cookeville Floodplain Zoning Ordinance, as adopted in 1993 by Ordinance No. 93117. This Ordinance requires that structures located in identified flood hazard areas be elevated or flood proofed to reduce the potential for flood damage. In addition these regulations prohibit encroachment, including fill material, within a distance equal to 2 times the width of the stream at the top of the bank or twenty feet on each side, whichever is greater. This no encroachment standard also applies to all unmapped streams.

In addition to the Floodplain Zoning Ordinance, the City of Cookeville has also adopted regulations for sinkhole retention areas. These regulations, which are enforced through the Cookeville Zoning Code, restrict how sinkhole retention areas can be utilized. Flooding potential for many of the sinkholes located in Cookeville was determined in the Assessment of the Cookeville, Tennessee, Stormwater Management System, prepared by the Center for the Management, Utilization and Protection of Water Resources at Tennessee Technological University in 1990. This study, which covers approximately 90 percent of the current corporate limits and a very small portion of the unincorporated planning area, delineated 164 sinkholes. The protection and maintenance of the numerous sinkholes located in and around Cookeville is important for drainage and for reducing the potential for flooding.

Findings. Flooding has only minimally affected development in Cookeville in the past and it is not expected to significantly affect development in the future. The restrictions placed on the several hundred acres of land in the municipality as flood hazard or sinkhole retention areas, limit their availability for future development. Fortunately, due to the availability of land not susceptible to flooding, future pressure for development in the flood hazard areas in the Cookeville Planning Area is not expected.

SOILS AND GEOLOGY

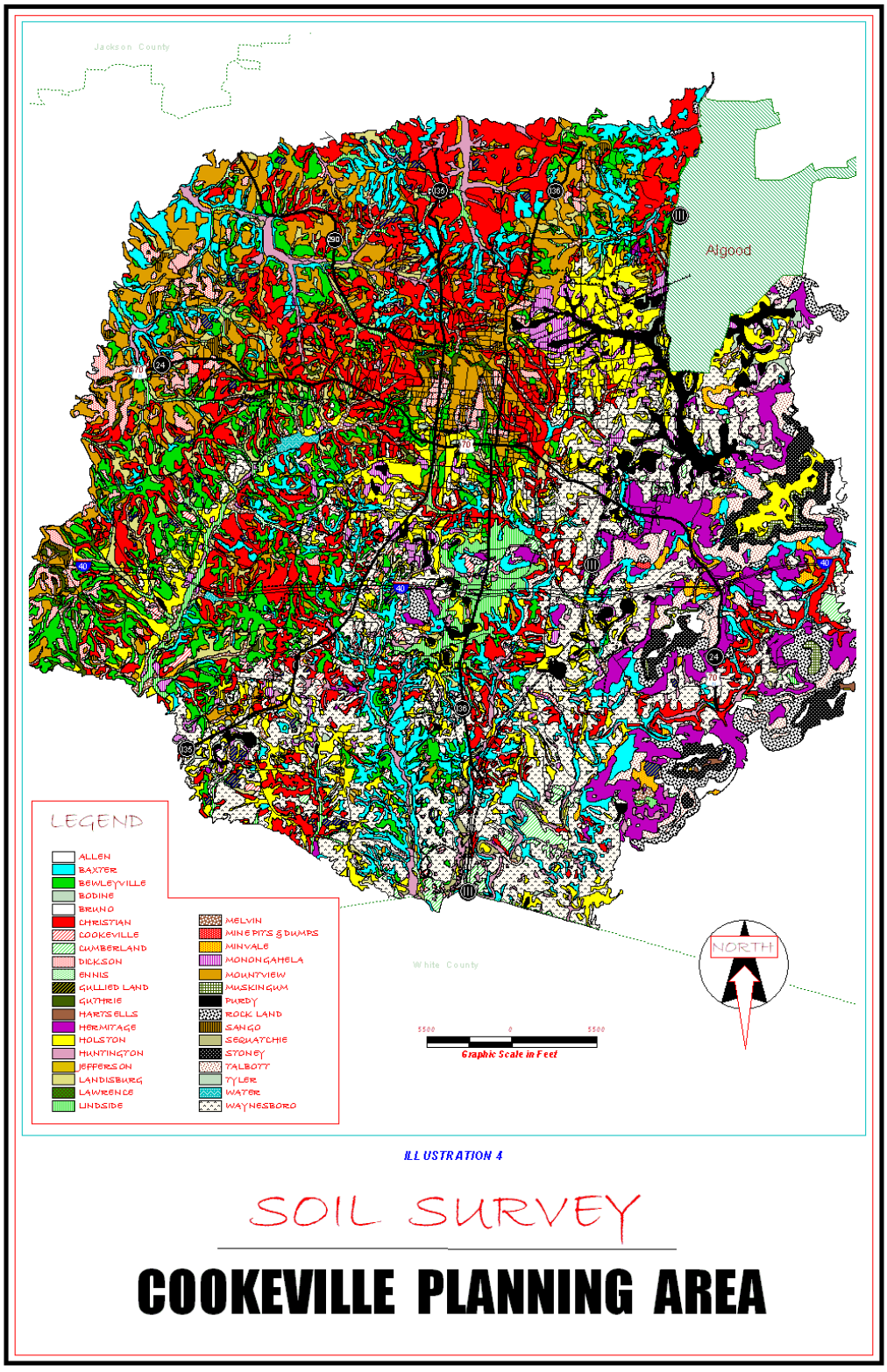
One of the most important factors affecting development in any community is the content and capability of the various soils. Knowledge of the various characteristics of the soils, such as flood potential, septic tank capability, drainage qualities, depth to water table, load bearing strength, stability, shrink-swell potential, and soil depth are important in determining the appropriate land use for particular sites. The primary source for information on soils and geology for Cookeville and the surrounding planning area is the Soil Survey of Putnam County, Tennessee which was prepared by the United States Department of Agriculture Soil Conservation Service in 1963 and reissued in 1992. The General Soils Map for Putnam County presented in the soil survey indicates that the Cookeville Planning Area is located primarily within four soils associations; those being the Mountview-Bewleyville-Baxter, Christian-Mountview, and Waynesboro-Holston-Baxter, and Stony colluvial-Rock land Soils Associations. Except for the Stony colluvial-Rock land Association, land located in these soil associations is characterized as gently rolling or undulating with a few areas of steep, choppy hills. In places oval and irregularly shaped sinkholes and depressions pit the surface. Steep rough slopes with many rock outcrops, loose stones, and boulders characterize the Stony colluvial-Rock land Association.

Illustration 4, Soil Survey of the Cookeville Planning Area, depicts the general location of the various soil series in the four soil associations situated in and around the municipality. This map is a useful guide in planning for various types of development on large tracts of land or for providing general information on the location of soils, but it does not identify the specific soils on individual tracts of land. Within the four soil associations, eight major soils series and approximately 20 minor soils series have been identified in Cookeville and the surrounding planning area. Many of these soil series are subdivided into soil types and some are further subdivided into soil phases. For detailed information on these soil types and soil phases the 1963 Soil Survey of Putnam County, Tennessee should be consulted. Descriptions and interpretations of the major and minor soils series located in the Cookeville Planning Area are presented in the following:

Major Soils Series

According to the soil survey, about 75 percent of the Cookeville Planning Area is located in one of eight major soils series. The Baxter, Bewleyville, Christian, Holston, Mountview, and Waynesboro Soils Series are each generally very deep over bedrock and occupy the smooth, undulating hilltops and mild side slopes. Two other soils series,

ILLUSTRATION 4
SOIL SURVEY COOKEVILLE PLANNING AREA



Rock Land and Stony Colluvial Land, are generally shallow in depth to bedrock and occupy steep slopes in most locations. Descriptions of the eight major soil series are presented in the following:

Baxter Series. The Baxter Series consists of deep, well-drained soils. Slopes range from 5 to 30 percent. Depth to bedrock is from 5 to 15 feet. This series is located primarily in the northern and southern sections of the Cookeville Planning Area. No large concentrations are located within the corporate limits. Two of the larger concentrations of soils in this series are located along Hudgens Creek and in the vicinity of Quinland Lake. Only a moderate amount of development has occurred on soils in the Baxter Series.

Bewleyville Series. The Bewleyville Series consists of deep, well-drained soils. Slopes range from 2 to 20 percent, but are generally 4 to 8 percent in most areas. Depth to bedrock is from 10 to 30 feet. Soils in this series are located almost entirely west of Highway 111 with the largest intensities situated west of Willow Avenue. Most of the soils in this series located within the City of Cookeville have been developed.

Christian Series. The Christian Series consists of deep, moderately to well-drained soils. Slopes range from 2 to 30 percent. Depth to bedrock is from 2 to 6 feet. This series is located primarily north of Highway 70 and west of Willow Avenue. The largest concentration of this series is found north of the municipality between State Highways 135 and 136. Soils in this series located in the municipality have been extensively developed.

Holston Series. The Holston Series consists of deep, well-drained soils. Slopes range from 2 to 12 percent. Depth to bedrock is from 10 to 20 feet. Soils in this series are generally located in the central, eastern and southern sections of the planning area. The largest concentration of these soils is located in the northeast section of the municipality. A fair amount of development has occurred on these soils.

Mountview Series. The Mountview Series consists of deep, well-drained soils. Slopes range from 2 to 12 percent. Depth to bedrock is from 6 to 20 feet. This series is a dominant soils series in the northern section of Cookeville and in the northern and western sections of the planning area. A great deal of development in the municipality has occurred on these soils.

Waynesboro Series. The Waynesboro Series consists of deep, well-drained, loamy soils. Slopes range from 2 to 20 percent, but in most places from 2 to 10 percent. Depth to bedrock is 4 to 30 feet. This series is the most dominant soil series in the southern and eastern sections of the Cookeville Planning Area. One of the largest concentrations of these soils is located in a corridor along the length of Highway 111. A moderate amount of development has occurred on soils in this series.

Rock Land. The Rock Land Series consists of ledges of bedrock, other exposed bedrock, soil material in cracks and crevices of the rock, and shallow soils. Slopes range from 15 to 45 percent. Soils in this series are located on the eastern edge of the planning area on the escarpments of the Cumberland Plateau. Very little development has occurred on the soils in this series.

Stony Colluvial Land. The Stony Colluvial Series consists of soils for which the land surface area is generally characterized by stones and some boulders occupying 15 to 50 percent of the land surface. Depth to bedrock is 2 to 20 feet. These soils are located on the Cumberland Plateau escarpment in the eastern fringe of the planning area. Little if any development has occurred on the Stony Colluvial Land.

Minor Soils Series

The soil survey indicates that about 25 percent of the Cookeville Planning Area is composed of approximately 20 minor soils. Descriptions of these 20 soil series, which have extents ranging from a few acres to hundreds of acres, are presented in the following:

Allen Series. The soils of the Allen Series are deep and well drained. Slopes range from 2 to 30 percent or more. Depth to bedrock is from 2 to 25 feet. Soils in this series are limited to the extreme southeastern section of the planning area. Very little development has occurred on these soils.

Bruno Series. The Bruno Series consists of very sandy soils within flood plains. There is only one small pocket of these soils, consisting of less than 20 acres situated along the Falling Water River, located in the planning area. These soils are generally flooded for short periods every year or two. No development has occurred on these soils in the Cookeville Planning Area.

Cookeville Series. The Cookeville Series consists of deep, well-drained soils. Slopes range from 5 to 12 percent. Depth to bedrock is from 5 to 20 feet. These soils are located primarily in the southwestern section of the planning area. Very little development has occurred on these soils.

Dickson Series. In the Dickson Series are light-colored, silty soils that have a fragipan at a depth of about 2 feet. Above the fragipan the soil is waterlogged in the winter and early spring. These soils occupy slopes of 1 to 4 percent in areas of undulating relief. The largest concentrations of these soils are located in the central portion of the municipality and the western edge of the planning area. A significant amount of development has occurred on these soils within the municipality.

Ennis Series. The Ennis Series consists of deep, well-drained soils located along small drainageways. These soils are occasionally flooded. Slopes range from 0 to 3 percent and depth to bedrock is from 3 to 10 feet. Small pockets of these soils, generally consisting of less than five acres each, are scattered throughout the planning area. Little development has occurred on soils in this series.

Guthrie Series. The Guthrie Series consists of poorly drained, gray, silty soils that have a fragipan at a depth of about 2 feet. These soils occur on broad flats and in sight depressions on nearly level uplands that commonly lack a drainage outlet. Slopes in this series range from 0 to 2 percent. There are only a few areas of soils in this series scattered throughout the planning region, with the largest concentration located on the Tennessee Tech University Campus.

Hermitage Series. The Hermitage Series consists of deep, well-drained soils. Slopes range from 2 to 30 percent. Depth to bedrock is from 5 to 12 feet. These soils are some of the most fertile and productive in Putnam County. Soils in this series are located almost entirely east of Highway 111, with some of the largest concentrations situated along Highway 70N. Large areas of these soils remain undeveloped.

Huntington Series. The soils in the Huntington Series are deep, friable, and well drained. Slopes generally range from 0 to 2 percent. The depth to bedrock ranges from 5 to 25 feet. Soils in this series are located primarily along the various streams and waterways in the planning area. Very little development has occurred on soils in the Huntington Series.

Jefferson Series. The Jefferson Series consists of deep, well-drained, loamy soils on high stream terraces and on mountain foot slopes. Slopes range from 2 to 20 percent. Bedrock is 3 to 12 feet from the surface. There is a large concentration of these soils in the vicinity of the intersection of Interstate 40 and South Jefferson Avenue.

Landisburg Series. The Landisburg Series consists of moderately well drained soils that have a fragipan. Drainage and permeability is slow. Slopes range from 2 to 12 percent, but is 3 to 8 percent in most places. Bedrock generally is more than 10 feet from the surface. These soils are scattered in small areas throughout the planning area with the largest intensities located on the western edge. The soils have only been moderately developed.

Lawrence Series. The Lawrence Series consists of somewhat poorly drained, silty soils on slopes of 1 to 3 percent. These soils are around the rim of large wet depressions, on nearly level upland plains, and along intermittent drains. Bedrock is 15 to 25 feet below the surface. There are less than 50 acres of these soils located in the planning area with the largest grouping located north of West Stevens Street.

Lindside Series. The Lindside Series consists of moderately well drained to somewhat poorly drained soils located on bottom lands along streams. Slopes range from 0 to 2 percent. Depth to bedrock is 5 to 15 feet. Most areas are flooded occasionally, especially in winter and spring. Small corridors of soils in this series are scattered along streams throughout the planning area with the largest concentration located along Cane Creek.

Melvin Series. In the Melvin Series are gray, poorly drained soils on nearly level first bottoms. Slopes range from 0 to 2 percent. Depth to bedrock is between 5 and 15 feet. In many places soils in this series occur on the outer rim of the flood plain. Within the municipality these soils have been moderately developed.

Minvale Series. The Minvale Series consists of well-drained, loamy soils on foot slopes. Slopes range from 2 to 20 percent, but generally is 3 to 10 percent. The depth to bedrock ranges from 5 to 15 feet. There are only a few areas of these soils located in the planning area with the largest grouping located on the eastern edge north of Buck Mountain Road.

Monongahela Series. The Monongahela Series consists of moderately well drained soils on terraces. These soils have a fragipan at an average depth of 26 inches. Slopes range from 2 to 5 percent. These soils occupy several hundred acres of land located primarily in the northeastern and central portions of the planning area. There is a considerable amount of development located on the soils in this series.

Purdy Series. The Purdy Series consists of poorly drained, gray soils located on stream terraces. Slopes range from 0 to 2 percent. Depth to bedrock is 6 to 20 feet. Surface runoff is very slow and some areas are ponded most of the time. Soils in this series are located primarily in the central and eastern portions of the planning area with a vast collection located along Highway 111 north of Highway 70N. Little development has occurred on soils in this series.

Sango Series. The Sango Series consists of moderately well drained soils that have a fragipan. Slopes range from 1 to 3 percent. Bedrock is 15 to 25 feet or more from the surface. There are only a few pockets of these soils located in the planning area with most located on the western edge.

Sequatchie Series. In the Sequatchie Series are deep, well-drained soils situated on low stream terraces. Slopes range from 2 to 12 percent but commonly are 1 to 3 percent. Depth to bedrock is 5 to 12 feet. These soils, which are located to the south primarily along Pigeon Roost Creek and Falling Water River, are occasionally flooded. Little if any development has occurred on these soils in the planning area.

Talbott Series. In the Talbott Series are well-drained, clayey soils that formed in material weathered from limestone. Slopes range from 5 to 30 percent. Bedrock lies at an average depth of 2 to 5 feet below the surface with rock out crops occurring in some places. Soils in this series are located primarily on the eastern and southeastern edges of the planning area with the largest groupings located east of Highway 111 and north of Interstate 40. Little development has occurred on soils in this series.

Tyler Series. The soils in the Tyler Series are somewhat poorly drained. Surface runoff is slow and internal drainage is very slow. Slopes range from 0 to 2 percent. Depth to bedrock is 8 to 25 feet. In the Cookeville Planning Area these soils are mostly located adjacent to the soils in the Purdy Series. Very little development in the planning area has occurred on soils in this series.

Soil Limitations

The soils in the Cookeville area have been rated according to their limitations for residential, commercial, industrial, recreation and open space, and street uses. Awareness of the limitations for each soil area is useful in recommending the capabilities of a parcel of land for development. Soil limitations for a particular use do not necessarily mean that the land cannot be developed for that use. It does mean that measures may have to be taken to overcome the limitations. Table 1 presents detailed information on the characteristics and features of the soils in Cookeville and the surrounding planning area. In this table the ratings of slight, moderate, and severe have the following meanings:

Slight limitations--Soils have properties available for the rated use. Limitations are so minor that they can be easily overcome. Good performance and low maintenance can be expected.

Moderate limitations--Soils have properties moderately favorable for the rated use. Limitations can be overcome or modified with planning, design or special maintenance.

Severe limitations--Soils have one or more properties unfavorable for the rated use. Limitations are difficult and costly to modify or overcome, requiring major soil reclamation, special design, or intense maintenance.

The soils characteristics which have had the greatest impacts on development in Cookeville are slope, drainage and permeability, and flood potential. The greatest extent and intensity of development in the Cookeville area has occurred on soils in the Bewleyville, Christian, Dickson, Holston, Jefferson, Mountview, and Waynesboro Series. Each of these series generally have less than 12 percent slope, are well-drained, and have low flood potential. In general the soils series in the Cookeville area with characteristics severely limiting development, which includes the Bruno, Guthrie, Huntington, Lawrence, Lindside, Melvin, Purdy, and Tyler Series, have had little development. The Guthrie, Melvin, Lindside and Purdy soils, which are poorly drained soils with fragipans, have had the most severe affect on development in Cookeville.

The geology of an area can also play a significant role in determining the direction and extent of development. Of particular importance is the depth of the soil covering above the underlying rock strata, or the depth to bedrock. Two soils series with little depth to bedrock, Rock land and Stony colluvial, are located in the Cookeville Planning Area. The depth to bedrock for most of the soils in Cookeville and the planning area is generally greater than five feet and there are relatively few areas with problems due to depth to bedrock.

Findings. The Cookeville Planning Area is located primarily within four soil associations. In general the characteristics of the soils series within these associations pose few significant limitations for development. The most severe limitations are severe slope, depth to bedrock, poor drainage, and flooding. Fortunately, soils with these limitations are not widespread in Cookeville and the surrounding planning area.

SUMMARY OF FINDINGS

The climate and air and water quality in the Cookeville Planning Area are favorable to development. Like many communities, the pattern of land use or development in the City of Cookeville has been affected by natural factors. The natural factors most significantly affecting development in Cookeville and surrounding planning area are drainage and flooding. In most cases, however, flooding, topographic, and soils constraints have not significantly restricted areas for growth and development in the municipality and the planning area.

TABLE 1 SOIL LIMITATIONS

TABLE 1

SOIL LIMITATIONS FOR COOKEVILLE PLANNING AREA
DEGREE AND KIND OF LIMITATIONS FOR SELECTED COMMUNITY USES

SOILS SERIES	PUBLIC SEWER	SEPTIC TANK	COMMERCIAL/ LIGHT INDUSTRIAL	STREETS	DEVELOPED RECREATION
	DWELLINGS AND NONINTENSIVE USES				
ALLEN	SLIGHT TO SEVERE-SLOPE	SLIGHT TO SEVERE-SLOPE	SLIGHT TO SEVERE-SLOPE	SLIGHT TO SEVERE-SLOPE	SLIGHT TO SEVERE-SLOPE
BAXTER	SLIGHT TO SEVERE-SLOPE	SLIGHT TO SEVERE-SLOPE	SLIGHT TO SEVERE-SLOPE	SLIGHT TO SEVERE-SLOPE	MODERATE TO SEVERE-SLOPE, CHERT
BEWLEYVILLE	SLIGHT TO MODERATE-SLOPE	SLIGHT TO MODERATE-SLOPE	SLIGHT TO SEVERE-SLOPE	SLIGHT TO MODERATE-SLOPE	SLIGHT TO SEVERE-SLOPE
BRUNO	SEVERE-FLOOD	SEVERE-FLOOD	SEVERE-FLOOD	SEVERE-FLOOD	SEVERE-FLOOD
CHRISTIAN	SLIGHT TO SEVERE-SLOPE	MODERATE TO SEVERE-PERCOLATION	SLIGHT TO SEVERE-SLOPE	MODERATE TO SEVERE-SLOPE, STRENGTH	SEVERE-SLOPE, TEXTURE
COOKEVILLE	SLIGHT TO MODERATE-SLOPE	SLIGHT TO MODERATE-SLOPE	MODERATE TO SEVERE-SLOPE	MODERATE TO SEVERE-SLOPE, STRENGTH	MODERATE-TEXTURE, SLOPE
DICKSON	SLIGHT	SEVERE-PERCOLATION	SLIGHT	MODERATE-STRENGTH	SEVERE-PERMEABILITY
ENNIS	SEVERE-FLOOD	SEVERE-FLOOD	SEVERE-FLOOD	SEVERE-FLOOD	SEVERE-FLOOD
GUTHRIE	SEVERE-WETNESS	SEVERE-PERCOLATION, WETNESS	SEVERE-FLOOD, WETNESS	SEVERE-FLOOD, WATER TABLE	SEVERE-FLOOD
HOLSTON	SLIGHT	SLIGHT	SLIGHT TO MODERATE-SLOPE	SLIGHT	SLIGHT TO MODERATE-SLOPE
HERMITAGE	SLIGHT TO SEVERE-SLOPE	SLIGHT TO SEVERE-SLOPE	SLIGHT TO SEVERE-SLOPE	SLIGHT TO SEVERE-SLOPE	SLIGHT TO SEVERE-SLOPE
HUNTINGTON	SEVERE-FLOOD	SEVERE-FLOOD	SEVERE-FLOOD	SEVERE-FLOOD	MODERATE-FLOOD
JEFFERSON	SLIGHT TO SEVERE-SLOPE	SLIGHT TO SEVERE-SLOPE	SLIGHT TO SEVERE-SLOPE	SLIGHT TO SEVERE-SLOPE	SLIGHT TO SEVERE-SLOPE, COBBLES
LANDISBURG	SLIGHT	SEVERE-PERCOLATION	SLIGHT TO MODERATE-SLOPE	MODERATE-STRENGTH	MODERATE-PERMEABILITY
LAWRENCE	MODERATE-WETNESS	SEVERE-PERCOLATION, WETNESS	SEVERE-WATER TABLE	SLIGHT TO SEVERE-SLOPE	SEVERE-WETNESS
LINDSIDE	SEVERE-FLOOD	SEVERE-FLOOD	SEVERE-FLOOD	SEVERE-FLOOD	MODERATE-FLOOD
MELVIN	SEVERE-FLOOD	SEVERE-FLOOD, WETNESS	SEVERE-FLOOD, WATER TABLE	SEVERE-FLOOD, WATER TABLE	SEVERE-FLOOD
MINVALE	SLIGHT TO MODERATE-SLOPE	SLIGHT TO MODERATE-SLOPE	SLIGHT TO SEVERE-SLOPE	SLIGHT TO MODERATE SLOPE	SLIGHT TO SEVERE-SLOPE, CHERT
MONONGAHELA	SLIGHT	SEVERE-PERCOLATION	SLIGHT	MODERATE-WATER TABLE	MODERATE-PERMEABILITY
MOUNTVIEW	SLIGHT TO MODERATE-SLOPE	SLIGHT TO MODERATE-SLOPE	SLIGHT TO SEVERE-SLOPE	SLIGHT TO MODERATE-SLOPE	SLIGHT TO SEVERE-SLOPE
PURDY	SEVERE-WETNESS	SEVERE-PERCOLATION	SEVERE-FLOOD, WATER TABLE	SEVERE-FLOOD, WATER TABLE	SEVERE-WETNESS
SANGO	SLIGHT	SEVERE-PERCOLATION	MODERATE-WATER TABLE	MODERATE-WATER TABLE	MODERATE-PERMEABILITY
SEQUATCHIE	SLIGHT	SLIGHT	SLIGHT	SLIGHT	SLIGHT
TALBOTT	MODERATE TO SEVERE-SLOPE, CLAYEY	SEVERE-SLOPE, PERCOLATION	SEVERE-SLOPE, SHRINK-SWELL	MODERATE TO SEVERE-SLOPE, STRENGTH	SEVERE-SLOPE, TEXTURE
TYLER	SEVERE-WETNESS	SEVERE-PERCOLATION	SEVERE-FLOOD, WATER TABLE	SEVERE-WATER TABLE	SEVERE-WETNESS
WAYNESBORO	SLIGHT TO MODERATE-SLOPE	SLIGHT TO MODERATE-SLOPE	SLIGHT TO MODERATE-SLOPE	SLIGHT TO MODERATE-SLOPE	SLIGHT TO SEVERE-SLOPE

SOURCE: SOIL INTERPRETATIONS FOR PUTNAM COUNTY, TENNESSEE, 1963.

CHAPTER 4

SOCIO-ECONOMIC FACTORS AFFECTING DEVELOPMENT

INTRODUCTION

This chapter will present a summary of the socio-economic trends pertinent to the preparation of this Comprehensive Plan. Strategies for community development, projections of land use and transportation needs, discussions of land use issues, are dependent upon population and employment characteristics. These demographics provide future trend projections, which can be affected, but the trends must be understood to be of planning significance.

TRENDS SUMMARY

For the purposes of this plan the past changes in population and employment were examined for their implications for development within the City of Cookeville and the surrounding planning area. Of most significance are the projected changes in the population and employment within Putnam County and Cookeville through the year 2020.

POPULATION

According to U. S. Census figures the population of Cookeville grew from 6,924 in 1950 to 21,744 in 1990. During the same period the Putnam County population increased from 29,869 to 51,373. Historic population counts for Cookeville, Putnam County, the Upper Cumberland Region, and the State are presented in Table 2. Of particular interest for the City of Cookeville are the large population increases from 1960 to 1970 and from 1970 to 1980 which were followed by almost no increase from 1980 to 1990. It is also significant that the less than 1 percent growth rate for Cookeville as indicated by the 1990 Census is much less than the county's growth rate of nearly 8 percent and is even less than the averages for both the region and the state. Graphs 5 and 6 graphically present the trends for the municipality and the county.

Population Projections

Population projections to 2020 for Cookeville, Putnam County, the region and the state, were prepared by the University of Tennessee Center for Business and Economic Research (UT-CBER) in early 1999. Under the provisions of Public Chapter 1101 of 1998, the use of UT-CBER estimates is required in the process of determining a municipality's projected urban growth area. It should be noted that the UT-CBER projections are significantly less than other population projections for the city and county. For long range planning purposes, especially for the provision of municipal facilities and services, the UT-CBER projections should be considered as minimum to moderate growth projections.

The UT-CBER population projections are presented in Table 3. It is estimated the population of Cookeville will increase by 5,576 or to 27,120 in 2000, by 4,535 or to 31,655 in the year 2010, and by 4,682 or to 36,337 in the year 2020. This is graphically depicted in Graph 7. Graph 8 shows that the Putnam County population is projected to grow to 60,452 persons in the year 2000, to 67,128 in the year 2010, and to 73,308 by the year 2020.

The projections prepared by UT-CBER reflect approximate growth rates for Cookeville of 25 percent from 1990 to 2000, of 17 percent from 2000 to 2010, and of 15 percent from 2010 to 2020. Total growth for Cookeville for the 30-year period is projected to be 14,593 or 67 percent. For the same decades, UT-CBER projects approximate growth rates for Putnam County of 17 percent, 11 percent, and 9 percent. Total growth for the county during the 30-year period is projected to be 21,740 or 42 percent. The projections also indicate that the percent of Putnam County's total population located within the corporate limits of Cookeville will increase from 42 percent in 1990 to 50 percent in 2020.

TABLE 2

HISTORIC POPULATION COUNTS AND PERCENT CHANGE

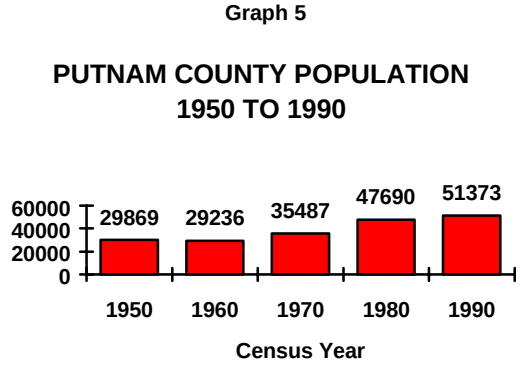
1950 TO 1990

Incorporated Place/County	1950	Percent Change 1950-60	1960	Percent Change 1960-70	1970	Percent Change 1970-80	1980	Percent Change 1980-90	1990
Cookeville	6,924	12.72%	7,805	84.54%	14,403	49.99%	21,604	0.65%	21,744
Algood	729	21.54%	886	104.06%	1,808	33.08%	2,406	-0.29%	2,399
Baxter	861	-0.93%	853	44.08%	1,229	14.81%	1,411	-8.65%	1,289
Monterey	2,043	1.27%	2,069	13.63%	2,351	11.02%	2,610	-1.95%	2,559
Total Incorporated	10,557	10.00%	11,613	70.42%	19,791	41.64%	28,031	-0.14%	27,991
Putnam County	29,869	-2.12%	29,236	21.38%	35,487	34.39%	47,690	7.72%	51,373
UCR	198,382	-7.66%	183,190	5.75%	193,719	24.72%	241,605	4.43%	252,301
Tennessee	3,291,718	8.37%	3,567,089	10.06%	3,926,018	16.94%	4,591,023	6.23%	4,877,185

Adapted from Tennessee Statistical Abstract (1991) with addition of 1950 figures.

Note: The Upper Cumberland Region includes the counties of Cannon, Clay, Cumberland, DeKalb, Fentress, Jackson, Macon, Pickett, Putnam, Smith, Van Buren, Warren and White.

Graph 5



Graph 6

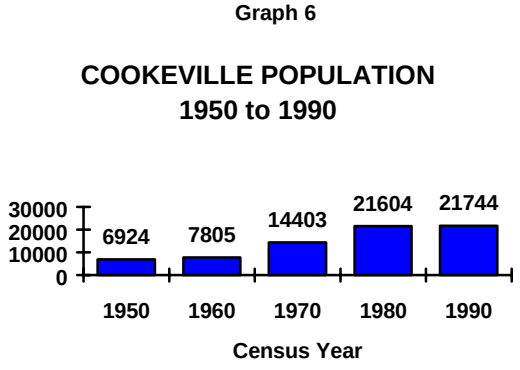


TABLE 3

PROJECTED POPULATION COUNTS AND PERCENT CHANGE

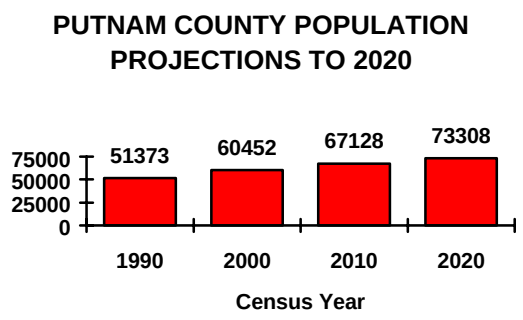
TO 2020

Incorporated Place/County	1990	Percent Change 1990-2000	2000	Percent Change 2000-2010	2010	Percent Change 2010-2020	2020
Cookeville	21,744	24.7%	27,120	16.7%	31,655	14.8%	36,337
Putnam County	51,568	17.2%	60,452	11.0%	67,128	9.2%	73,308
UCR	252,301	7.7%	271,795	8.8%	295,602	6.8%	315,642
Tennessee	4,877,185	13.5%	5,533,762	9.6%	6,062,695	8.8%	6,593,194

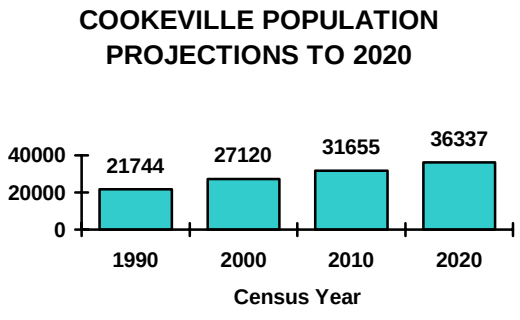
Projections were prepared by the University of Tennessee Center for Business and Economic Research (UT-CBER).

Note: The Upper Cumberland Region includes the counties of Cannon, Clay, Cumberland, DeKalb, Fentress, Jackson, Macon, Pickett, Putnam, Smith, Van Buren, Warren and White.

Graph 7



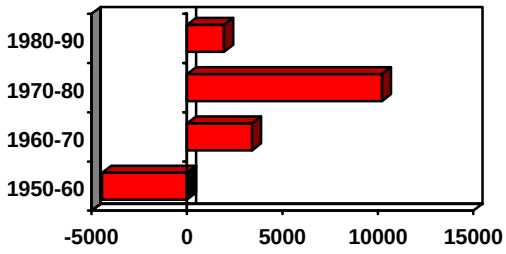
Graph 8



Migration

Migration represented a significant factor in population changes in Putnam County during the forty-year period from 1950 to 1990. As Graph 9 depicts, Putnam County has experienced considerable migration changes during the past four decades. During the period from 1970 to 1980 the county had an in-migration of over 10,200 persons, which represented a net migration rate of nearly 28 percent. Migration accounted for approximately 84 percent of the total population gain from 1970 to 1980. From 1980 to 1990 net in-migration in the county dropped to just over 1,900 persons, which represented a net migration rate of only 4 percent. Migration accounted for approximately 53 percent of the total population increase from 1980 to 1990. Although significantly less than the previous decade, Putnam County's net migration rate was greater than the average of the Upper Cumberland Region and the State as a whole. In both instances there was a net in-migration rate of 1.61 and 0.79 percent respectively from 1980 to 1990.

Graph 9



PUTNAM COUNTY NET MIGRATION
1950 TO 1990

Age Distribution

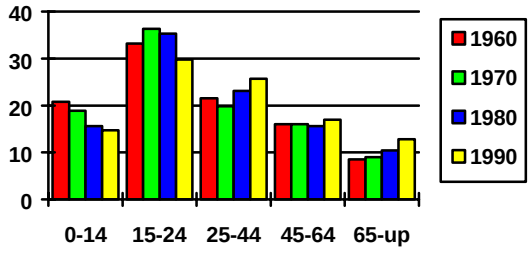
Trends in a community's population age distribution are important to consider when making future land use, transportation and community facility plans. Graph 10 depicts a summary of cohort age distribution in Cookeville from 1960 to 1990. The trends, which are depicted in Graph 10, represent some of the forces that could account for the moderate population growth projected for the city.

An analysis of the cohort age distribution in Cookeville from 1960 to 1990 indicates considerable and steady declines, from 20.8 percent of the total population to 14.7 percent, in the age groups of 14 years and under. The age group between 15 and 24 years has also declined over the same period from 33.2 percent of the total population to 29.8 percent. In 1960, 54 percent of the Cookeville population was less than 25 years old and by 1990 only 44.5 percent was less than 25. The reductions in the categories of 24 years and under have long-term implications, including a potential reduction in the available labor force. These declines are also indicative of the national trend of a smaller family size.

It is significant that the age group of between 25 and 44 years, which is the primary child bearing cohort, has increased from 21.5 percent of the total population in 1960 to 25.7 percent in 1990. The increase in this cohort could slow the declining trend in the age groups of 14 years and under. Also of importance is that the age group of between 25 and 64 years, which is the primary working cohort, has actually increased from 37.5 percent in 1960 to 42.7 percent in 1990.

The Cookeville population has followed the national trend of a larger senior population with the age group over 64 years increasing from 8.5 percent of the total population in 1960 to 12.8 percent in 1990. This trend for an aging population is also reflected in the city's median age which has increased from 23.2 in 1970 to 28.1 in 1990.

Graph 10



COOKEVILLE SELECTED AGE GROUPS
1960 TO 1990

Household Characteristics

The number of households and average persons-per-household in Putnam County and Cookeville reflect the general trend of population change noted above. While the number of households in the county more than doubled from 1960 to 1990, increasing from 8,124 to 19,753, the average persons-per-household decreased from 3.41 to 2.45. Cookeville follows the county pattern in numbers of households, growing from 2,047 in 1960 to 8,653 in 1990. Persons-per-household in the municipality declined from 3.07 in 1960 to 2.23 in 1990. The decreases in persons-per-household of nearly one person in a 30-year period reflect the nationwide trend of smaller family size. Table 4 reflects selected household characteristics for Cookeville and Putnam County from 1960 to 1990.

TABLE 4

HOUSEHOLD CHARACTERISTICS
1960 TO 1990

	COOKEVILLE		PUTNAM COUNTY	
Year	Total Households	Persons per Household	Total Households	Persons Per Household
1960	2,047	3.07	8,124	3.41
1970	4,250	2.76	11,047	2.98
1980	7,087	2.44	16,076	2.65
1990	8,563	2.23	19,753	2.45

Findings. The moderate population increase projected for both Putnam County and Cookeville is supported by the decline in the younger population, the decrease in household size, and the growing numbers of elderly as indicated in the 1990 Census. These parallel trends, if they continue through the planning period, will have significant implications for planning within the City of Cookeville, in both land use and the delivery and types of services required by the resulting population.

EMPLOYMENT

A comparison of employment in Cookeville and Putnam County to the State employment pattern is important to understand current trends. Table 5 depicts the 1980 and 1990 employment figures by major industrial sector for the State, Putnam County and the City of Cookeville. As Table 5 reflects, a total of 10,383 persons were employed in Cookeville in 1990, which was an increase of 1,695 or of 19.5 percent from 1980. Total employment in Putnam County increased by approximately 21 percent over the same period while the State increased by approximately 17.5 percent.

Wholesale and retail trade at 27.2 percent accounts for the largest percentage of total employment in the City of Cookeville followed by employment in manufacturing at 19.8 percent. The high percentage of the city's population employed in wholesale and retail trade reflects the community's importance as a commercial center for the region.

Manufacturing, followed by wholesale and retail trade, account for the largest percentage of employment in the State and Putnam County. It is significant that for all three government levels the percentage of total employment in the manufacturing sector dropped from 1980 to 1990. For the City of Cookeville manufacturing actually dropped in 1990 to below 20 percent of the total employment. According to the 1990 figures, Putnam County employs a higher percentage in manufacturing than the State.

Both Putnam County and Cookeville employ a much higher percentage of persons in the educational services sector than the State average, which is reflective of Tennessee Tech University. However, employment in educational services actually declined as a percentage of total employment at all three levels. The city and the county each employ a lower percentage of persons than the State in the industrial sectors of construction; transportation; communication and utilities; finance, insurance and real estate; health services; and public administration.

TABLE 5 EMPLOYMENT
1980 TO 1990

TABLE 5
EMPLOYMENT BY MAJOR INDUSTRIAL SECTOR
STATE, PUTNAM COUNTY, AND CITY OF COOKEVILLE
1980 & 1990

INDUSTRIAL SECTOR	STATE				PUTNAM COUNTY				COOKEVILLE			
	1980		1990		1980		1990		1980		1990	
	PERSONS EMPLOYED	%	PERSONS EMPLOYED	%	PERSONS EMPLOYED	%	PERSONS EMPLOYED	%	PERSONS EMPLOYED	%	PERSONS EMPLOYED	%
Agriculture, Forestry, & Fisheries	50,517	2.64%	50,706	2.26%	467	2.32%	446	1.83%	75	0.86%	92	0.88%
Mining	11,068	0.58%	7,707	0.34%	125	0.62%	93	.38%	60	0.69%	13	0.12%
Construction	119,039	6.22%	142,280	6.32%	1,343	6.68%	1,375	5.64%	406	4.67%	372	3.58%
Manufacturing	511,139	26.69%	523,813	23.27%	5,792	28.81%	6,508	26.69%	1,912	22.01%	2,060	19.84%
Transportation	81,573	4.26%	107,576	4.78%	555	2.26%	828	3.39%	174	2.00%	333	3.21%
Communication & Other Public Utilities	72,330	3.78%	63,441	2.82%	665	3.30%	497	2.04%	214	2.46%	179	1.72%
Wholesale & Retail Trade	379,394	19.81%	480,135	21.33%	3,959	19.69%	5,689	23.36%	1,975	22.73%	2,825	27.21%
Finance, Insurance & Real Estate	93,492	4.88%	120,371	5.35%	720	3.65%	1,007	4.13%	338	3.89%	502	4.83%
Business & Repair Services	68,249	3.56%	91,177	4.05%	560	2.78%	814	3.34%	215	2.47%	424	4.08%
Personal, Entertainment & Recreational Services	80,223	4.19%	97,528	4.33%	777	3.86%	1,036	4.25%	374	4.30%	542	5.22%
Health Services	136,980	7.15%	191,134	8.49%	1,122	5.58%	1,669	6.85%	570	6.56%	719	6.92%
Educational Services	154,307	8.06%	165,498	7.35%	2,663	13.24%	2,765	11.34%	1,708	19.67%	1,562	15.04%
Other Professional Services	65,167	3.40%	115,219	5.12%	519	2.58%	882	3.62%	317	3.65%	412	3.97%
Public Administration	91,412	4.77%	94,049	4.18%	825	4.10%	767	3.15%	350	4.03%	348	3.35%
TOTALS	1,914,929	100%	2,250,845	100%	20,104	100%	24,376	100%	8,688	100%	10,383	100%

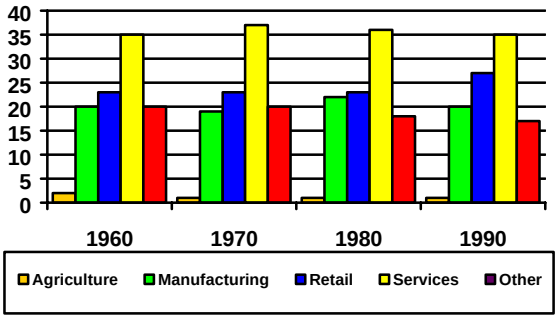
Note: Figures do not reflect location of employment.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Selected Labor Force and Commuting Characteristics 1980 and 1990.

Historical Employment

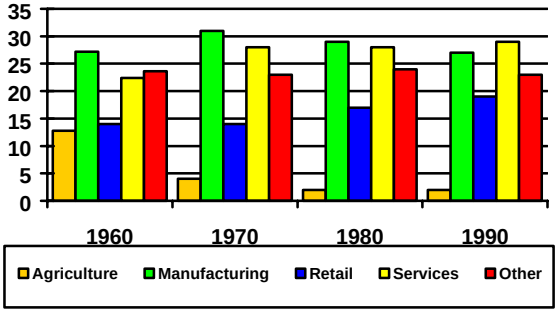
Employment has not changed significantly for Cookeville during the past three decades, with services and retail sales being the sectors with the most employment from 1960 to 1990. The most significant change for the city has been the increase in employment in the retail sector, which increased from 23 percent of the total employment to 27 percent. Manufacturing employment has been stable remaining at approximately 20 percent. In Putnam County the most significant change over the 30-year period is the decline in agriculture employment, which decreased from 13 percent of the work force in 1960 to less than 2 percent in 1990. The county's loss in agriculture employment has been made up for with significant increases of employment in the retail and service sectors. Graphs 11 and 12 depict historical employment percentages for Cookeville and Putnam County from 1960 to 1990.

Graph 11



COOKEVILLE EMPLOYMENT
1960-1990

Graph 12



PUTNAM COUNTY EMPLOYMENT
1960-1990

Major Employers

The major employers located in the City of Cookeville for 1998 according to the Cookeville/Putnam County Chamber of Commerce, are identified in Table 6. The 16 employers listed in Table 6 employ an estimated 10,275 persons, with Tennessee Tech University being by far the largest employer. Other major employers in Cookeville include Fleetguard, Cookeville Regional Medical Center, and Russell Stover Candies. The diversity of the major employers is of significant benefit for the economy of Cookeville. This diversification reduces the susceptibility of an impact on the economy of Cookeville from large fluctuations in the national employment trends of any one industrial category.

TABLE 6

MAJOR EMPLOYERS
CITY OF COOKEVILLE
1998

Employer	Number of Employees
Tennessee Tech University	2,400
Fleetguard	1,000
Cookeville Regional Medical Center	930
Russell Stover Candies	900
Aquatech	650
TRW Vehicle Safety Systems	620
Wal-Mart	475
DACCO	458
Tutco	450
State of Tennessee	440
City of Cookeville	380
Averitt Express	370
Red Kap Industries	352
Adams Industries	300
Flowserve	290
Putnam County Government	260

Place of Work

Employment and place of work are

important issues. In 1990, Putnam County employed 21,534 or 89.9 percent of its working population, with 2,421 or 10.1 percent commuting to other counties. This commuting percentage is the lowest in the region, which reflects the importance of Cookeville and Putnam County as an employment hub. White, Davidson, Jackson and Cumberland Counties, in that order, employ the highest percentage of commuting Putnam County workers. The number of persons commuting to Putnam County for employment in 1990 was 6,326 or 3,905 more persons than reside in Putnam County and work elsewhere. Overton, White, Jackson, and Cumberland Counties, in that order, provide the most workers from outside Putnam County.

Other Factors

Unemployment rates, income levels and poverty rates are also significant characteristics of employment pertinent to long range planning. The 1998 annual average unemployment rate in Putnam County was 4.2 percent, which was the same as the State average and was lower than the region average of 5.8 percent. Per capita personal income in Putnam County in 1996 was $19,673, which was lower than the State average of $22,032 but was higher than the region average of $17,149. The 1993 poverty rate in Putnam County was 16.6 percent, which was lower than the region average of 19 percent and the State average of 17.8 percent. These employment characteristics reflect a stable economy in Putnam County. The status of employment in a community has long term planning implications, and is significant in both land use decisions and decisions of economic strategy.

Findings. Employment characteristics indicate a stable economy for Cookeville and Putnam County. A comparison with state averages indicates that a higher percentage of the city's population is employed in the wholesale and retail trade and the educational services sectors. This is reflective of the city's prominence as a regional commercial center and of the importance of Tennessee Tech University. One of the most significant aspects of employment in the city is the diversification.

SUMMARY OF FINDINGS

Based on historic population trends, the population of Cookeville is projected to increase by approximately 25 percent from 1990 to 2000, by approximately 17 percent from 2000 to 2010, and by approximately 15 percent from 2010 to 2020. Putnam County's population is projected to increase by approximately 17 percent by the year 2000, by approximately 11 percent from 2000 to 2010, and by approximately 9 percent from 2010 to 2020. The projected population increases for both the municipality and the county could be significantly reduced if the current trends of out-migration, and of an aging population are not reversed.

A continued decline in the average persons-per-household will have a significant impact on planning issues. The decrease in persons-per-household reflects smaller family sizes and an increasing age of the Cookeville and Putnam County populations. This may be important in the planning of facilities as well as the projection of land use needs and housing demands.

The creation of employment opportunities within Cookeville and Putnam County offers an opportunity to affect long term population trends. The current balance of jobs, weighted heavily toward wholesale and retail trade, is reflective of the regional importance of Cookeville as a commercial hub. Manufacturing, although less than previous years, continues to be a primary source of employment for the city. Employment in the educational services sector is significantly higher than the State average, which reflects the importance of Tennessee Tech University in Cookeville and Putnam County. Diversification of employment opportunities in Cookeville is a significant benefit to the city's overall economy. Increases in job opportunities in the service sectors may further add to the current employment mix.

CHAPTER 5

EXISTING LAND USE ANALYSIS

INTRODUCTION

As a prerequisite to preparing a plan for future land use, a survey and analysis of the existing land use patterns and characteristics must be completed. The data from this existing land use analysis when integrated with information pertaining to natural factors affecting development, the population, economic factors, utilities and transportation facilities is vital in determining what areas are best suited for the various land uses and transportation facilities over a planning period. In addition a thorough analysis of existing land use will facilitate a more accurate projection of future land use needs.

As the last existing land use inventory of the City of Cookeville was completed more than 35 years ago a thorough land use trends analysis is not feasible. However, historical trends were identified when possible by comparing the 1999 land use with that found in the Land Use Plan for 1980, Cookeville, Tennessee, prepared by the Tennessee State Planning Office in 1964.

EXISTING LAND USE INVENTORY

During the months of March through August of 1999, field surveys of the City of Cookeville and the unincorporated planning area were conducted by the staff of the Cookeville Department of Planning and Codes for the purpose of determining how each parcel of land was utilized. Illustration 5 depicts the various land uses in Cookeville and the surrounding planning area as determined by the 1999 land use survey.

Land Use Categories

Each individual land use identified in the 1999 field survey of the Cookeville Planning Area was assigned to a general land use category for the purpose of analysis. The land use categories are as follows:

Residential: Land on which one or more dwelling units are located. This includes all single-family and multi-family residences, mobile homes, and public housing.

Commercial/Private Services: Land on which retail and wholesale trade activities and/or services occur, including vacant floor space. Land on which an array of private firms which provide special services are located. This category includes hospitals, churches, cemeteries, professional offices, banks, personal services, repair services, etc.

Industrial: Land on which activities of processing or fabricating raw materials, or producing commodities takes place, including manufacturing uses.

Public Services/Cultural and Recreational: Land on which educational facilities, and all federal, state, and local governmental uses are located. This category also includes land on which museums, libraries, parks, and similar uses are located.

Utilities: Land on which utility structures or facilities are located.

Transportation: Land on which municipal streets, county roads, state highways, interstates and rail lines are located, including the right-of-ways.

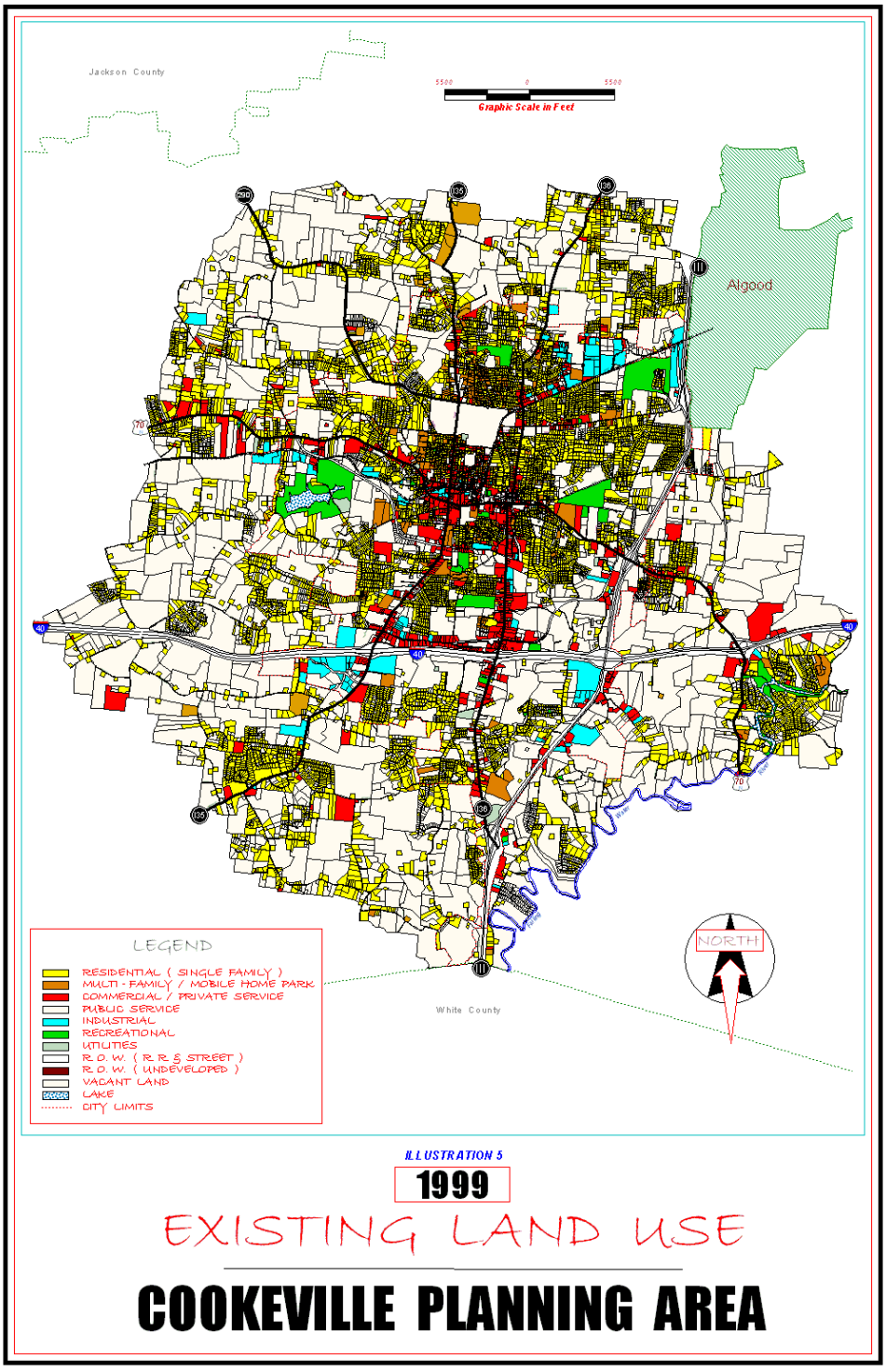
Vacant Land: Land that either has not been or cannot be developed. Vacant land can be divided into two general categories:

1. Vacant Developable. Land that has no physical or other constraints which would prohibit it from being developed.

2. Vacant Undevelopable. Land that has physical or other constraints which prohibit or limit it from being developed.

ILLUSTRATION 5

EXISTING LAND USE COOKEVILLE PLANNING AREA



GENERAL ANALYSIS OF EXISTING LAND USE

As Illustration 5 reflects, land use in the older sections of Cookeville has developed primarily along traditional designs reflective of the grid pattern. In the more recently developed portions of the municipality, and in most of the unincorporated planning area, the curvilinear pattern has been utilized. Natural factors, such as flood plains and steep topography, have affected the location of land use in both the municipality and the surrounding planning area. Conflicting land uses are generally well separated from each other in the municipality and it is not yet a significant problem in the planning area. As a mid-size community, most residents have easy access to the necessary public and private facilities and services.

Within the corporate limits of Cookeville there are approximately 14,050 acres, or 22 square miles of land. According to the 1999 land use survey, an estimated 68 percent, or 9,508 acres, of the total land area in Cookeville is developed and approximately 32 percent, or 4,542 acres is vacant. Table 7 depicts a summary of the existing land use in the City of Cookeville as determined by the 1999 inventory.

TABLE 7

LAND USE BY ACREAGE AND AS PERCENT OF TOTAL LAND IN CORPORATE LIMITS

LAND USE	ACRES	%
Residential	4,178	29.8
Commercial/Private Services	1,176	8.4
Industrial	633	4.5
Public/Cultural/Recreational	1,480	10.5
Utilities	71	0.5
Transportation	1,970	14.0
DEVELOPED LAND	9,508	67.7
VACANT LAND	4,542	32.3
TOTAL LAND AREA	14,050	100

The area within the corporate limits of Cookeville has increased substantially over the past few decades. The city's current total land area of 14,050 acres represents an increase of approximately 12,000 acres or 600 percent since 1964. During the 35-year period between 1964 and 1999 the municipality increased its land area by an annual average of approximately 343 acres.

The planning area outside the corporate limits identified for study in this Plan consists of approximately 23,980 acres, or 37.5 square miles. According to the 1999 land use survey an estimated 8,417 acres or 35 percent of this land is developed and approximately 15,563 acres or 65 percent is vacant. Table 8 depicts a summary of the existing land use in the unincorporated planning area as determined by the 1999 inventory.

TABLE 8

LAND USE BY ACREAGE AND AS PERCENT OF TOTAL LAND UNINCORPORATED PLANNING AREA

LAND USE	ACRES	%
Residential	5,775	24.1
Commercial/Private Services	542	2.2
Industrial	90	0.4
Public/Cultural/Recreational	831	3.5
Utilities	9	0.0
Transportation	1,170	4.9
DEVELOPED LAND	8,417	35.1
VACANT LAND	15,563	64.9
TOTAL LAND AREA	23,980	100

As indicated in Tables 7 and 8, the area within the corporate limits of Cookeville is substantially more developed than the surrounding planning area. A detailed analysis of this developed land use is presented in the following section.

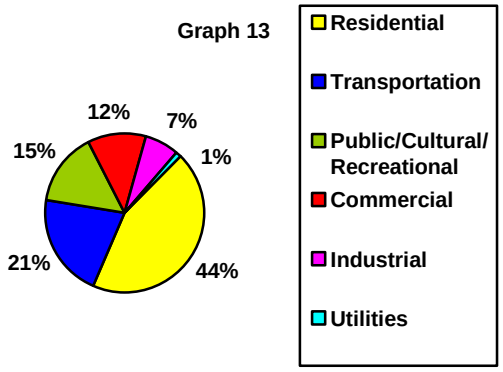
ANALYSIS OF EXISTING DEVELOPED LAND USE

The 1999 land use inventory indicates that approximately 68 percent or 9,508 acres of the total land area in Cookeville is developed. The largest percentage of the developed land area in Cookeville is used for residential purposes. Residential land comprises 4,178 acres, or approximately 44 percent of the total developed land in the municipality. Land used for transportation purposes occupy 1,970 acres or 21 percent of the developed land. This includes the right-of-ways for all streets and highways and all railways. Approximately 1,178 acres or 12 percent of the developed land area is used for commercial/private service purposes. Public services occupy 879 acres of land while cultural and recreational uses occupy 601 acres. Combined these land uses account for 1,480 acres or 15 percent of the developed land area. Industrial land uses occupy approximately 633 acres or seven percent of the developed land area. The remaining 71 acres, or less than one percent of the developed land area, is occupied by utility facilities. A summary of the developed land uses by acreage in Cookeville is presented in Table 9. Graph 13 reflects the percentage of developed land area in Cookeville by land use category.

TABLE 9

DEVELOPED LAND USE BY ACREAGE IN CORPORATE LIMITS 1999

LAND USE	ACRES
Single-Family Residential	3,620
Multi-Family Residential	441
Mobile Homes/ Mobile Home Parks	117
Commercial/Private Services	1,176
Industrial	633
Public Services	879
Cultural and Recreational	601
Utilities	71
Transportation	1,970
TOTAL DEVELOPED LAND	9,508



PERCENTAGE OF DEVELOPED LAND AREA IN CORPORATE LIMITS

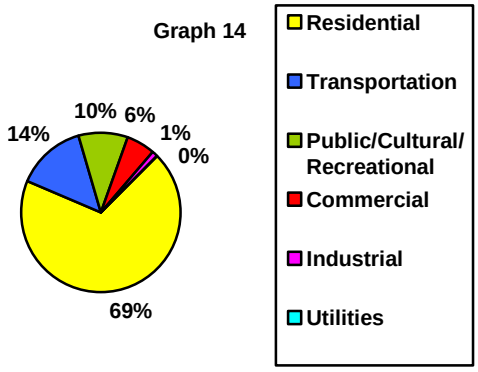
According to the 1999 land use inventory approximately 8,417 acres or only 35 percent of the total land area in the unincorporated planning area is developed. Similar to the municipality, residential uses occupy the largest portion of the developed land area. Nearly 69 percent, or approximately 5,775 acres, of the developed land in the unincorporated planning area is occupied for residential purposes. Street, highway, and railroad right-of-ways occupy approximately 1,170 acres or 14 percent of the developed land. In the planning area, 702 acres are occupied by public service land uses and 129 acres are occupied by cultural and recreational uses. Combined, public service, cultural and recreational land uses account for just under 10 percent of the total developed land area. Approximately 542 acres, or six percent of the developed land, are used for commercial/private services uses. Only approximately 90 acres or about one percent of the developed land is used for industrial purposes. The remaining 9 acres, or one tenth of one percent of the developed land, are occupied by utility facilities. A summary of the developed land uses by acreage in the planning area is presented in Table 10. Graph 14 reflects the percentage of developed land in the planning area by land use category.

TABLE 10

DEVELOPED LAND USE BY ACREAGE
UNINCORPORATED PLANNING AREA
1999

LAND USE	ACRES
Single-Family Residential	5,210
Multi-Family Residential	109
Mobile Homes/ Mobile Home Parks	456
Commercial/Private Services	542
Industrial	90
Public Services	702
Cultural and Recreational	129
Utilities	9
Transportation	1,170
TOTAL DEVELOPED LAND	8,417

Graph 14



PERCENTAGE OF DEVELOPED LAND AREA
UNINCORPORATED PLANNING AREA

A detailed analysis of existing land use in the municipality and the unincorporated planning area by land use category is presented in the following.

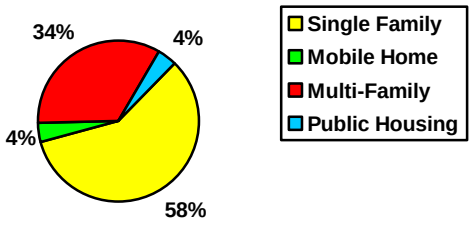
Residential

The residential land use category, like in most communities, occupies the largest portion of developed land in Cookeville and the surrounding planning area. Also, like most communities, the traditional single-family detached dwelling unit is the predominant form of residential land use in both areas. Natural factors have had only a minor effect on residential development in the Cookeville Planning Area.

Residential development in Cookeville is scattered throughout the municipality with the older neighborhoods located on traditional grid pattern streets branching out from the downtown area. The grid pattern streets are typical in areas with few physical constraints to development. Some of the newer residential subdivisions have occurred in areas with topographic constraints and have developed on curvilinear pattern streets. Several of the oldest neighborhoods have undergone a transition from traditional single family developments to multi-family developments and, in some cases, to commercial/private service developments. This is especially true for the areas in the vicinity of downtown, the hospital, and the university.

The residential areas in Cookeville occupy 44 percent of the total developed land, or about 4,178 acres. The 1999 land use inventory identified a total of 10,069 housing units located on the 4,178 acres of residential land use. This represents an average lot size of slightly more than 18,000 square feet and an approximate density of 2.4 housing units per acre. Student housing located on the university campus, which totals more than 300 units, is not included in the municipality's residential acreage or housing unit totals. Graph 15 reflects the percentage of housing units in Cookeville by type of housing.

Graph 15



PERCENTAGE OF HOUSING UNITS BY TYPE
IN CORPORATE LIMITS

Of the 10,069 housing units in Cookeville, 5,828 or 58 percent are traditional single-family detached residences. These residences are scattered throughout the municipality with large concentrations located off most major thoroughfares. Most of the single-family residential lots have a lot width of at least 80 feet and are generally well-shaped with good lot width-to-depth ratio. This is reflective of residential development associated with the grid pattern. Although the majority of the lots occupied by single-family detached residences are of adequate size, there are some narrow and smaller lots located primarily in the oldest sections of the municipality to the north and south of the downtown.

Multi-family housing units, including both public and private units, represent approximately 38 percent, or 3,786 of the total housing units in Cookeville. Private multi-family housing consists of 3,350 units, or 34 percent of the total housing units. Although the majority of these are located within traditional multi-family complexes, a significant portion of these units developed as conversions of older single-family detached structures, especially in the vicinity of Tennessee Tech University. This has resulted in several multi-family structures being located in areas with insufficient transportation facilities and inadequate off-street parking. In addition, a small portion of the private multi-family units is located, as a result of adaptive reuse, in the second stories of structures in downtown area. The 1999 inventory indicated that there were a number of vacancies in the private, multi-family complexes. This indicates that the supply of multi-family housing may be approaching the current demand. Zoning should not hamper the future provision of high-density housing, as there are many areas of vacant land available in Cookeville zoned for multi-family use. Public, multi-family housing consists of 436 units, or only four percent of the total housing units. These 436 units are divided among six public housing complexes. All are located within close proximity of shopping areas.

The 1999 survey identified 455 mobile homes in Cookeville, which account for approximately four percent of the total housing units. Only 54 of these mobile homes are not situated within one of the 16 mobile home parks located in the municipality. This can be attributed to a municipal zoning requirement that restricts the location of mobile homes to mobile home parks. All of these mobile home parks were developed prior to the current zoning regulations and as a result most have substandard infrastructure. In many of these mobile home parks the mobile homes are rental and have not been well maintained. The municipality periodically receives requests for mobile homes on individual lots, however, the local zoning regulations prohibit this.

Residential construction in Cookeville during the past 20 years has been steady. According to the city's building permit records, a total of 3,635 dwelling units were built between 1979 and 1998. Of the 3,635 dwelling units constructed during the 20-year period 1,636 or 45 percent were single-family units. This represents a construction rate of approximately 82 single-family structures per year. During the same 20-year period a total of 1,999 multi-family dwelling units were built. This represents a construction rate of approximately 100 multi-family units per year. The largest year for single-family construction in the past 20 years occurred in 1987 when 130 units were built and for multi-family developments it was 1994 when 267 units were built. It is significant to note that in 1998 the total number of single-family units built was the smallest since 1984 and that the total number of multi-family units built was the smallest since 1982. A summary of residential construction in Cookeville during the past 20 years is presented in Table 11.

TABLE 11

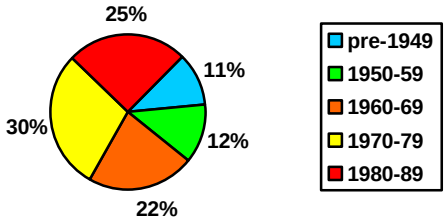
RESIDENTIAL CONSTRUCTION BY BUILDING PERMITS ISSUED 1979-1998

YEAR	SINGLE-FAMILY	MULTI-FAMILY	TOTAL UNITS
1979	72	263	335
1980	90	85	175
1981	34	12	46
1982	37	11	48
1983	57	52	109
1984	43	49	92
1985	67	75	142
1986	115	138	253
1987	130	111	241
1988	108	210	318
1989	108	73	181
1990	123	23	146
1991	82	62	144
1992	102	72	174
1993	93	93	186
1994	77	267	344
1995	77	246	323
1996	93	85	178
1997	78	53	131
1998	50	19	69
TOTAL	1,636	1,999	3,635

Preservation of housing stock is as important as the development of new residential areas. According to the 1999 land use inventory, 5,745 of the 5,826 single-family housing units, or over 98.5 percent, are in sound structural condition. Less than one percent of the single-family housing units in sound condition are vacant. There are 65 housing units considered to be in need of extensive repairs. Twelve of these units are vacant. Only 16 single-family housing units are considered to be in an unsound condition and all of these units are vacant. There are no concentrated areas of residential structures in less than sound condition located within the municipality. The low percentage of housing in less than sound condition can be partly attributed to an effective codes enforcement policy.

According to the 1990 Census only approximately 11 percent of the housing stock in Cookeville was constructed prior to 1950 while another almost 13 percent was constructed between 1950 and 1960. Nearly 55 percent of the housing stock was constructed after 1970. Approximately 30 percent of the housing stock in 1990 was constructed during the period between 1970 and 1979. In 1990, the median age of single family housing units was 19 years. Due to the number of housing units constructed since 1990, the percentage of older housing is expected to have declined. Graph 16 below depicts the percentage of housing units in Cookeville by age of construction according to the 1990 Census.

Graph 16



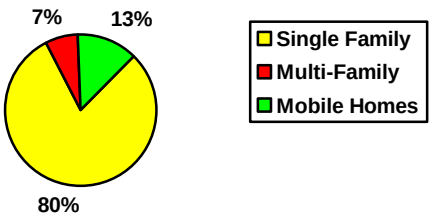
PERCENTAGE OF HOUSING UNITS IN 1990 BY AGE OF CONSTRUCTION IN CORPORATE LIMITS

Residential development is scattered throughout the unincorporated planning area of Cookeville with large concentrations to the east, northeast, northwest, and southwest of the municipality. The planning area has seen significant growth in residential development in recent years. This can be partly attributed to the lack of available land within the corporate limits of Cookeville. Natural factors should not significantly affect the potential for future residential development in the planning area. The lack of public sanitary sewer outside the city is the primary constraint to future residential growth.

Residential land use in the unincorporated planning area is by far the largest occupier of developed land, accounting for 5,775 acres, or approximately 69 percent of the

developed land. The 1999 land use survey identified 4,512 housing units on these 5,775 acres which represents an approximate density of .78 housing units per acre. The average residential lot size in the potential growth area exceeds one acre. The larger lots and lower densities can be primarily attributed to the lack of public sanitary sewer in the growth area. Graph 17 reflects the percentage of housing units in the planning area by type of housing.

Graph 17



PERCENTAGE OF HOUSING UNITS BY TYPE UNINCORPORATED PLANNING AREA

Of the 4,512 housing units in the unincorporated planning area 3,608 or approximately 80 percent are in the form of traditional detached single-family structures located on significantly larger lots than within Cookeville. Most of these units are located in large lot subdivisions situated on the fringe of the current corporate limits. Mobile homes make up approximately 13 percent, 596 total units, of the housing units in the planning area. Less than half of these mobile homes, 267 units, are located in the 14 mobile home parks in the planning area. The condition of most of these mobile home parks is indicative of the lack of regulatory controls. In the unincorporated planning area 308 or seven percent of the total housing units are private, multi-family units. This relatively high number is unusual when considering the lack of necessary infrastructure, primarily public sanitary sewer, outside the corporate limits. It may also be indicative of the lack of available land within the municipality. There are no public, multi-family housing units in the unincorporated planning area.

In the planning area of Cookeville, 3,559, or over 98 percent of the 3,608 single-family housing units are considered to be in sound structural condition with 17 units vacant. Of the remaining single-family housing units 41 are considered to be in need of extensive repairs and only eight are considered to be in an unsound condition. Only 33 of the housing units are vacant and 16 of these units are in less than sound condition. There are no concentrated areas of blight located in the unincorporated planning area.

A significant amount of new subdivision development and residential construction has occurred on the fringe of the City of Cookeville. In fact, the majority of the housing stock in the unincorporated planning area has been constructed since 1970. This can be partly attributed to the lack of available lots for development in Cookeville. The percentage of newer housing in the unincorporated planning area is expected to continue to increase, as there are numerous lots available for development.

Findings. Housing in Cookeville is basically in very good condition and there are no concentrated areas of blighted housing. Generally, all residential properties have good access to community goods and services. Multi-family construction has out paced single-family construction over the past 20 years. There are relatively few areas in Cookeville without severe physical limitations available for residential development. This is of particular concern since there is a demand for developable lots, multi-family housing units, and mobile home park spaces. Informal surveys indicate a very strong local community demand for low to moderately priced single-family housing. The limited availability of land in Cookeville for residential development has resulted in requests for annexation for new subdivision development. This lack of available land has also resulted in the development of numerous subdivisions on the fringe of the municipality.

Commercial/Private Services

Historically, the core area of the municipality, the Central Business District (CBD), has been its traditional economic center. Cookeville is unique in that it actually has two downtown areas, one developing around the courthouse and the other developing around the train depot. For planning purposes these two downtown areas are combined and identified as the Cookeville CBD. The CBD consists of an area generally defined by East 1st and Freeze Streets to the north, by Spring Street to the south, by Cedar Avenue to the west and by Maple Street to the east. The transition from a pedestrian oriented society to a vehicular oriented society has had its impacts on Cookeville with numerous commercial developments branching out away from the downtown. However, the Cookeville CBD, unlike many, remains viable. This is largely due to the CBD still serving as the governmental center of Putnam County and to a concentrated effort by the city and the downtown merchants to maintain and enhance the area.

There are few vacant parcels and very little vacant floor space in the downtown area available for development. Commercial/private service growth in the CBD is primarily limited to retrofitting and reuse of some of the oldest structures in the municipality or to demolition and new construction.

Like other communities, strip commercial developments along major thoroughfares have expanded and shifted Cookeville's commercial/private service center from the CBD to other areas. There are several areas of concentrated commercial/private service development in Cookeville located outside the CBD. The first areas of commercial/private service development to spread out away from the downtown area were along Broad and Spring Streets. With the completion of Interstate 40, two primary corridors of commercial development outside the CBD developed along Jefferson Avenue from the CBD south to Highway 111 and along Willow Avenue from Tennessee Tech University south to Interstate 40. In recent years the municipality has experienced significant commercial development along Interstate Drive, East Neal and West Jackson Streets.

As the retail trade and service center for Putnam County and for a large part of the Upper Cumberland Region, 1,178 acres, or 12 percent of the total developed land within Cookeville, is commercial/private service use oriented. Commercial retail sale establishments occupy 688 acres or seven percent of the developed land in Cookeville. Private service uses account for 488 acres, or five percent of the developed land. The vast majority of the private services are in the form of professional offices, financial facilities, and repair or personal services, many of which are located in or near the downtown area.

The commercial/private service areas on South Jefferson and Willow Avenues have developed in both a strip development pattern and a shopping center development pattern. The location of strip commercial areas on both of these thoroughfares near Interstate 40 has resulted in traffic congestion and safety problems due to a large number of curb cuts in close proximity along high traffic volume thoroughfares. The shopping center areas on these thoroughfares all generally have an adequate means of ingress-egress and have an ample amount of parking available. Areas for future commercial development on these two thoroughfares are limited, especially on South Jefferson Avenue. There are some scattered areas with vacant floor space available for reoccupancy. Due to the lack of available land on the South Jefferson and Willow Avenues the city has experienced a significant amount of commercial development on Interstate Drive, East Neal Street and more recently on West Jackson Street. There are still some areas available for development primarily along East Neal and West Jackson Streets.

In the unincorporated planning area 542 acres, or approximately 6 percent of the total developed land, is devoted to commercial/private service uses. This

development has occurred primarily in a strip commercial fashion along state highways branching out from Cookeville. The majority of this commercial development is adequately setback from the highway right-of-way, has sufficient off-street parking, and satisfactory loading and unloading space. There is land available for further commercial/private service development located off the state highways. Of significance is the lack of zoning restrictions in the planning area, which could lead to development problems such as unlimited curb cuts and inadequate off-street parking.

Findings. The commercial/private service areas of Cookeville are primarily located in and around the CBD and along most of the major thoroughfares in the municipality. The primary commercial areas of Cookeville have shifted from the downtown area to strip commercial/shopping center areas along South Jefferson and South Willow Avenues and more recently along Interstate Drive, Neal Street and West Jackson Street. The CBD is now dominated by private service uses. In general, the commercial/private service sector of Cookeville is strong and viable as evidenced by the very low vacant floor space available. There are some traffic safety and congestion problems in the downtown area and along Jefferson and Willow Avenues in the strip commercial areas. Areas for further expansion of commercial and private service uses are very limited in the municipality. This has resulted in spillage of this type of development into areas outside the corporate limits. This erodes the city's sales tax base and also results in development without any local regulatory controls or review.

Industrial

The industrial land uses in Cookeville currently occupy 633 acres, or approximately seven percent of the developed land area. This industrial acreage is primarily concentrated within three areas that are located to the southwest off Gould Drive, to the southeast off Highway 111, and to the northeast off the Nashville and Eastern Rail line. There is also a significant amount of industrial development located along the rail line west from the downtown.

In the unincorporated planning area approximately 90 acres of land are used for industrial purposes. This acreage accounts for just one percent of the total developed land use. The largest concentrations of industrial properties in the planning area are located to the southwest off Highway 135 and to the southeast off Highway 111.

The City of Cookeville, historically, has been the primary area for manufacturing and industrial development in Putnam County. Transportation systems played a vital role in industrial development. The first areas of industrial development in the city were located in the vicinity of the railroad depot and additional areas followed along the rail line to the west and northeast. The more recently developed industrial areas in the city have occurred in the vicinity of Interstate 40 and Highway 111.

Although the City of Cookeville remains the industrial center for Putnam County, no new major industrial developments have occurred in the city in the past 10 years. This can be attributed to a number of factors including a reduction in the available work force due to several recent years of low unemployment in Putnam County.

In the recent past, emphasis in Cookeville has been both to maintain and occupy existing facilities and sites and to develop additional sites. The Lemon Farris Industrial Park, a planned industrial area located southeast off Highway 111, was purchased by the city in 1989. At present TRW is the only industry located in this industrial park. There are approximately 100 additional acres at this site which can be made available for industrial development with the provision of the necessary infrastructure. Currently there are no sites available in Cookeville for large-scale industrial development. There are sites available in the planning area with the potential for large-scale industrial development.

Findings. Cookeville continues to be a primary location for industrial land uses in Putnam County. There are, however, no sites currently available for large-scale industrial development in the municipality. It is anticipated that transportation system improvements will play an important role in future industrial developments. Within the planning area of Cookeville there are areas with potential for industrial development, however, infrastructure improvement expenditures will be necessary.

Public, Cultural, Recreational

The City of Cookeville, as the county seat, serves as the center for public, cultural, and recreational land uses in Putnam County. This very broad classification covers numerous uses including all educational facilities, governmental facilities, medical facilities, recreational facilities, and all cemeteries and churches. Combined, the land uses in this category occupy 1,480 acres within the corporate limits of Cookeville. These acres represent approximately 15 percent of the total developed land acreage.

In the planning area approximately 831 acres of land, or approximately 10 percent of the total developed land area, are devoted to public services, cultural, or recreational uses. This relatively high percentage is misleading as the majority of this land is accounted for by a few large users, including the Hyder Burk Pavilion (213 acres), Hyder Farm (29 acres), Shipley Farm (87 acres), the Putnam County rock quarry (98 acres), city lake (124 acres), and land surrounding Cookeville High School (98 acres). This leaves only an estimated 182 acres of land used for public, cultural or recreational purposes in the planning region, which indicates this area's reliance on Cookeville to provide such facilities and services.

Public service facilities occupy 879 acres or 59 percent of the land area in this category in the municipality. Educational facilities account for 437 acres or nearly 50 percent of the acreage devoted to public services. The campus of Tennessee Tech University, which occupies approximately 231 acres, accounts for much of this acreage. Other principal land users in this category are the public educational facilities, which include Cookeville Senior High School, Avery Trace and Prescott Central Middle Schools, and Cane Creek, Capshaw, Jere Whitson, Northeast, Park View, and Sycamore Elementary Schools. Nashville Tech-Cookeville Center and Cumberland School of Technology are additional educational facilities located in Cookeville. A new site consisting of 22 acres located off Neal Street East has recently been allocated for the construction of a campus for the Nashville Tech-Cookeville Center. In the unincorporated planning area the only educational facility is a bible college which occupies less than seven acres.

Approximately 234 acres of land in Cookeville classified as public services are occupied by governmental facilities. Many of these governmental facilities are concentrated in or near the central portion of the municipality including the Cookeville Municipal Building, the Cookeville Police Department, the Putnam County Courthouse, the Putnam County Justice Center, the Chamber of Commerce, and the U. S. Post Office. Governmental facilities situated outside the CBD include the National Guard Armory, the Tennessee Department of Transportation Regional Office, the U. S. Post Office on South Willow Avenue and the state and federal office buildings located off Neal Street East. Only three governmental facilities, a county fire department, a solid waste convenience center, and the State's Driver Testing Station, are located in the unincorporated planning area. These three uses occupy less than 6 acres of land.

Medical facilities are also included in the public service category. Two such facilities, the Cookeville Regional Medical Center and the Putnam County Health Department, are located in the City of Cookeville. The Cookeville Regional Medical Center, which occupies approximately 12 acres, has expanded significantly in recent years and additional growth can be expected. There are no medical facilities available in the unincorporated planning area.

A total of 52 churches and nine cemeteries are located within the City of Cookeville. These land uses occupy an estimated 194 acres or 22 percent of the area classified as public services. In the unincorporated planning area 19 churches and 16 cemeteries occupy an estimated 121 acres.

Cultural and recreational facilities occupy 601 acres or 41 percent of the land area in this category. Most of these facilities are municipally owned. The Cookeville Department of Leisure Services operates and maintains approximately 340 acres of park land and open space. The city facilities include Cane Creek Regional Park, Cane Creek Sportsplex, Park View Park and Pool and Athletic Fields, Cookeville Depot Museum, Cookeville Drama Center, Leisure Services Multi-Purpose Center, Cookeville Senior Citizens Center, the Ensor Sink, and several neighborhood parks. There are no municipal recreational facilities located south of Interstate 40. County operated recreational facilities located in the city include the Putnam County Fairgrounds, the Cookeville Community Center and the Jere Whitson Park Fields. Other recreational facilities located in the city include the Putnam County Library, the Cookeville Golf and Country Club, the Belle Acres Golf Course, and the Cookeville-Putnam County YMCA. In the planning area 129 acres are used for cultural and recreational purposes. However, the bulk of this acreage, approximately 124 acres, is accounted for by the city owned and maintained City Lake Natural Area. The municipality's location is such that there are several state and federal park facilities within a relative short distance for its citizens to utilize as well. These facilities remove some of the burden for Cookeville to provide more facilities than are available.

The age of the public, cultural and recreational structures tend to vary significantly, but in most cases such facilities are in satisfactory condition and basically meet current demands. There is a need for the development of recreational facilities south of Interstate 40. Also the need for the provision of Fire Department Substations, in the southeast and northwest sections of the municipality has been identified. A site off Highway 111 has already been identified for the southeast station and it should be in operation in two to three years.

Findings. Adequate space is available to meet the current public, cultural, and recreational needs of Cookeville and its planning area. This is significant since the municipality does provide such facilities in this category for most of Putnam County. It is anticipated, based upon future population projections, that a sufficient amount of space is available to meet future needs. There is a need for recreational facilities south of Interstate 40. An additional factor that could significantly affect future land use would be the expansion of the Tennessee Tech University campus.

Utilities

The City of Cookeville is the primary provider and location in Putnam County for utility services and facilities. Land uses in this category occupy 71 acres or less than one percent of the developed land in the municipality. These uses include the municipal wastewater treatment facility, all water and sewer pump stations, all water storage tanks, the Cookeville Water Department warehouses, the Cookeville Gas Department, the Cookeville Electric Department and all electrical substations.

In the unincorporated planning area only approximately nine acres are devoted to land uses in this category which reflects the area's dependency on Cookeville to provide such facilities. These uses include the Upper Cumberland Electric Membership Cooperative office, the Cookeville Boat Dock Water Utility District office, the Bangham Water Utility District office, all water pump stations, water storage tanks, and all electrical substations.

Water Service

Public water service is available to all developed portions of the municipality and is provided entirely by the Cookeville Department of Water Quality Control. Both the City of Cookeville and a number of water utility districts serve the unincorporated planning area. The eastern and southeastern sections of the planning area are served by Cookeville, the northern portion is served by the Bangham and Gainesboro Grade Utility Districts, the western portion is served by the Double Springs Utility District, and the southwestern section is served by the Cookeville Boat Dock Utility District. The City of Cookeville supplies water to each of the utility districts serving the planning area, and also supplies water to the cities of Algood and Baxter. The water service areas and locations and sizes of existing water lines in the Cookeville Planning Area are reflected in Illustration 6.

Cookeville's water treatment facility is located on Water Plant Road on Mine Lick Creek near the Putnam-Dekalb County line. This facility was originally constructed in 1961 with a 15 million gallon per day (MGD) treatment capacity, however, the pumping capacity is only 13.86 MGD. Center Hill Reservoir (Mine Lick Creek) provides the municipality with a perpetual source of water. A 30-inch transmission line connects the treatment facility with the municipality. The construction of an additional 30-inch transmission line is expected to be completed by 2001. This will allow full use of the treatment facility's capacity. Also, the Department of Water Quality Control has plans for the expansion of the water treatment facility to increase its treatment capacity to 21 million gallons by 2005. There is sufficient land available at the existing water treatment site for this expansion.

The municipality has a total water storage capacity of 10 million gallons. Three ground storage tanks (Pilot Knob -5 million gallons, Buck Mountain -2 million gallons, and Shoneys - 2 million gallons) and two elevated tanks (Capshaw - 500,000 gallons and 15th Street - 500,000 gallons), provide this storage. The addition of a 10 million gallon storage tank adjacent to the existing water storage tank on Pilot Knob is planned and should be completed by 2001. This will bring the municipality's total storage capacity to 20 million gallons.

The Cookeville Water System currently has approximately 11,865 customers. With an average daily consumption rate currently at 8.9 MGD, or approximately 64 percent of capacity, the municipality can provide for the immediate future demand. The completion of the planned water storage and water transmission improvements by 2001 and the proposed expansion of the treatment facility by 2005 should allow the municipality to meet expected water demands through 2020. Future land use needs for water service should be minimal.

Sewer Service

Public sewer service is provided to an estimated 10,800 customers or approximately 92 percent of the developed properties in the municipality. Illustration 7 depicts the location of sewer service within the city. Public sewer service is not available in the unincorporated planning area. The Cookeville wastewater treatment facility is located off South Jefferson Avenue. This facility has a treatment capacity of 14 MGD. In 1997, an average of 6.53 MGD of sewage were treated, or approximately 47 percent of treatment capacity. There should be no need for a major expansion of the Cookeville wastewater treatment facility during the next ten years.

There are only a few areas within the municipality that do not have access to the public sewer system. The most densely developed areas without public sewer service are Hillwood Estates Subdivision, Bunker Hill Subdivision, and the Canterbury and Holliday Hills Subdivisions. Completion of the provision of sewer service to these areas is expected to be completed by 2002 and will result in a total

ILLUSTRATION 6

WATER SERVICE COOKEVILLE PLANNING AREA

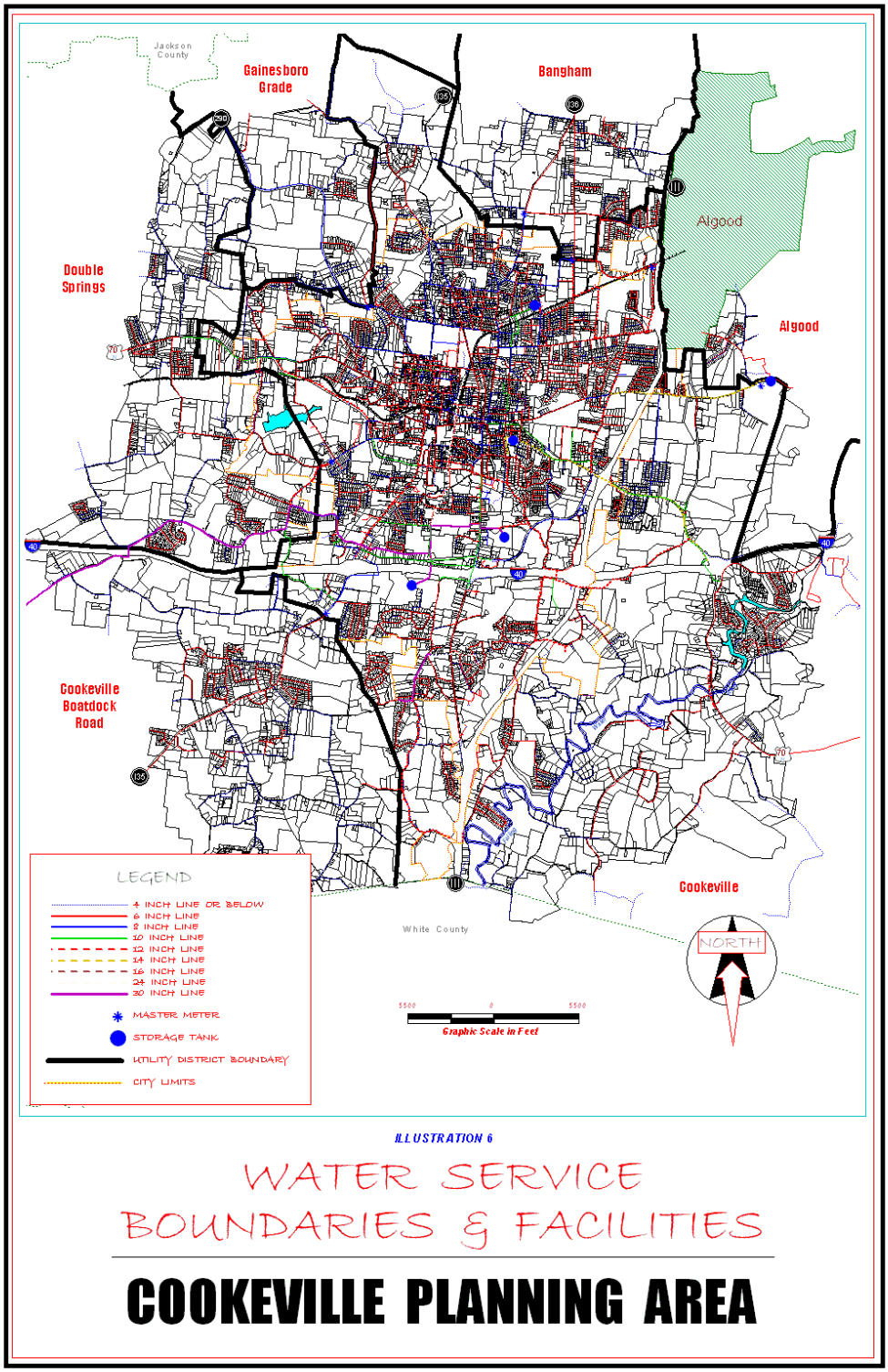
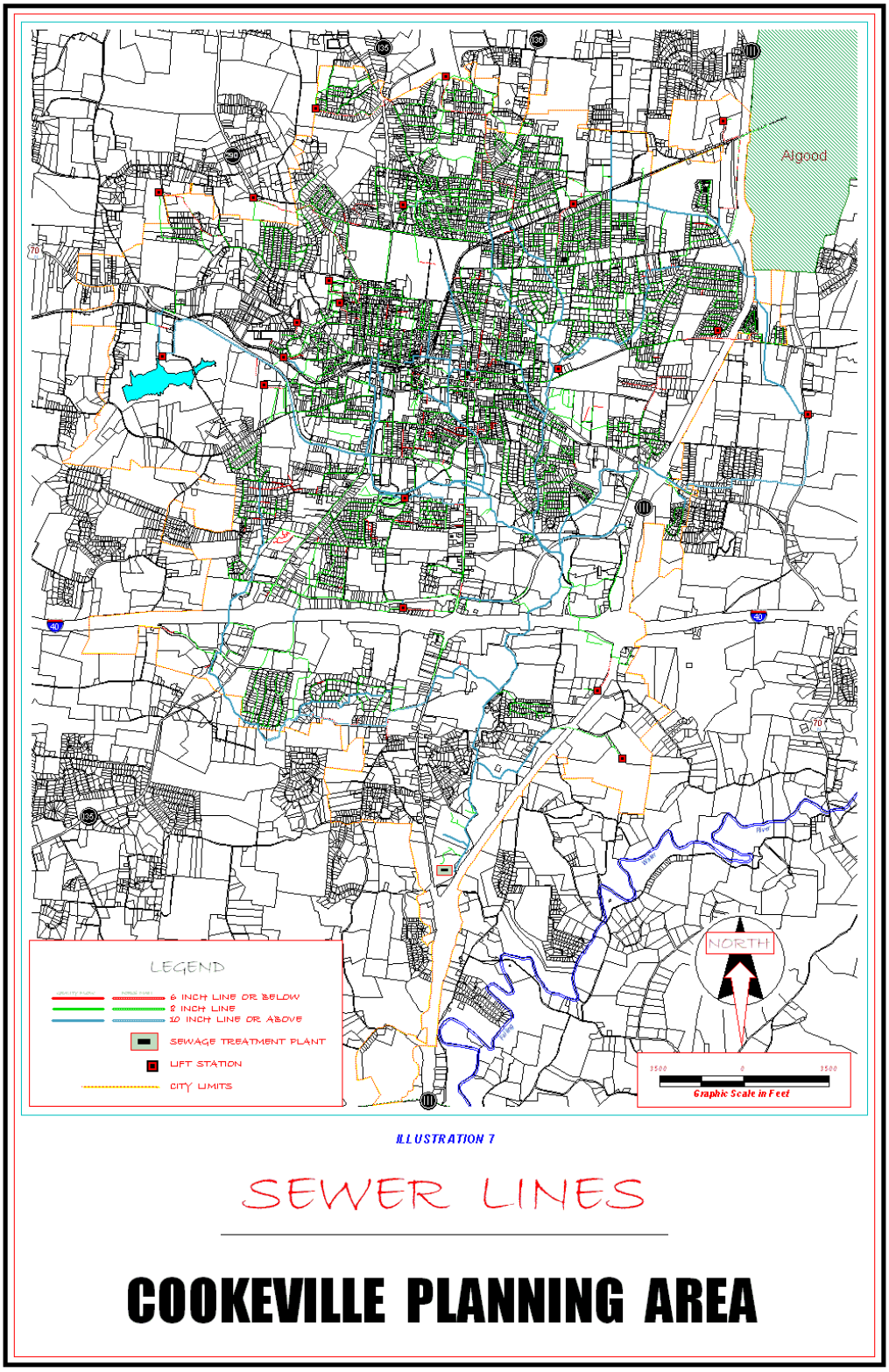


ILLUSTRATION 7
SEWER LINES CITY OF COOKEVILLE



coverage of approximately 98 percent of the developed portions of the municipality. It is anticipated that the remaining developed areas within the municipality will be provided public sewer service by the year 2005. The estimated cost for completing these extensions is five to seven million dollars.

The development of properties in Cookeville with topographic constraints will require additional sites for the location of water and sewer pump stations. The provision of public sewer service to many of the properties in the planning area will also require sites for the location of lift stations. Such facilities, however, require very minimal land area with physical locations being the primary engineering concern.

Electrical Service

Electrical service is available to all developed areas in Cookeville and the planning area. The Cookeville Electric System serves all of Cookeville and certain areas outside the corporate limits. Those portions of the planning area not served by the City of Cookeville are served by the Upper Cumberland Electric Membership Cooperative. Illustration 8 depicts the location of the Cookeville Electric Department's service boundary.

The Cookeville Electric Department is located on West Davis Road. The electric system is municipally owned. Currently, the Cookeville Electric Department serves an estimated 13,270 customers of which approximately 10,470 are residential. The present power supply should more than adequately meet the future electrical needs of its service area.

Natural Gas Service

Natural gas service within the City of Cookeville and almost the entirety of the planning area is provided by the Cookeville Natural Gas System. All developed areas within the corporate limits have access to natural gas. The Cookeville Gas Department also provides natural gas service to the Town of Algood. That portion of the planning area not served by the city's gas department is served by Middle Tennessee Natural Gas. Illustration 9 depicts the location of the Cookeville Gas Department's service boundary.

The Cookeville Gas Department is located on North Oak Street. The gas system is a municipally owned local distribution company (LDC). Currently, the Cookeville Gas Department serves an estimated 7,750 customers of which approximately 6,260 are residential. Approximately 5,270 of these residential customers are located within the corporate limits of Cookeville. The present natural gas supply should more than adequately meet the future natural gas needs of the service area.

Other Utilities

The remaining facilities within this land use category, including telephone and cable television service, appear to have sufficient land available to expand at their current sites. Therefore, any growth would not correspondingly require additional land of any significance for these uses.

Findings. Adequate land is available in Cookeville and the planning area for land uses in the utility category. Minimal future land acquisition would be required for those areas where sewer or water pump or electrical substations would be required. It is anticipated that the necessary land will be provided in conjunction with any major developments requiring such facilities.

ILLUSTRATION 8

ELECTRIC SERVICE BOUNDARIES
COOKEVILLE

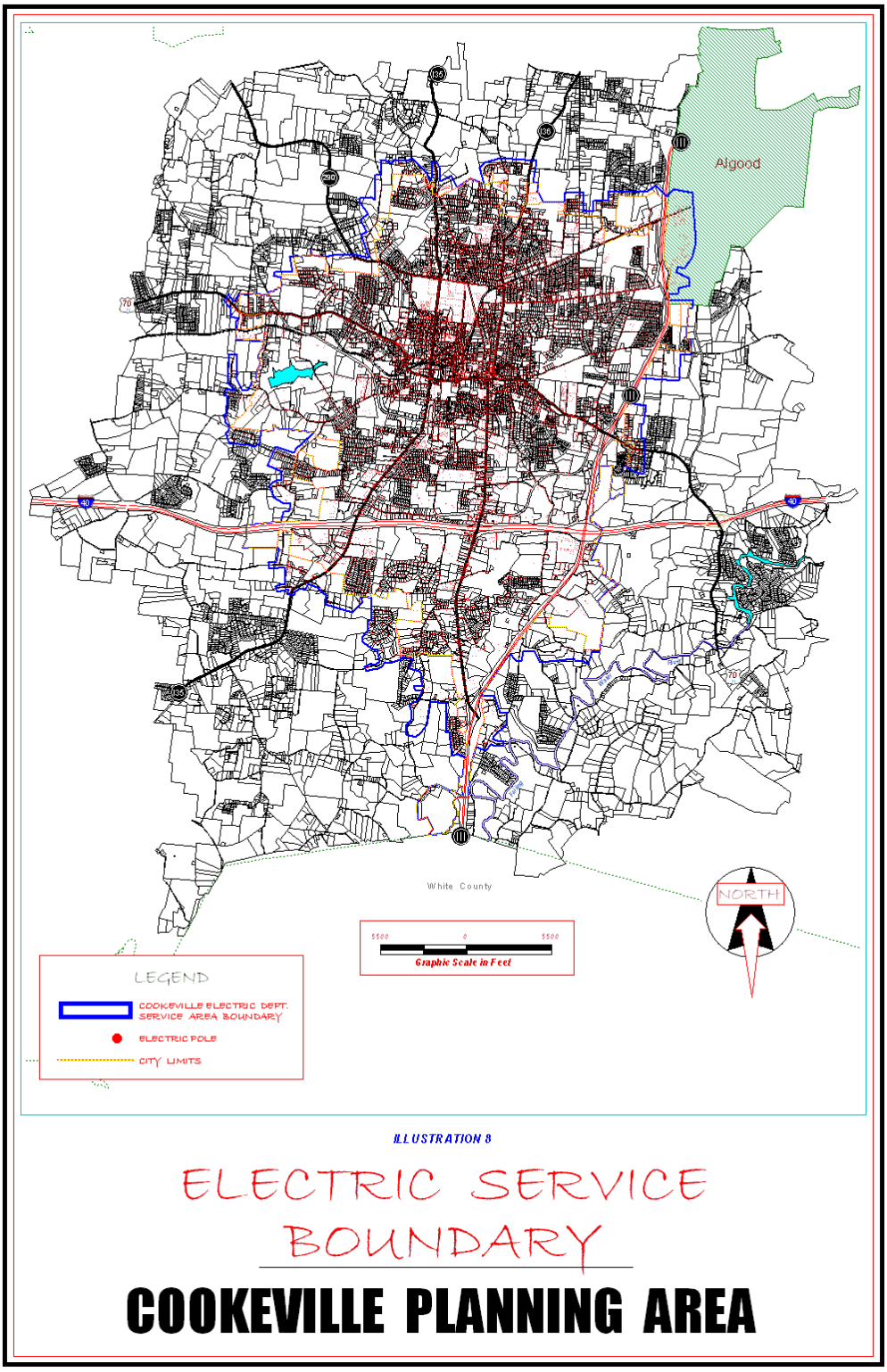
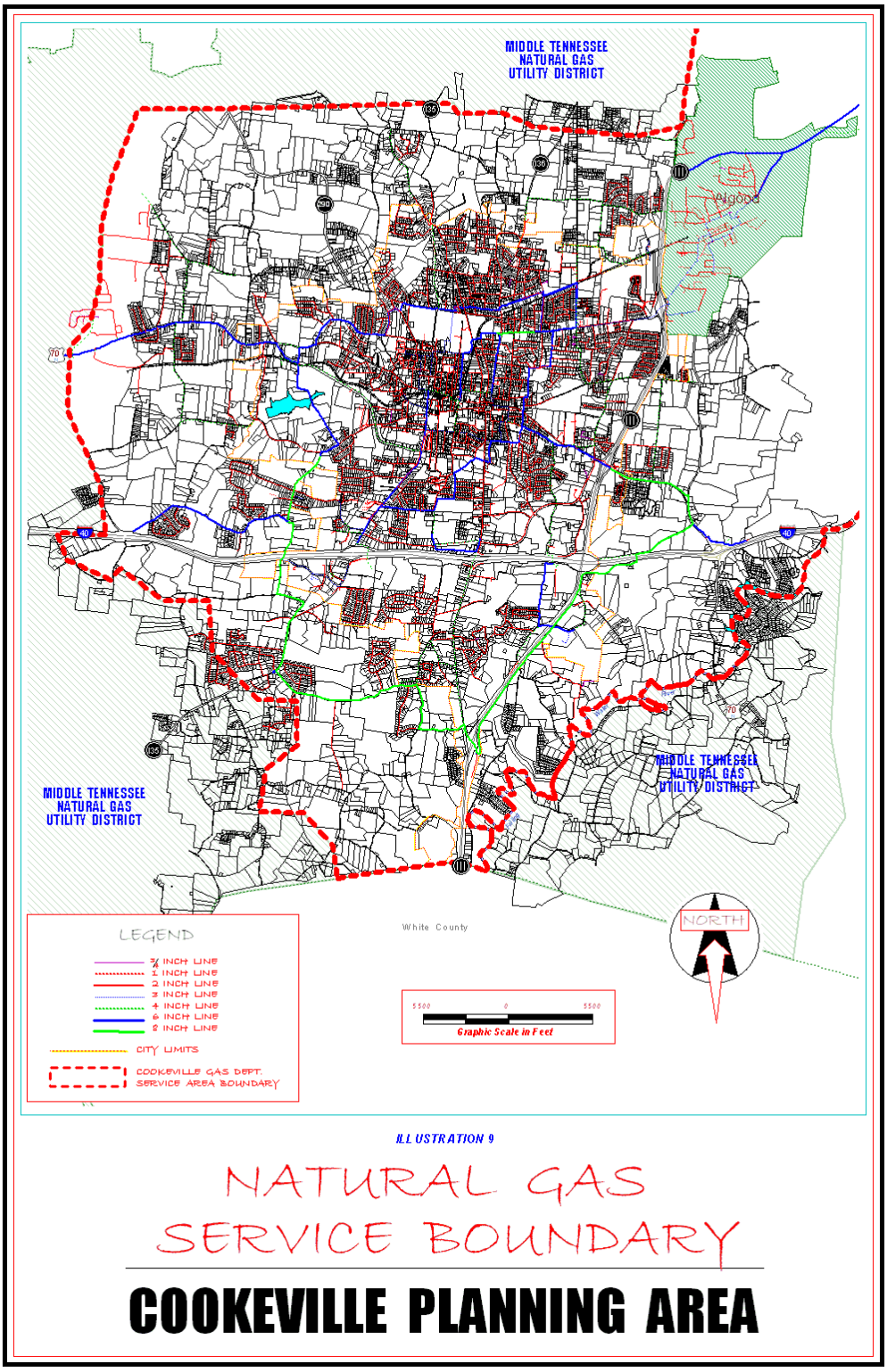


ILLUSTRATION 9

NATURAL GAS SERVICE BOUNDARIES COOKEVILLE



Transportation

There is perhaps no greater impact on land development than transportation systems. Generally where streets are constructed land development will follow. Transportation systems occupy a significant percentage of the developed land area in the municipality and the unincorporated planning area. This category of land use includes the right-of-ways for all local streets and roads, federal and state highways, and rail lines. Within Cookeville, approximately 1,970 acres of land are devoted to transportation systems. This represents 21 percent of the developed land and 14 percent of the total land area. Within the unincorporated planning area, approximately 1,170 acres of land are devoted to transportation systems. This represents 14 percent of the developed land area.

Street and highway right-of-ways account for 1,908 of the 1,970 acres of land dedicated to transportation uses in Cookeville. Of these 1,908 acres, 342 acres are occupied by Interstate 40, state highways occupy 558 acres, local streets occupy 973 acres and 35 acres are undeveloped right-of-ways. In the unincorporated planning area, street and highway right-of-ways account for 1,151 of the 1,170 acres used for transportation systems. Of these 1,151 acres, 321 acres are occupied by Interstate 40, state highways occupy 179 acres, local roads occupy 649 acres, and only two acres are undeveloped right-of-ways.

Within the 1,873 acres of developed street and highway right-of-ways located in the City of Cookeville there are approximately 219.1 miles of thoroughfares. City streets and alleys, which occupy 189.1 miles, account for the majority of these miles. The total thoroughfare mileage also includes 4.3 miles of Interstate 40 and 25.7 miles of U.S. or state highways, including 7.9 miles of Highway 111 and 5.1 miles of Highway 70N. Of the approximate 158.4 miles of thoroughfares in the unincorporated planning area, Interstate 40 accounts for 5.5 miles, U. S. or state highways account for 14.4 miles, and local county roads account for 138.5 miles.

Railroad right-of-ways occupy approximately 62 acres of land within the City of Cookeville and approximately 19 acres of land in the unincorporated planning area.

A number of improvements to the municipality's existing street and highway system are planned. Several of these improvements will require the acquisition of additional right-of-way. Likewise, the construction of new streets or highways in the municipality and the unincorporated planning area will require the acquisition or dedication of right-of-ways.

Findings.

Land used for transportation purposes greatly affects land used for other purposes. The movement of people and goods from one point to another is, of course, the primary purpose of transportation systems. However, transportation systems also provide access to properties, which allows for development. It is anticipated that land for the future development of transportation systems in the Cookeville Planning Area will be obtained as necessary. Where improvements to existing streets and highways or the construction of new thoroughfares requires the acquisition of lands used for other purposes, then land for the relocation of the acquired land uses will have to be accounted for.

VACANT LAND ANALYSIS

Within the City of Cookeville approximately 4,542 acres or 32 percent of the total land area is vacant land. The majority of this vacant land is improved land, that is, the infrastructure necessary for development is adjacent or nearby the property. However, a significant amount of this vacant land has severe physical limitations, including topographic constraints, susceptibility to flooding, sinkholes, or poor soils, which make it either not developable or cost prohibitive to develop. In addition, a moderate percentage of the vacant land is subject to other constraints, such as power line and other utility easements, which will prohibit it from being developed. Table 12 depicts a summary of the vacant land in the municipality by constraints to development. In those cases where the same property is affected by more than one physical constraint, such as steep topography and poor soils, the acreage is assigned to only one constraint. Illustration 10 reflects the location of vacant land in the municipality and its planning area with constraints to development.

TABLE 12

SUMMARY OF VACANT LAND BY CONSTRAINTS TO DEVELOPMENT IN CORPORATE LIMITS

CONSTRAINT	ACREAGE	PERCENT
Topography	529	11.6
Flood Plain	125	2.8
Sinkholes	107	2.3
Poor Soils	454	10.0
Utility Easements	58	1.3
Subtotal	1,273	28.0
No Constraints	3,269	72.0
Total Vacant Land	4,542	100%

Approximately 529 acres of the vacant land in Cookeville have severe topographic constraints, slopes exceeding 20 percent, which limit the potential for development. The largest concentration of vacant land with severe topographic constraints, consisting of an estimated 80 acres, is located on Pilot Knob just south of Interstate 40. Other significant areas of vacant land with topographic problems are located along Pigeon Roost Creek south from Neal Street East and near the northeast intersection of Highway 111 and Interstate 40.

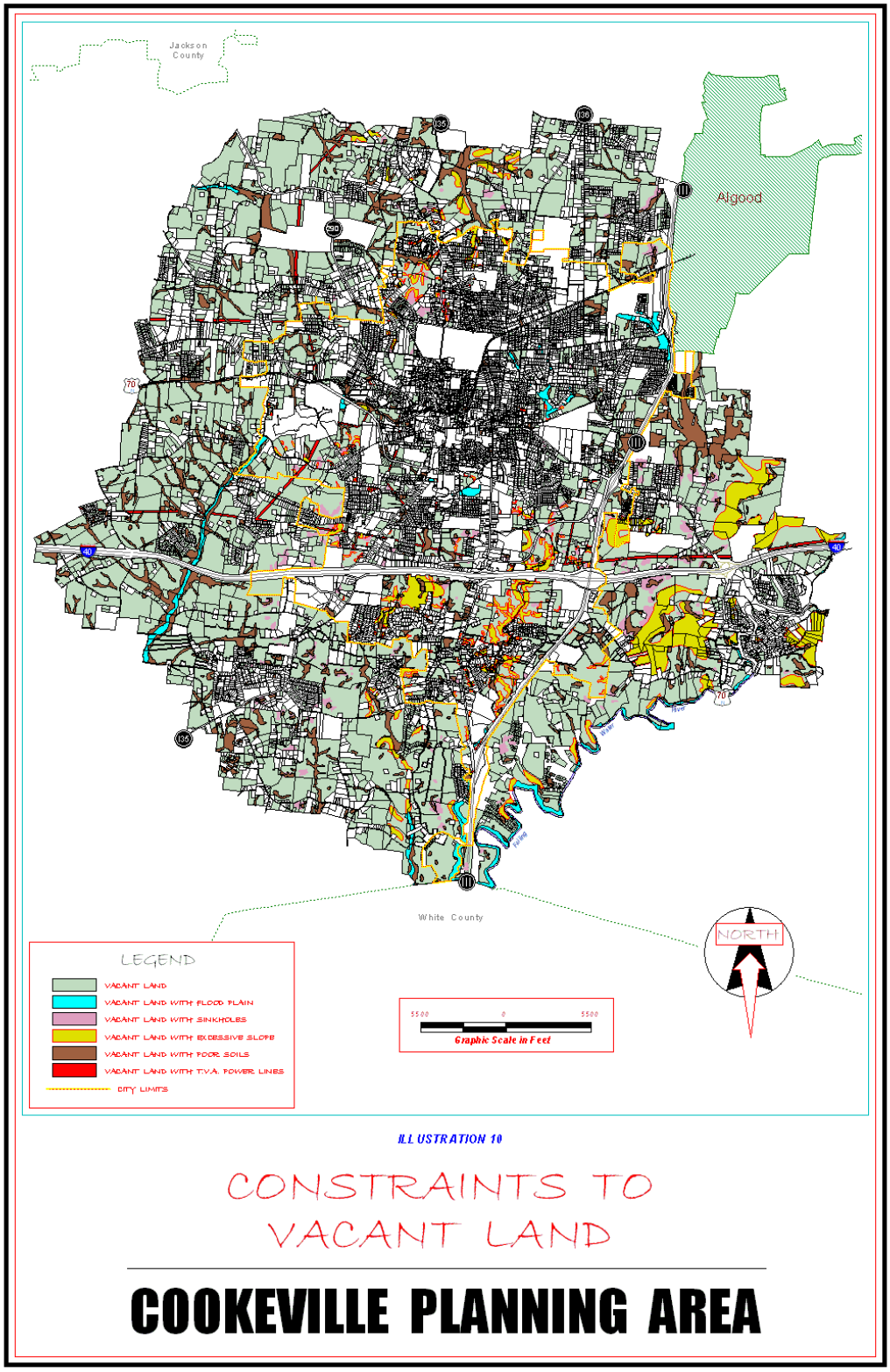
An estimated 125 acres of the vacant land in Cookeville are located in areas with designated flood hazards areas. Much of this land is situated along Burton's Branch, Pigeon Roost and Cane Creeks. There are also vacant lands affected by flood plains located off Loweland Road, East 6th Street, North Ferguson Avenue, East Broad Street, and Bunker Hill Road. Although potentially developable, properties located in identified flood hazard areas are subject to the municipality's flood hazard regulations, which in some cases can make the development of this land cost prohibitive.

Sinkholes and their retention areas occupy approximately 107 acres of vacant land in the city. These sinkholes are scattered throughout the municipality. Lands located in sinkhole retention areas generally can not be developed.

Poor soils affect an estimated 454 acres of vacant land in Cookeville. The soils' characteristics limiting the development potential of vacant land include slow drainage and permeability, wetlands, high potential for flooding, and shallow depth to bedrock. Vacant land with soils generally unsuitable for development is scattered throughout the municipality with some of the largest concentrations located in the vicinity of Interstate 40 between South Jefferson and South Willow Avenues.

Approximately 58 acres of vacant land are subject to the restraints of various utility easements for major transmission lines. In most cases, no development can occur on lands within these easements. The largest percentage of vacant land affected by utility easements is that located under TVA power line easements which traverse the city.

ILLUSTRATION 10
CONSTRAINTS TO VACANT LAND
COOKEVILLE PLANNING AREA



Within the city there are only approximately 3,269 acres of vacant land that are not susceptible to some physical constraint that would limit or in some cases prohibit their development. This land consists primarily of smaller tracts scattered throughout the municipality. Fortunately most of this land has the infrastructure necessary for development.

As the amount of vacant land available or suitable for development in Cookeville is limited, it will be necessary that the municipality annex areas to accommodate expected growth. Within the unincorporated planning area there are approximately 15,553 acres of vacant land. This represents approximately 66 percent of the total land area. As is the case in the municipality a portion of this vacant land has severe physical constraints that limit their potential for development. A summary of vacant land by constraints to development in the unincorporated planning area is presented in Table 13.

TABLE 13

SUMMARY OF VACANT LAND BY CONSTRAINTS TO DEVELOPMENT UNINCORPORTED PLANNING AREA

CONSTRAINT	ACREAGE	PERCENT
Topography	**950**	**6.1**
Flood Plain	**282**	**1.8**
Sinkholes	**254**	**1.6**
Poor Soils	**1,861**	**12.0**
Utility Easements	**117**	**0.7**
Subtotal	**3,464**	**22.2**
No Constraints	**12,099**	**77.8**
Total Vacant Land	**15,563**	**100**

Approximately 950 acres of the vacant land in the unincorporated planning area have severe topographic constraints that limit the potential for development. The vast majority of vacant land with severe topographic constraints is located to the northeast and southwest of the Interstate 40 and Highway 70N Interchange. Another area of vacant land with topographic problems is located north of the municipality between Highways 135 and 136.

An estimated 282 acres of the vacant land in the planning area are located in areas with designated flood hazards areas. Much of this land is situated along the Falling Water River and along Pigeon Roost and Cane Creeks. There are also identified floodplains located along Little Creek, East Blackburn Fork, and Hudgens Creek. Flood prone properties located outside the municipality are subject to the provisions of the Putnam County Floodplain Regulations.

Sinkholes and their retention areas occupy approximately 254 acres of vacant land in the planning area. These sinkholes are scattered throughout planning area. Although sinkhole areas should not be considered as developable, there are no county regulations prohibiting them from development.

Poor soils affect an estimated 1,861 acres of vacant land in the planning area. The constraints of poor soils are much more significant outside the municipality because public sewer service is not available. Vacant land with soils generally unsuitable for development is scattered throughout the planning area with some of the largest concentrations located in the east and southeast.

Approximately 117 acres of vacant land in the planning area are subject to the restraints of various utility easements for major transmission lines. As is the case in the municipality, the largest percentage of vacant land affected by utility easements is that located under TVA power line easements.

There are approximately 12,099 acres of vacant land in the unincorporated planning area that are not susceptible to physical or other constraints which limit their development potential. Unfortunately, only a very small percentage of this vacant land has the infrastructure in place necessary to support an intensive level of development. Public sewer service, which is required for

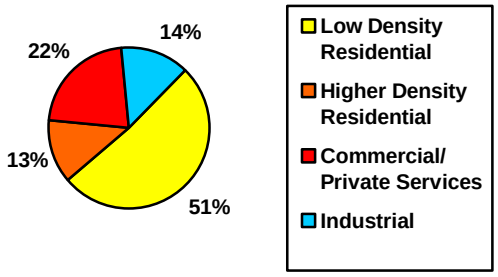
intense development, is not available outside the incorporated area. There are, however; several large parcels of land and numerous lots available in the planning area that are prime for development provided the necessary infrastructure is made available.

Findings. Only 4,542 acres of land, or 32 percent of the total land area of Cookeville, is classified as vacant. With an additional 1,273 acres, or 28 percent of the vacant land, subject to physical constraints that limit their potential for development, the municipality does not have an abundance of land that can be developed. It will be important that proper standards for development be followed for those areas with severe physical limitations. There is a substantial amount of vacant land available in the unincorporated planning area that could be developed if the necessary infrastructure is provided. It will be necessary for the municipality to expand into the planning area to meet the demands for future development.

ANALYSIS OF EXISTING LAND USE BY ZONING

Land use in Cookeville is significantly affected by zoning. The zoning designation for a parcel of property is a major determinate of how it may be utilized. The City of Cookeville Zoning Code divides the municipality into 15 zoning districts. Nearly 64 percent of the city's total land area, or 8,961 acres, is zoned for residential purposes. Of the acreage zoned residential, approximately 7,121 acres, or 51 percent of the total land area, is zoned R-1 for low density residential use. Higher density residential uses, which are in districts zoned R-2, R-3, R-4, PRD, and MHP occupy approximately 1,840 acres or 13 percent of the total land area in Cookeville. Approximately 3,106 acres or 22 percent of the total land area in Cookeville is zoned for commercial or private service use, which includes the C-1, C-2, C-3, CBD, PCD, CM, and UNV Districts. Properties zoned for industrial use, which includes the LM and HM Districts, occupy approximately 1,983 acres or 14 percent of the total land area. There is no zoning in effect outside the corporate limits of Cookeville. Graph 18 below reflects the percentage of land area in Cookeville by zoning category. Table 14 depicts the acreage for each zoning district as of September 1999.

Graph 18



PERCENTAGE OF LAND AREA BY ZONING IN CORPORATE LIMITS

TABLE 14

ACREAGE BY ZONING DISTRICT IN CORPORATE LIMITS SEPTEMBER 1999

ZONING DISTRICT	ACREAGE
R-1, Single Family Residential	7,121
R-2, Single and Two Family Residential	245
R-3, Moderate Density Residential	1,135
R-4, Multi-Family Residential	187
PRD, Planned Residential Development	228
MHP, Mobile Home Park	45
C-1, Neighborhood Commercial	13
C-2, General Commercial	772
C-3, Highway Commercial	1,693
CBD, Central Business	21
PCD, Planned Commercial Development	147
CM, Commercial Medical	106
UNV, University	354
LM, Light Manufacturing	1,571
HM, Heavy Manufacturing	412

SUMMARY OF FINDINGS

The current land use pattern in Cookeville follows that of many municipalities, with the oldest and most dense development occurring in the immediate vicinity of the downtown area and the more recent developments branching out from the downtown. Nearly 70 percent of the total land area in the municipality is developed. There are only approximately 3,200 acres of land remaining in the municipality that are available and suitable for future development. In the unincorporated planning area almost 65 percent of the land area is vacant.

The demand for uses in all land use categories appears to be strong. This demand is reflected in the low vacancy rates of structures in each land use category. These low vacancy rates have resulted in good maintenance of most structures, which has in turn resulted in the absence of areas of substantial blight in Cookeville. Demand for a diversity of land uses in the residential category is indicated by the low number of vacant single-family homes and in the high prices of homes and lots in the municipality. It is further indicated in the substantial amount of residential development in the unincorporated planning area, in the low vacancy rates at the multi-family complexes, and in the requests received by the municipality for the location of mobile homes in the existing mobile home parks. Demand for land uses in the commercial and industrial categories is reflected in the low vacancy rates of existing structures, the expansion of existing structures, and the significant development of these land uses.

In order to meet the demand for future land use in each of the land use categories, the City of Cookeville has few alternatives. Annexation within the unincorporated planning area will be essential to accommodate future land use needs. Expansion into the planning area will especially be necessary to meet the future residential land use demand. Future commercial and industrial development land area needs must also be at least partially accommodated in the planning area. Any significant development in the unincorporated planning area will, however, require the extension of public sewer service and upgrading of other existing infrastructure.

CHAPTER 6

ANALYSIS OF EXISTING LAND USE BY PLANNING NEIGHBORHOODS

INTRODUCTION

To facilitate a more detailed analysis of the various land uses identified in the 1999 land use survey, the City of Cookeville was divided into nine planning neighborhoods. To provide some permanence of boundary lines, the neighborhood divisions generally follow major transportation routes. The neighborhood boundary lines can be extended through the current corporate limits into the planning area. Illustration 11 depicts the boundaries of each neighborhood.

The utilization of planning neighborhoods will allow for a more thorough analysis of land use trends in future planning efforts. The compiled information can be used as base data for comparison to determine where and at what levels growth and development are occurring. In addition, it is anticipated that individual plans will be prepared for each of the identified neighborhoods as a basis for the completion of a citywide zoning study.

EXISTING LAND USE BY PLANNING NEIGHBORHOOD

In the following, an analysis of the existing land use in each of the nine planning neighborhoods is presented. Descriptions of the boundaries and the general character of each neighborhood are included. Land use by acreage and percentages of the total land area within each neighborhood are determined. Detailed examinations of residential land use, including types of housing and housing conditions, are also provided. Table 15 depicts a summary of the land uses for each neighborhood by acreage and percentage allotted. Table 16 depicts a summary of housing units and conditions by planning neighborhood.

Neighborhood One

Neighborhood One is identified as the sector of Cookeville generally bounded by North Washington Avenue and Freehill Road to the east and West 12th Street and Benton Young Road to the south. This neighborhood is overwhelmingly residential in character with the exception of a strip commercial area along North Willow Avenue. Approximately 30 percent of the land area in Neighborhood One is vacant and an estimated 11 percent is used for transportation purposes.

Within Neighborhood One approximately 50 percent of the land area or 543 acres is occupied by residential uses. This includes an estimated 424 acres for single family structures, 96 acres for multi-family housing, and 23 acres for mobile homes. There are 723 single family structures located in Neighborhood One of which only 24 are vacant and only 11 are in less than sound condition. In this neighborhood there are 1,060 multi-family dwelling units plus three fraternity houses and one youth home. It also contains 101 mobile homes of which 97 are located within five mobile home parks.

Non-residential land uses in Neighborhood One occupy approximately nine percent of the land area or 92 acres. The majority of this non-residential land use is limited to along North Willow Avenue and along North Washington Avenue. There are 34 commercial/private service uses located in Neighborhood One of which three are vacant. Seven public service land uses are located in this neighborhood which includes Jere Whitson Elementary School, the Fire Department's North Substation, and five churches. One cultural/recreational land use, the Jere Whitson Park, is located in this Neighborhood One. No industrial land uses are located within this neighborhood.

ILLUSTRATION 11
PLANNING NEIGHBORHOODS

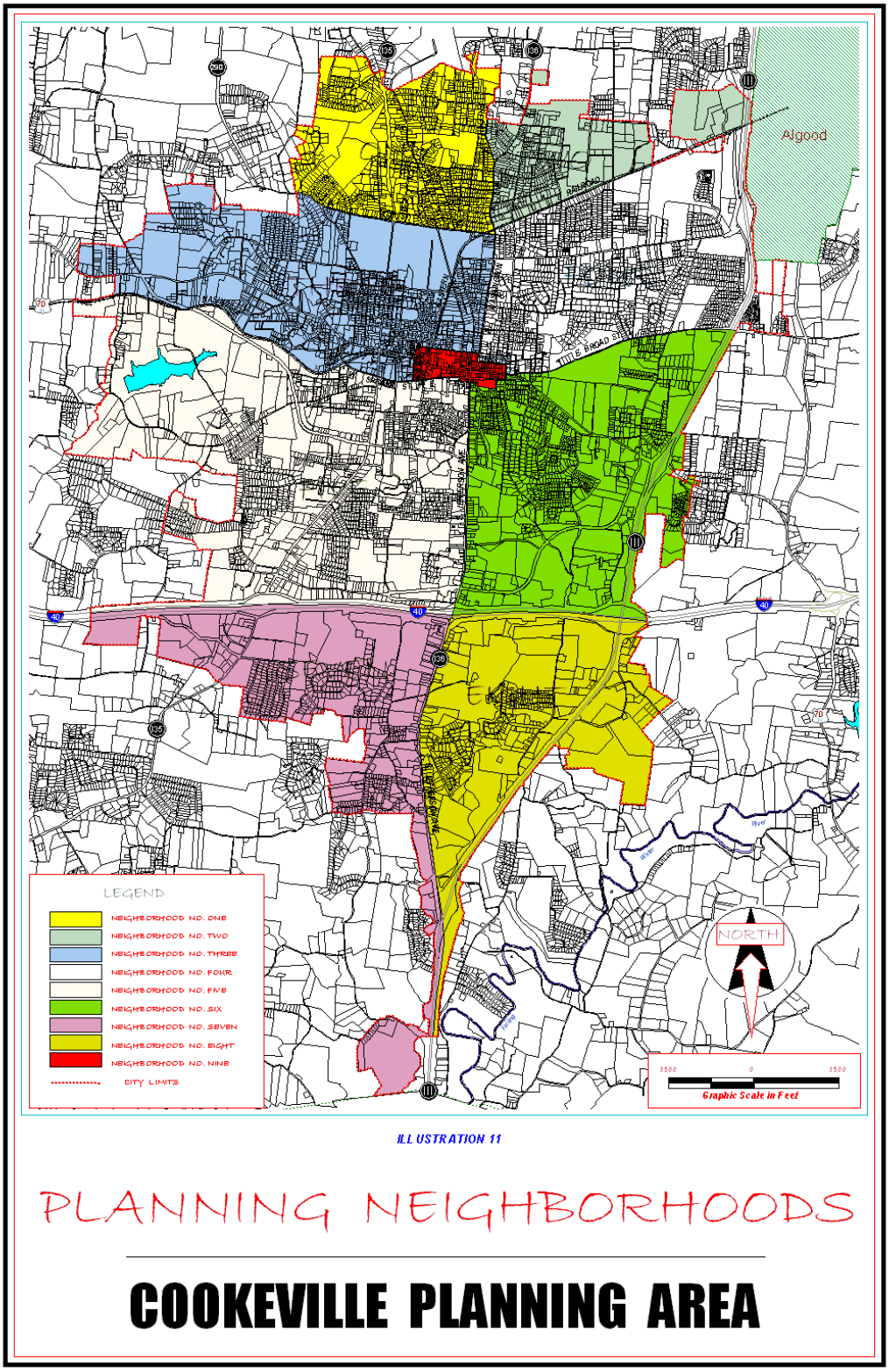


TABLE 15

EXISTING LAND USE BY ACREAGE IN PLANNING NEIGHBORHOODS

TABLE 15

EXISTING LAND USE BY ACREAGE AND PERCENTAGE IN PLANNING NEIGHBORHOODS

CITY OF COOKEVILLE

1999

PLANNING NEIGHBORHOOD	SINGLE-FAMILY RESIDENTIAL		MULTI-FAMILY RESIDENTIAL		MOBILE HOMES		NON-RESIDENTIAL		TRANSPORTATION		VACANT LAND		TOTAL LAND
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%	Acres
1	424	39	96	9	23	2	92	9	124	11	325	30	1,084
													100
2	111	17	7	1	20	3	298	45	59	9	168	25	663
													100
3	615	33	81	5	6	0	525	28	245	13	387	21	1,859
													100
4	812	46	33	2	0	0	239	13	276	15	424	24	1,784
													100
5	680	22	107	3	37	1	1,025	33	361	11	950	30	3,160
													100
6	417	20	50	2	6	0	532	25	352	17	763	36	2,120
													100
7	361	22	21	1	15	1	299	19	242	15	683	42	1,621
													100
8	189	11	46	3	10	1	295	18	284	17	839	50	1,663
													100
9	11	12	0	0	0	0	55	57	27	28	3	3	96
													100
TOTAL ACREAGE	3,620	26	441	3	117	1	3,360	24	1,970	14	4,542	32	14050
													100

SOURCE: City of Cookeville, Department of Planning and Codes, May 1999.

TABLE 16

TABLE 16 SUMMARY OF HOUSING UNITS AND CONDITIONS BY PLANNING NEIGHBORHOODS

TABLE 16

SUMMARY OF HOUSING UNITS AND CONDITIONS BY PLANNING NEIGHBORHOOD

CITY OF COOKEVILLE

1999

PLANNING NEIGHBORHOOD	SINGLE FAMILY HOUSING UNITS				TOTAL SINGLE FAMILY UNITS	MULTI-FAMILY UNITS	MOBILE HOMES	TOTAL HOUSING UNITS
	SOUND/ VACANT	DETERIORATED/ VACANT	DILAPIDATED/ VACANT	TOTAL VACANT				
1	712/20	9/2	2/2	24	723	1,060	101	1,884
2	216/3	13/0	1/1	4	230	46	131	407
3	987/18	22/5	3/3	26	1,012	821	21	1,854
4	1,334/6	2/1	3/3	10	1,339	550	0	1,889
5	1,157/5	10/3	4/4	12	1,171	747	136	2,054
6	667/2	1/0	2/2	4	670	337	24	1,031
7	421/0	7/0	0/0	0	428	122	26	576
8	226/2	1/1	1/1	4	228	98	16	342
9	27/0	0/0	0/0	0	27	5	0	32
TOTALS	5,747/56	65/12	16/16	84	5,828	3,786	455	10,069

SOURCE: City of Cookeville, Department of Planning and Codes, May 1999.

Neighborhood Two

Neighborhood Two is identified as the sector of Cookeville generally bounded by North Washington Avenue and Freehill Road to the west and the Nashville and Eastern Railroad to the south. This neighborhood is primarily industrial in character. Approximately 25 percent of the land area in Neighborhood Two is vacant and an estimated nine percent is used for transportation purposes.

Within Neighborhood Two approximately 21 percent of the land area or 138 acres is occupied by residential uses. This includes an estimated 111 acres for single family structures, seven acres for multi-family housing, and 20 acres for mobile homes. There are 230 single family structures located in Neighborhood Two of which only four are vacant and 14 are in less than sound condition. In this neighborhood there are 46 multi-family dwelling units. The neighborhood also includes 131 mobile homes of which 122 are located within three mobile home parks.

Non-residential land uses in Neighborhood Two occupy approximately 45 percent of the land area or 298 acres. The bulk of this acreage is occupied by 30 industrial land uses with the largest concentration located in the industrial park off Fisk Road. In this neighborhood there are 42 commercial/private service uses, which are primarily located along East 15th Street and North Washington Avenue. Five public service land uses are located in this neighborhood which includes Cookeville Senior High School. This neighborhood also has four utility land uses which includes the city's gas distribution center, the city's water department warehouse, and an electrical substation. There are no cultural/recreational land uses located in this neighborhood.

Neighborhood Three

Neighborhood Three is identified as the sector of Cookeville generally bounded by West 12th Street and Benton Young Road to the north, by North Washington Avenue to the east, and by the Nashville and Eastern Railroad to the south. The character of this neighborhood is diversified with significant residential development and large concentrations of commercial/private service and public service land uses. Approximately 21 percent of the land area in Neighborhood Three is vacant and an estimated 13 percent is used for transportation purposes.

Within Neighborhood Three approximately 38 percent of the land area or 702 acres is occupied by residential uses. This includes an estimated 615 acres for single family structures, 81 acres for multi-family housing, and 6 acres for mobile homes. There are 1,012 single family structures located in Neighborhood Three of which 26 are vacant and 25 are in less than sound condition. In this neighborhood there are 692 multi-family dwelling units plus a 129-unit public housing complex and 12 fraternity houses. The neighborhood also includes 21 mobile homes of which 10 are located within one mobile home park.

Non-residential land uses in Neighborhood Three occupy approximately 28 percent of the land area or 525 acres. A large percentage of this non-residential land use is utilized by 18 public service land uses of which the Tennessee Tech Campus occupies the most acreage. Other significant public service land uses in this area include the Cookeville Regional Medical Center, Prescott Central Middle School and Sycamore Elementary School. There are 329 commercial/private service uses located in Neighborhood Three, of which 23 are vacant. Commercial uses are primarily located along Spring and Broad Streets and along Willow Avenue. Many of the private services in this neighborhood are medical related and are located in the vicinity of the hospital. Eight cultural/recreational land uses are located in this neighborhood including Franklin Avenue Park, the Varsity Cinema, and the Depot Museum. There are 14 industrial land uses located within this neighborhood with the largest land user being a foundry located off Mill Avenue.

Neighborhood Four

Neighborhood Four is identified as the sector of Cookeville generally bounded by the Nashville and Eastern Railroad to the north, by North Washington Avenue to the west, and by East Broad Street to the south. This neighborhood is primarily residential in character. Approximately 24 percent of the land area in Neighborhood Four is vacant and an estimated 15 percent is used for transportation purposes.

Within Neighborhood Four approximately 48 percent of the land area or 845 acres is occupied by residential uses. This includes an estimated 812 acres for single family structures and 33 acres for multi-family housing. There are 1,334 single family structures located in Neighborhood Four of which only 10 are vacant and only 5 are in less than sound condition. In this neighborhood there are 550 multi-family dwelling units plus one 18-unit complex under construction. There are no mobile homes located within this neighborhood.

Non-residential land uses in Neighborhood Four occupy approximately 13 percent of the land area or 239 acres. There are 59 commercial/private service uses located in Neighborhood Four, of which only one is vacant. Most of this commercial/private service land use is situated in strip commercial developments along East 10th Street and within a small area on North Washington Avenue. Five public service land uses are located in this neighborhood which includes Northeast Elementary School and four churches. Three cultural/recreational land uses, including Cinderella Park and the Cookeville Country Club, are located in Neighborhood Four. There are three industrial land uses situated within this neighborhood, the largest of which is Russell Stover Candies which is located off Chocolate Drive.

Neighborhood Five

Neighborhood Five is identified as the sector of Cookeville generally bounded by the Nashville and Eastern Railroad to the north, by South Jefferson Avenue to the east, and by Interstate 40 to the south. The character of this neighborhood is diversified with significant residential development and large concentrations of commercial/private service and public service land uses. Approximately 30 percent of the land area in Neighborhood Five is vacant and an estimated 11 percent is used for transportation purposes.

Within Neighborhood Five approximately 26 percent of the land area or 824 acres is occupied by residential uses. This includes an estimated 680 acres for single family structures, 107 acres for multi-family housing, and 37 acres for mobile homes. There are 1,171 single family structures located in Neighborhood Five of which only 12 are vacant and only 14 are in less than sound condition. In this neighborhood there are 747 multi-family dwelling units, which includes 307 units located in five public housing complexes. The neighborhood also includes 136 mobile homes of which 127 are located within four mobile home parks.

Non-residential land uses in Neighborhood Five occupy approximately 33 percent of the land area or 1,025 acres. There are 438 commercial/private service uses located in Neighborhood Five, of which 23 are vacant. Most of this commercial/private service land use is situated in strip commercial developments located along South Jefferson and South Willow Avenues, Interstate Drive, and West Jackson and Spring Streets. There are 36 public service land uses located in this neighborhood which includes Park View and Cane Creek Elementary Schools, the Upper Cumberland Regional Library, two large cemeteries and numerous churches. Seven cultural/recreational land uses, including Cane Creek Park, Cane Creek Sportsplex, Park View Park and Pool, and the Putnam County Fairgrounds, are located in Neighborhood Five. There are 16 industrial land uses situated within this neighborhood. Most of these industrial land uses are concentrated along the N & E Railroad and along Interstate and Foreman Drives. An additional 29 acres off Foreman Drive is currently being privately developed for industrial use.

Neighborhood Six

Neighborhood Six is identified as the sector of Cookeville generally bounded by East Broad Street to the north, by South Jefferson Avenue to the west, and by Interstate 40 to the south. Neighborhood Six can be characterized as residential in the central portion and as a mixture of primarily commercial/private services on the perimeter. Approximately 36 percent of the land area in this neighborhood is vacant and an estimated 17 percent is used for transportation purposes.

Within Neighborhood Six approximately 22 percent of the land area or 473 acres is occupied by residential uses. This includes an estimated 417 acres for single family structures, 50 acres for multi-family housing, and six acres for mobile homes. There are 670 single family structures located in Neighborhood Six of which only four are vacant and only three are in less than sound condition. In this neighborhood there are 337 multi-family dwelling units. It also contains 24 mobile homes of which 21 are located within one mobile home park.

Non-residential land uses in Neighborhood Six occupy approximately 25 percent of the land area or 532 acres. There are 208 commercial/private service uses located in Neighborhood Six, which includes the Cookeville Mall. Most of this commercial/private service land use is situated in strip commercial developments along South Jefferson Avenue, Neal Street East, and Spring Street. There are 26 public service land uses located in this neighborhood which includes Capshaw Elementary School, Avery Trace Middle School, and several state and county facilities. This neighborhood is also the proposed location for the Nashville Tech-Cookeville Center. Four cultural/recreational land uses, including the Putnam County Community Center, Belle Acres Golf Course and the Putnam County YMCA, are located in Neighborhood Six. There are 11 industrial land uses situated within this neighborhood, of which seven are located off South Jefferson Avenue and three are located off Neal Street East.

Neighborhood Seven

Neighborhood Seven is identified as the sector of Cookeville generally bounded by Interstate 40 to the north and by South Jefferson Avenue to the east. This neighborhood is primarily residential in character in the central portion, commercial on the eastern perimeter, and industrial on the western perimeter. Approximately 42 percent of the land area in this neighborhood is vacant and an estimated 15 percent is used for transportation purposes.

Within Neighborhood Seven approximately 24 percent of the land area or 397 acres is occupied by residential uses. This includes an estimated 361 acres for single family structures, 21 acres for multi-family housing, and 15 acres for mobile homes. There are 421 single family structures located in Neighborhood Seven of which none are vacant and only seven are in less than sound condition. In this neighborhood there are 122 multi-family dwelling units. It also contains 26 mobile homes of which ten are located within one mobile home park.

Non-residential land uses in Neighborhood Seven occupy approximately 19 percent of the land area or 299 acres. There are only 28 commercial/private service uses located in Neighborhood Seven, of which one is vacant. All of this commercial/private service land use is situated along South Willow and South Jefferson Avenues. There are 11 public service land uses located in this neighborhood which includes the Fire Department's South Substation, the National Guard Armory and the Lighthouse Rescue Mission. Only one cultural/recreational land use, the Highland 10 Cinema, is located in Neighborhood Seven. Two utility land uses, including the Cookeville Electric Department on West Davis Road, are located in this neighborhood. There are 17 industrial land uses situated within this neighborhood, more than any other neighborhood. All of these industrial land uses are concentrated along South Willow Avenue and Gould Drive.

Neighborhood Eight

Neighborhood Eight is identified as the sector of Cookeville generally bounded by Interstate 40 to the north and by South Jefferson Avenue to the west. This neighborhood is primarily residential in character in the central portion, commercial on the western perimeter, and industrial on the eastern perimeter. Approximately 50 percent of the land area in this neighborhood is vacant and an estimated 17 percent is used for transportation purposes.

Within Neighborhood Eight approximately 15 percent of the land area or 245 acres is occupied by residential uses. This includes an estimated 189 acres for single family structures, 46 acres for multi-family housing, and ten acres for mobile homes. There are 228 single family structures located in Neighborhood Eight of which only four are vacant and only two are in less than sound condition. In this neighborhood there are 98 multi-family dwelling units. It also contains 16 mobile homes of which 14 are located within one mobile home park.

Non-residential land uses in Neighborhood Eight occupy approximately 18 percent of the land area or 295 acres. There are 44 commercial/private service uses located in Neighborhood Eight, of which two are vacant. Most of this commercial/private service land use is situated along South Jefferson Avenue and off Highway 111. Six public service land uses are located in this neighborhood which includes the Tennessee Department of Transportation Regional Office and the Solid Waste Transfer Station. There are no cultural/recreational land uses located in Neighborhood Eight. There are six industrial land uses situated within this neighborhood, the largest of these are TRW, Dacco, and Fleetguard all of which are located off Highway 111.

Neighborhood Nine

Neighborhood Nine is identified as the sector of Cookeville consisting of the downtown area which is generally bounded by South Cedar Avenue on the west, Maple Avenue on the east, East 1st and Freeze Streets on the north, and Spring Street on the south. This neighborhood is primarily commercial/private service in character. It is also the principal location in the city for public service land uses. Only approximately three percent of the land area in this neighborhood is vacant and an estimated 28 percent is used for transportation purposes.

Within Neighborhood Nine approximately 12 percent of the land area or 11 acres is occupied by residential uses. Most of this residential acreage is occupied by single family residential structures. There are 27 single family structures located in Neighborhood Nine of which all are occupied and in sound condition. The majority of these residential structures are located along East First and Freeze Streets. In this neighborhood there are five multi-family dwelling units most of which have developed through adaptive reuse of upper floors in existing commercial structures. There are no mobile home dwelling units located in this neighborhood.

Non-residential land uses in Neighborhood Nine occupy approximately 57 percent of the land area or 55 acres. There are 181 commercial/private service uses located in Neighborhood Nine, of which ten are vacant. This commercial/private service land use is situated throughout the neighborhood. There are 27 public service land uses located in this neighborhood which includes the Cookeville Municipal Building and Fire Station, the Putnam County Courthouse, the Putnam County Justice Center, and the U. S. Courthouse and Post Office. There are five cultural/recreational land uses, including the Cookeville Drama Center and the Putnam County Library, located in Neighborhood Nine. Three utility land uses, including local telephone and cable television offices, are located in this neighborhood. There are three industrial land uses situated within this neighborhood. One of these industrial land uses, a sheet metal company located off South Walnut Avenue, has been purchased by the City of Cookeville and is scheduled for removal.

SUMMARY

Approximately 30 percent of the total land area within the City of Cookeville is occupied by residential uses. Planning Neighborhoods One, Four, and Three, at 50, 48 and 38 percent respectively, have the highest percentages of their land areas occupied by residential uses. These three neighborhoods also have the highest percentage of their land areas utilized for single-family residential purposes. Neighborhoods One, Three, and Five, at nine, five and three percent respectively, have the highest percentage of their land areas utilized for multi-family purposes. The neighborhoods with the highest percentages of their land areas occupied by mobile homes are Neighborhoods One and Two.

An estimated 24 percent of the total land area within the municipality is utilized for non-residential purposes. Neighborhoods Nine and Two, at 57 and 45 percent respectively, have the highest percentage of their land areas occupied by non-residential uses. Three other neighborhoods, Neighborhoods Five, Three, and Six, have higher percentages of their total land area use for non-residential purposes than the city as a whole.

Vacant land accounts for 32 percent of the total land area in the city. It is anticipated that Planning Neighborhoods Eight and Seven, which have the highest percentages of vacant land, will experience the greatest amount of change over the 20 year planning period. Neighborhoods One, Five and Six can also be expected to undergo a significant level of development.

The examination of land use by planning neighborhoods will allow the municipality to better track development trends in the future. Current land use patterns should be compared to future patterns to identify where and what kinds of development are occurring.

CHAPTER 7

TRANSPORTATION ANALYSIS AND PLAN

INTRODUCTION

A transportation system is a vital service function, which is essential to a municipality's growth and development. The transportation system forms the framework upon which a community is built, and adequate traffic circulation is a prerequisite to economic activity and general community development. In this chapter an analysis of the transportation system in the Cookeville Planning Area is completed and plans for future improvements are presented.

ANALYSIS OF TRANSPORTATION SYSTEM

The numerous thoroughfares that traverse the Cookeville Planning Area vary in their design, purpose and utilization. To facilitate the analysis of the streets, roads and highways, these thoroughfares have been classified as to their intended use. Also included in this analysis of the Cookeville transportation system is a review of traffic circulation patterns; traffic volumes; major impediments to traffic; the major traffic generators; existing street conditions; parking; air, rail, and port transportation facilities; mass transit; and pedestrian/non-vehicular circulation.

Classification of Thoroughfares

The primary or intended use of a thoroughfare varies from that of providing access to residential, commercial and other land uses, to providing uninterrupted movement of high-speed traffic. To clarify the usage, a classification has been established denoting the function served. These classifications, as shown on Illustration 12, include (1) interstate/limited access highway, (2) principal/major arterial, (3) minor/secondary arterial, (4) principal/major collector, (5) minor collector, and (6) local road/minor street.

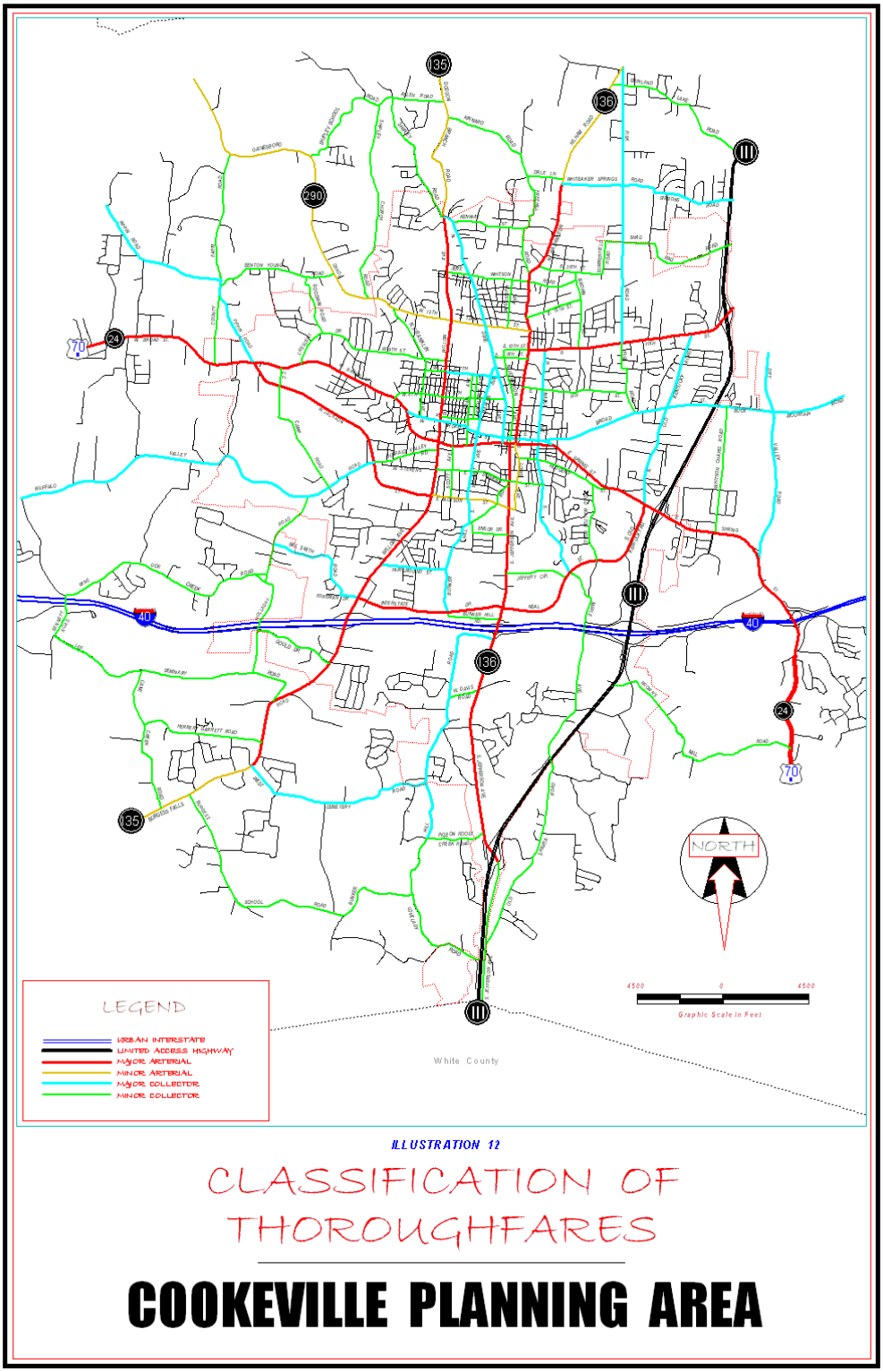
Interstate/Limited Access Highway: Access controlled roadways connecting major population centers devoted to serving high traffic volumes and long distance trips. The only such roadways in the Cookeville Planning Area are Interstate 40 and U.S. Highway 111.

Major/Principal Arterial: Roadways that link population centers, but usually lack controlled access and traffic flow separation. Often these are numbered U.S. Highways or State Primary Highways. U. S. Highway 70N, and State Primary Highways 135 and 136 (Willow and Jefferson-Lowe-Washington Avenues) can be defined as major arterials. Local streets classified as major arterials include East 10th Street, Neal Street, Interstate Drive, and West Jackson Street.

Minor/Secondary Arterial: Roadways that link small population nodes and provide direct access to major traffic generators such as work, shopping, and residential centers. Often these are State Secondary Highways. State Highway 290-West 12th Street, East Jackson Street-South Lowe Avenue, and Hilham Road can be classified as minor arterials

Major Collector: Roadways that link arterials and distribute traffic onto minor streets. These links also provide direct access to major traffic generators. Major collectors identified in the Cookeville Planning Area include Broad Street-Buck Mountain Road, North Old Kentucky Road, Buffalo Valley Road, Bunker Hill Road, Dixie Avenue, Maple Avenue, East 7th Street, Fairground Street, Fisk Road, West Cemetery Road, and Dry Valley Road.

ILLUSTRATION 12
STREET CLASSIFICATIONS



Minor Collector: Roadways that link and provide access to and between local roads and minor streets. Ideally these are internal to or abutting neighborhoods. There are numerous streets classified as minor collectors in the Cookeville Planning Area. These include: Stevens Street, Old Walton Road, East 6th Street, Hudgens Street, Jeffery Circle, Jere Whitson Road, Holladay Road, and Old Sparta Road.

Minor Street/Local Road: Roadways that function primarily as the means for accessing individual properties. Most often minor streets are intended for limited capacities, carrying traffic for short distances, and serving residential uses. The majority of Cookeville's streets are of this classification.

Traffic Circulation Patterns

The traffic circulation pattern in the Cookeville Planning Area is greatly influenced by Interstate 40 and to a lesser degree by Highway 111. These two routes provide for circumferential movement on the south and east sides of the city. There are no acceptable circumferential routes available on the north and west sides of the city.

The city's internal north-south circulation depends heavily on Willow Avenue and Jefferson-Lowe-Washington Avenues, which feed directly into Interstate 40. Due to high traffic volumes and intense land use development, traffic circulation is, at times, a problem on both of these north-south thoroughfares. Maple Avenue, Old Kentucky Road, Fisk Road, Dixie Avenue and Bunker Hill Road/South Walnut Avenue/Mahler Avenue also provide limited north-south traffic movement within the city. Willow Avenue is the only continuous internal north-south route through the city.

The city's internal east-west circulation depends heavily on Highway 70N and East 10th Street, which feed directly into Highway 111. Interstate Drive/Neal Street, 12th Street/Gainesboro Grade, and Jackson Street also provide east-west movement. Highway 70N is the only continuous east-west route through the city. All other east-west routes involve offsets that prohibit continuity of movement. The lack of continuous east-west routes also hinders traffic circulation in the northern and southern portions of the unincorporated planning area.

The grid pattern of street design dominates the minor/local street layout in the central portion of the municipality. The curvilinear pattern has been primarily utilized where topographic constraints have limited the extension of the grid pattern. In some instances where the curvilinear pattern has been used in residential subdivision development an adequate number of access points have not been provided.

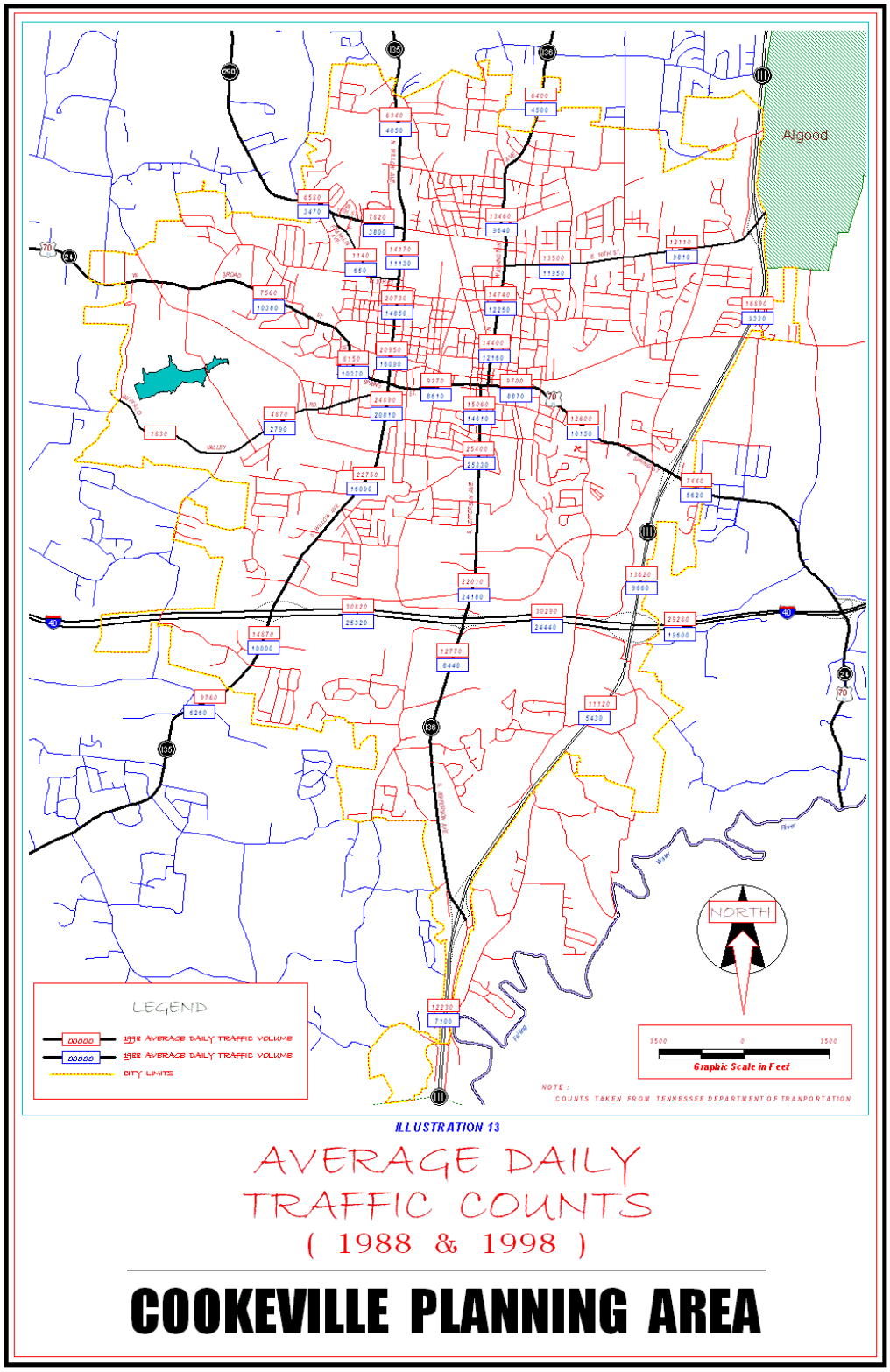
Findings. The traffic circulation pattern of Cookeville Planning Area is greatly influenced by Interstate 40, which bisects the city from the east to the west. A primary hindrance to traffic circulation is insufficient availability of continuous routes through the municipality and the unincorporated planning area. Due to high traffic volumes and intense land use development, circulation problems exist on the city's two primary internal north-south routes.

Traffic Volumes

An historical analysis of traffic volumes can be useful in identifying transportation trends and potential problems. Illustration 13 depicts the Tennessee Department of Transportation's (TDOT) Average Daily Traffic counts for the years 1988 and 1998. According to the TDOT averages, in 1988 and 1998 the highest daily traffic volumes in the city on a north-south route, occurred on South Jefferson Avenue at the intersection with West Jackson Street. Excluding Interstate 40, in both 1988 and 1998 the highest daily traffic volumes in the city on an east-west route occurred on East 10th Street at the intersection with Maple Avenue.

The largest increases in daily traffic volumes from 1988 to 1998 occurred on Interstate 40 east of Highway 111 (9,680 vehicles) and on Highway 111 south of East 10th Street (7,560 vehicles). The largest increase in

ILLUSTRATION 13
AVERAGE DAILY TRAFFIC COUNTS
1988-1998



traffic volumes on an internal street occurred on South Willow Avenue just north of Fairground Lane. Daily traffic volumes at this point on South Willow Avenue increased by 6,660 vehicles. The next two largest increases on an internal street occurred on North Willow Avenue at West 7th Street (5,880 vehicles) and at Broad Street (5,360 vehicles). Other notable increases over the 10-year period occurred on South Willow Avenue just south of Interstate 40 (4,870 vehicles), on South Jefferson Avenue just south of Interstate 40 (4,330 vehicles) and on Highway 290/Gainesboro Grade (4,020 vehicles).

It is very significant to note that average daily traffic volumes on South Jefferson Avenue in the vicinity of the intersection with Interstate Drive/Neal Street actually declined by 2,170 vehicles over the 10-year period. This can most likely be attributed to drivers selecting Willow Avenue and Highway 111 as a route for north-south circulation. Traffic volumes on Highway 70N/West Broad Street also decreased from 1988 through 1998. Most of this decrease can be attributed to the completion of West Jackson Street. Another noteworthy aspect from the comparison of traffic volumes from 1988 and 1998 is the much smaller increase in volumes on Interstate 40 between South Willow Avenue and Highway 111 as compared to the increase east of Highway 111. This is probably a result of an increase in local traffic utilizing Interstate Drive/Neal Street as an east-west route instead of Interstate 40.

Findings. A comparison of 1988 and 1998 traffic volumes indicates the increasing importance of Willow Avenue and Highway 111 as north-south routes in the city. It also reveals significant increases in traffic volumes on all thoroughfares from the south and southwest. The completion of West Jackson Street has greatly reduced traffic volumes on Highway 70N/West Broad Street. Although traffic counts are not provided by TDOT for Interstate Drive/Neal Street, the affect of this route is reflected by the smaller increases in traffic volumes on Interstate 40 between South Willow Avenue and Highway 111.

Traffic Impediments

Historically, the major impediment to traffic flow in Cookeville was the location of the primary north-south and east-west routes of Putnam County through the center of the city. Where these routes intersect in the downtown area traffic congestion remains a problem.

One of the more significant impediments to traffic flow in the city and the unincorporated planning area is an insufficiency of adequate internal north-south and east-west routes. The problems include the lack of available routes, discontinuous routes, and inadequate lanes on existing routes. In the past 15 to 20 years several improvements have been made to address some of these problems. These include the construction of a connection to Jefferson, Lowe, and Washington Avenues, the widening of Willow Avenue, the construction of Interstate Drive and Neal Street, the construction of West Jackson Street, the construction of Jeffery Circle, and the widening of 10th Street. Although improvements have been made, there are still deficiencies.

Another major impediment to traffic flow in Cookeville is intense commercial development along major internal routes. This is especially a problem on South Jefferson and South Willow Avenues. Numerous ingress/egress points on these thoroughfares to the commercial developments impede traffic flow and create traffic hazards. A similar problem also exists along Highway 70N east of the current city limits to Interstate 40. This problem is compounded by an inadequate number of traffic lanes on this portion of Highway 70N.

The lack of a complete circumferential route on the periphery of the city is also an impediment to traffic flow. Traffic, which would bypass the city, must travel through internal streets. An east-west route to the north and a north-south route to the west are needed to complete an outer circumferential route.

Findings.

There are four (4) primary impediments to traffic flow in the Cookeville Planning Area will directly affect future land use development. These impediments are (1) traffic congestion at the intersections of major thoroughfares; (2) inadequacies of internal north-south and east-west routes; (3) intense commercial development on major thoroughfares; and (4) lack of a complete circumferential route.

Traffic Generators

There are several major traffic generators in Cookeville. These traffic generators are focal points of activity which are the origin and destination of numerous automobile trips during certain times of the day. Having an awareness of the location of these generators is necessary in analyzing the traffic circulation system and in preparing plans for improvement. The major traffic generators in Cookeville are grouped into three principal categories, which are as follows:

Industrial Areas

There are three primary industrial areas in Cookeville. The first of these areas is located in the northeast section of the city to the east and west of Fisk Road. The industrial operations located in this area employ a total of more than 1,500 persons. Compounding the traffic generation in this vicinity is the close proximity of Cookeville Senior High School. Traffic problems in this area are mostly the result of inadequate access. The second major industrial area is located in the southwest section of the city off South Willow Avenue near Interstate 40. An estimated 1,500 persons are employed by the industrial operations located in this area. Traffic problems in this area are primarily due to South Willow Avenue narrowing to two lanes at the Interstate 40 interchange. The third industrial area in the city is located off Highway 111 just south of Interstate 40. The industries located in this area employ more than 2,000 persons. Traffic problems in this area are generally caused during shift changes when a large amount of traffic enters and exits Highway 111, which is a high volume, high speed thoroughfare. Problems in this area will be compounded when Lemon Farris Industrial Park located to the east of TRW VSSI is developed.

Concentrated Commercial Areas

There are several areas in Cookeville where the concentration of commercial establishments generates large volumes of traffic. The downtown area of Cookeville generates much vehicular activity. The location of several public and private services, and numerous retail establishments, in the downtown area, contributes to the traffic volumes generated. Other concentrated commercial areas generating large volumes of traffic are the strip commercial developments along South Jefferson and South Willow Avenues and along Interstate Drive and Neal Street. There are also concentrated commercial areas located along Spring Street, North Washington Avenue, East 10th Street, and East Jackson Street. In addition, a large amount of commercial development has recently occurred on West Jackson Street.

Institutional and Professional Areas

The area north of West 2nd Street, south of 12th Street, west of Willow Avenue, and east of the Nashville and Eastern Railroad, in which Tennessee Tech University and Cookeville Regional Medical Center are located, is a source of major traffic generation. Contributing to the traffic generation of this area are the many auxiliary medical facilities and physicians' offices located around the hospital and the numerous multi-family residential units located to the north and south of the university. Other institutions that are major generators of traffic include Cookeville High School, two Middle Schools and six Elementary Schools located on major collectors or minor collectors rather than arterials.

At the current time there are no major traffic generators located in the unincorporated planning area.

Findings. In essence, employment related land uses are the traffic generators in a community. The industrial, commercial, institutional and professional service use areas of Cookeville are the primary traffic generators as destination points from the residential areas in the city and county. Many of these generators tend to compound traffic problems due to their relatively close proximity to each other. Additional problems exist where these major traffic generators are located on streets of less than adequate classification.

Existing Street Conditions

The condition of a community's existing streets directly affects the overall capability of the street system. Streets with pavement in need of major repairs or those of inadequate width can not carry traffic at appropriate volumes or speeds. Furthermore, streets in poor condition can create traffic hazards. The local streets in the City of Cookeville and the unincorporated planning area have been categorized as to their condition based on field surveys conducted by the Department of Planning and Codes in July and August of 1999. Illustration 14 presents information on the street conditions in the Cookeville Planning Area. The condition ratings depicted in Illustration 14 are based on the following criteria:

Good: Pavement is generally smooth with no immediate repairs needed.

Good to Fair: Pavement beginning to break down, scattered areas of broken pavement, potholes in beginning stages, moderate narrowness of pavement or shoulders, repairs may be needed in near future.

Fair: Pavement broken in numerous areas, potholes present, moderate to excessive narrowness of pavement or shoulders, repairs or resurfacing generally needed.

Fair to Poor: Pavement mostly broken, numerous potholes, excessive narrowness of pavement or shoulders, extensive repairs or resurfacing needed.

Poor: Pavement completely deteriorated or nonexistent, excessive narrowness of pavement or shoulders, street is in generally hazardous condition.

Undeveloped: Right-of-ways shown on recorded plats or tax maps but which have not been built.

Table 17 presents the condition of local streets by mileage and percent for Cookeville and the unincorporated planning area. Of the 197.7 miles of local streets in Cookeville 76.8 percent are in good or good to fair condition, 16.4 percent are in fair or fair to poor condition, and six percent are in poor or an undeveloped condition. Of the 138.3 miles of local roads in the unincorporated planning area 82.3 percent are in good or good to fair condition, 14.8 percent are in fair or fair to poor condition, and 3.9 percent are in poor or an undeveloped condition.

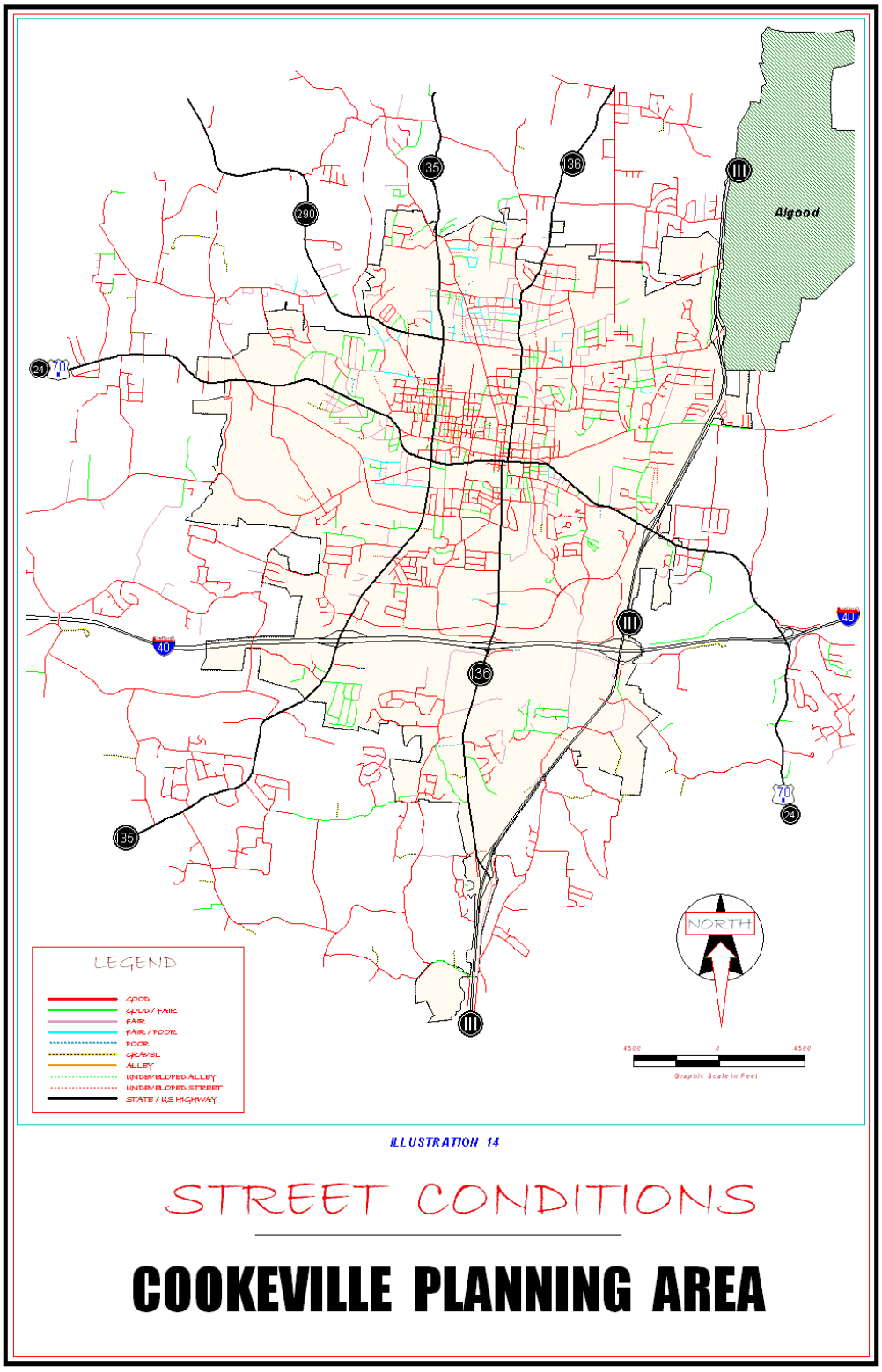
TABLE 17

1999 LOCAL STREET CONDITIONS

	COOKEVILLE		PLANNING AREA	
Condition	Miles	Percent	Miles	Percent
Good	122.1	61.8	110.4	79.8
Good to Fair	29.6	15.0	3.5	2.5
Fair	25.0	12.6	14.0	10.1
Fair to Poor	7.6	3.8	5.1	3.7
Poor	3.1	1.6	5.3	3.9
Undeveloped	8.6	4.4	0	0
Alley	1.7	0.8	0	0
TOTAL	197.7	100	138.3	100

Approximately 65.3 miles or 34.8 percent of the 187.4 miles of developed local streets in Cookeville are in less than good condition. Upgrading these streets could be an expensive process. A systematic approach

ILLUSTRATION 14
STREET CONDITIONS
COOKEVILLE PLANNING AREA



through the planning and budgeting process should be implemented to completed the needed street improvements.

The streets in the unincorporated planning area are generally in as good a condition as those within the municipality. Approximately 24.4 miles or 17.7 percent of the 138.3 miles of local streets in the planning area are in fair or worse condition. These street conditions should be evaluated whenever an area is considered for annexation.

Parking

With the exception of the downtown areas parking is not a significant problem within the City of Cookeville. Much of the parking in the CBD of Cookeville takes place on the street right-of-ways in non-metered spaces with a one-hour maximum. The primary off-street parking areas in the downtown areas are lots located north of Broad Street between Washington and Jefferson Avenues and south of Broad Street between Cedar and Church Avenues. The City of Cookeville also has a parking lot located at the Cookeville Municipal Building. Curb or on-street parking obstructs the flow of traffic with motorists maneuvering in and out of parking spaces. This problem is compounded in the downtown by the high traffic volumes on Broad and Spring Streets and Washington and Jefferson Avenues.

So far, the development associated with the planning area has had sufficient land area and the uses are such that parking has been safely provided on site thereby preventing parking problems. However, the lack of zoning regulations outside the corporate limits may result in future problems.

Findings. Like most CBD areas, parking is a problem in Cookeville as well. Given the relatively good condition of structures and low vacancy rates, it is doubtful if property could be acquired to expand the CBD parking in the future. No parking problems were identified in the unincorporated planning area.

Air/Rail/Port

Although there are no general aviation airport facilities located within Putnam County, the area is served by a regional airport, which is located off Highway 111 approximately 15 miles south of Cookeville. The Upper Cumberland Regional Airport was established in 1993 and is jointly owned by the City of Cookeville, the Town of Sparta, and Putnam and White Counties. The airport has a 6,000 foot lighted runway and has an instrument landing system.

Cookeville is served by the Nashville and Eastern Railroad. An estimated 6 miles of rail line occupy approximately 62 acres of land within the City of Cookeville and an estimated 1.3 miles of rail line occupy approximately 14 acres of land in the unincorporated planning area. This rail line bisects the city from east to west and it provides a direct link to Nashville. A significant amount of industrial development is located along the rail line. In 1999, the Nashville and Eastern Railroad announced plans for development of rail lines east to Knoxville.

There are no navigable waterways located in the Cookeville Planning Area. The nearest port is the Port of Gainesboro located on the Cumberland River, 15 miles northeast of Cookeville.

Findings. The City of Cookeville is served by a rail system and has access to air and port facilities. The impact of the proposed plans for improvements to the Nashville and Eastern Railway, such as right-of-way acquisition, should be considered in future land use decisions.

Mass Transit

Like most mid-sized communities, the automobile is the preferred method of transportation in Cookeville. This has limited the need for public transportation facilities in the form of mass transit. There is a senior citizens bus service provided county-wide through the rural transportation program. Three companies provide public taxi service in Cookeville. The municipality

is served by Greyhound Bus Lines, which has a terminal located off Palkway Drive. In addition a limousine service provides transportation to the Nashville Airport.

Findings. Due to the size of Cookeville and demand limitations for mass transit, mass transit is not an issue.

Pedestrian/Non-Vehicular Circulation

The provision of adequate pedestrian/non-vehicular means of transportation can greatly improve the quality of life for the residents of a city. When properly and adequately constructed sidewalks, trails, greenways, and bike paths can provide a safe means for the movement of pedestrian traffic. They can also serve as a border and buffer between the street and existing development. Sidewalks or other means of pedestrian circulation are especially needed in areas around schools, in downtown commercial areas, and in residential areas. Illustration 15 depicts the location and condition of existing sidewalks and other forms of non-vehicular circulation.

Overall, the existing sidewalks in Cookeville are in good condition. Sidewalks are present near most public school facilities, in the downtown area, and in many of the older residential areas. Pedestrian access to some of the city parks is limited due to the lack of sidewalks or other method of non-vehicular movement. In 1999 the Cookeville City Council initiated an extensive sidewalk construction project. This project includes plans for the construction of sidewalks along East Hudgens Street, and portions of Interstate Drive and South Maple Avenue.

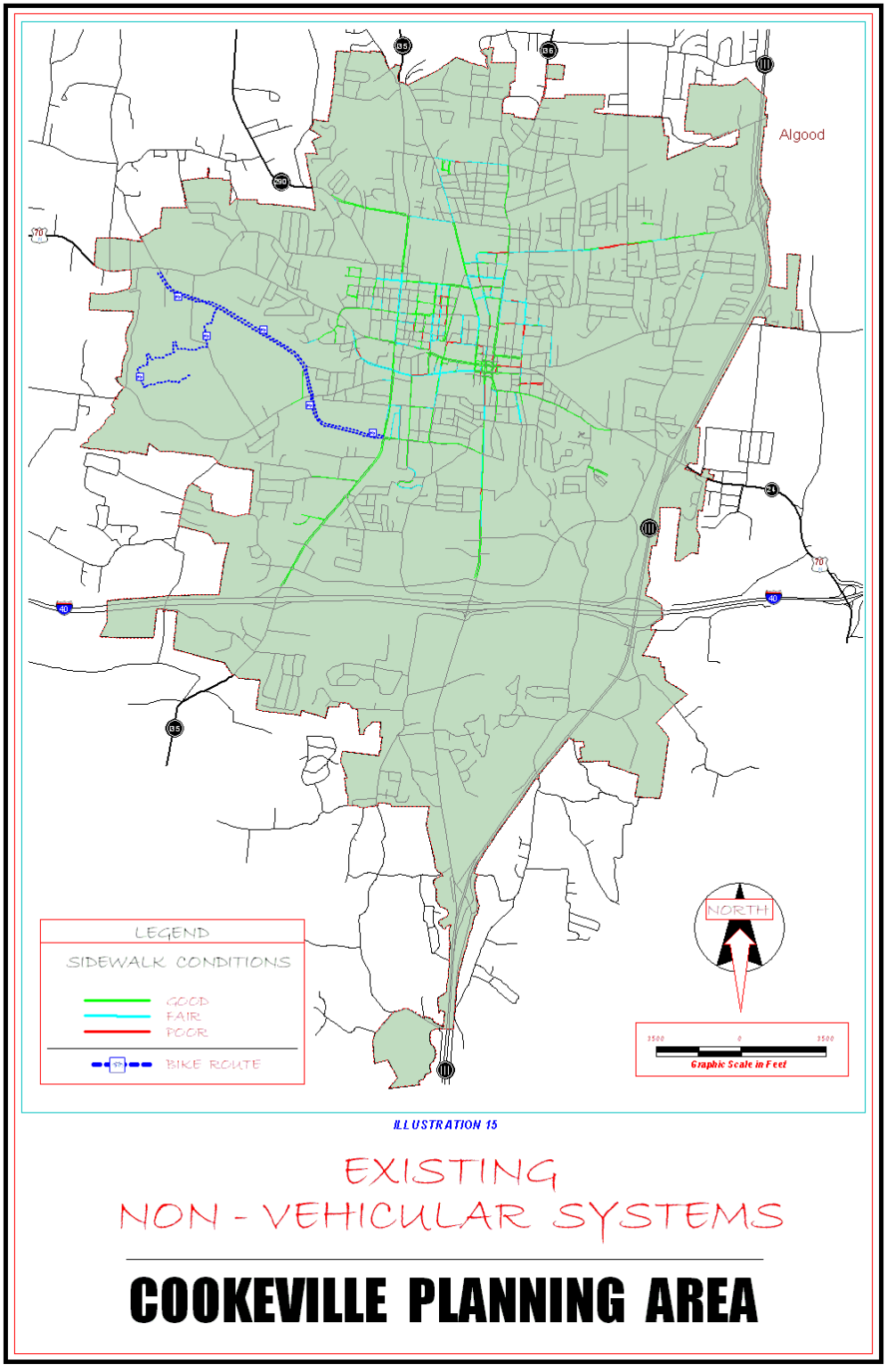
With the exception of sidewalks, existing alternatives for pedestrian and other non-vehicular means of circulation are generally limited in Cookeville. There are approximately 2.35 miles of marked bicycle lanes located along both sides of West Jackson Street from South Willow Avenue to State Highway 70N. Also, there are approximately 1.7 miles of off-road bicycle paths located in Cane Creek Park.

Recently a concentrated effort has evolved in the city for the development of bike paths, greenways, and other linear pathways to provide pedestrian or non-vehicular linkage for an internal municipal system. This effort has been led by the city's Leisure Services Department and by the Cookeville Greenways Committee. This committee has developed plans for a Cookeville Greenway. The first phase of the Cookeville Greenway will connect the downtown area with the Tennessee Tech University campus. This project will partially utilize existing railroad right-of-way. Funding has been approved for this first phase. The second phase of the Greenway is planned along South Old Kentucky Road/Neal Street East and would connect Avery Trace Middle School, the Putnam County YMCA, and the Putnam County Community Center with commercial areas near South Jefferson Avenue. Funding for the second phase is currently being sought.

There are no sidewalks or other means of non-vehicular circulation present in the unincorporated planning area. Current municipal and county subdivision regulations do not require the provision of sidewalks in new developments.

Findings. In general the older portions of the municipality have adequate means for pedestrian circulation through the provision of sidewalks. Sidewalks or other means of pedestrian circulation are not available in many of the more recently developed areas of the municipality, nor in the unincorporated planning area. This can be attributed to the absence of requirements for sidewalks in the municipal and county subdivision regulations. The Cookeville City Council initiated a sidewalk construction project in 1999. Also the municipality has initiated efforts for the development of a Cookeville Greenway, which is based, at least partially, on the concept of utilizing existing railroad right-of-ways for the completion of trails and pedestrian ways. It is necessary to ensure that these projects are done in conjunction with each other.

ILLUSTRATION 15
EXISTING NON-VEHICULAR SYSTEMS
COOKEVILLE



FUTURE TRANSPORTATION PLAN

The future transportation system in Cookeville and the surrounding planning area will be affected by a number of factors. These factors include the existing street pattern, major impediments to traffic, location of major traffic generators, parking needs, growth trends, construction of new thoroughfares, and the location and preferences of new development. Although the municipality cannot control all the factors which will influence its future transportation system, it can provide some direction through such measures as enforcing land use regulations, executing a major street plan, implementing a street improvements plan, and completing a non-vehicular circulation plan.

Land Use Regulations

Subdivision and zoning regulations are the two primary land use controls that can have a direct influence on a municipality's future transportation system. The city's subdivision regulations have specific standards for the construction of streets in subdivision developments. These regulations can also be used to require the construction of sidewalks in new subdivisions. Zoning regulations can be used to guide the location of major traffic generators to areas appropriate to the transportation network and can insure that adequate off-street parking and safe ingress-egress points are provided.

Major Street Plan

The primary purpose of a Major Street Plan is to establish a transportation system that promotes ease of movement throughout the municipality. The Major Street Plan accomplishes this by identifying or designating existing or proposed streets which can best provide for the adequate movement of traffic. The completion of the improvements to existing streets or the construction of new streets identified in the plan will require funding from the local, state, and federal levels. Illustration 16 depicts the Major Street Plan for the City of Cookeville and the surrounding planning area. A total of 30 projects are identified on the Major Street Plan. A summary of these projects, with no reflection of priority, is presented in the following:

1. Construction of 5th Interchange on I-40. The fifth interchange would be starting point for the "Northern Loop" and a possible "Southern Loop". Funding for this project is expected to primarily be from federal and state monies.

2. Construction of Southern Loop. This project involves the construction of a three to five lane major arterial connecting I-40 to the Regional Airport. As proposed, a large portion of this route would follow Ditty Road. Funding for this project would include federal, state, and local monies.

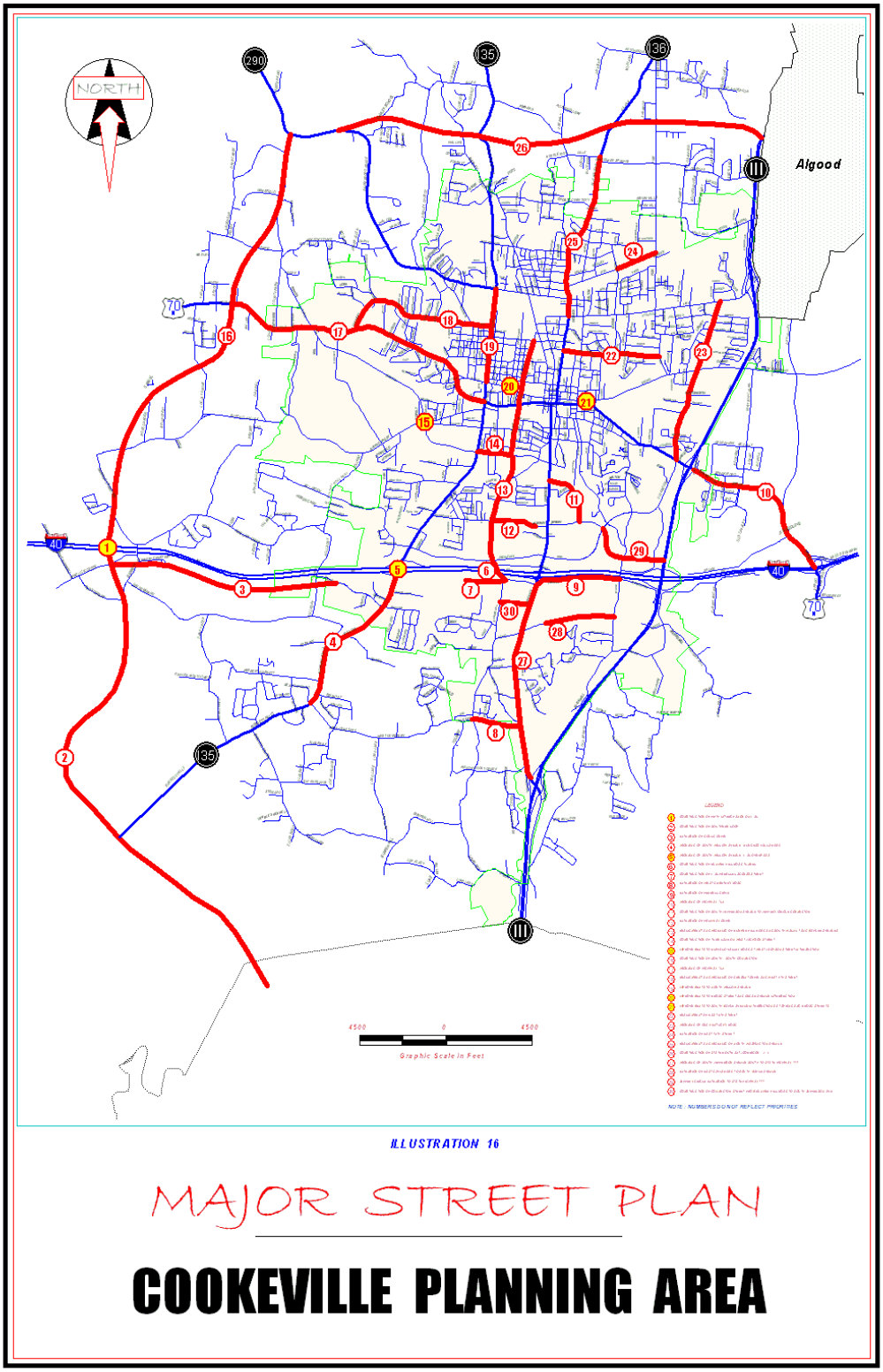
3. Extension of Gould Drive. This project involves extending Gould Drive westward from Holladay Road to Bennett Road or the 5th Interchange. Funding for this project would primarily involve local monies with possible industrial grant monies.

4. Widening of South Willow Avenue. This project involves widening South Willow Avenue to five lanes south from I-40 to West Cemetery Road. Funding would include state and local monies.

5. Widening of South Willow Avenue/I-40 Overpass. This project involves widening the South Willow Avenue/I-40 Overpass to five lanes. Funding would include federal, state, and local monies.

6. Construction of Bunker Hill Road Tunnel. This project involves the construction of a tunnel under Interstate 40 to connect the southern section of Bunker Hill Road with the northern section. Funding would include federal, state, and local monies.

ILLUSTRATION 16
MAJOR STREET PLAN



7. Construction of I-40 Parallel Access Street. This project involves the construction of a three lane parallel access street extending westward from Bunker Hill Road south of I-40. Funding for this project would primarily be local monies with possible developer participation.

8. Extension of West Cemetery Road. This project involves extending West Cemetery Road eastward to South Jefferson Avenue. Funding for this project would be primarily local monies.

9. Extension of Ferrell Drive. This project involves extending Ferrell Drive eastward parallel to Interstate 40 to South Maple Avenue. Funding would include state and local monies.

10. Widening of Highway 70N. This project involves widening Highway 70N to five lanes east from Highway 111 to I-40. Funding for this project would primarily be federal and state monies.

11. Construction of South Jefferson Avenue to Jeffery Circle Connector. This project involves the construction of a three lane connector form an existing traffic signal on South Jefferson Avenue to Jeffery Circle. Funding for this project would primarily be local monies with possible developer participation.

12. Extension of Palkway Drive. This project involves extending Palkway Drive westward to Bunker Hill Road. Funding for this project would primarily be local monies with possible developer participation.

13. Realignment and Widening of Bunker Hill Road and South Walnut and Mahler Avenues. This project involves realigning and widening Bunker Hill Road and South Walnut and Mahler Avenues north from Interstate Drive to East 7th Street. Funding for this project would be primarily local monies.

14. Construction of Turn Lane on West Jackson Street. This project involves the construction of a turn lane on West Jackson Street from South Jefferson to South Willow Avenues. Funding would involve local monies.

15. Improvements to Buffalo Valley Road at West Jackson Street Intersection. This project involves the construction of turn lanes on Buffalo Valley Road at the intersection with West Jackson Street. Funding would involve local monies.

16. Construction of North-South Connector. This project involves the construction of five lane major arterial connecting I-40 to State Route 290 or the proposed State Route 451. When combined with State Route 451 this project forms the "Northern Loop". Funding for this project is expected to be from federal, state, and local monies.

17. Widening of Highway 70N. This project involves widening Highway 70N to five lanes west from South Willow Avenue to the proposed North-South Connector or to the city limits. Funding for this project would primarily be federal and state monies.

18. Realignment and Widening of Crescent Drive and West 9th Street. This project involves realigning and widening Crescent Drive and West 9th Street from Highway 70N to North Willow Avenue. Funding would involve local monies

19. Improvements to North Willow Avenue. This project involves constructing a turn lane on North Willow Avenue from Broad Street to 12th Street. Funding for this project would primarily be state monies.

20. Improvements to Broad Street and Cedar Street Intersection. This project involves realignment of the intersection. Funding would involve local monies.

21. Improvements to South Maple Avenue Intersections at Spring and Broad Streets. This project involves the signalization and construction of turning lanes at the intersections of South Maple Avenue at Spring and Broad Streets. Funding would include state and local monies.

22. Realignment of East 6th Street. This project involves realignment of East 6th Street between North Maple Avenue and Fisk Road. Funding would be through local monies.

23. Widening of Old Kentucky Road. This project involves the construction of turn lanes and the general widening of Old Kentucky Road from Spring Street north to East 10th Street. Funding would be through local monies.

24. Extension of East 15th Street. This project involves extending East 15th Street eastward from Brown Avenue to Fisk Road. Funding would be through local monies.

25. Widening of North Washington Avenue. This project involves widening to five lanes North Washington Avenue from East 10th Street to Whitaker Springs Road. Funding would primarily involve state monies.

26. Construction of State Route 451, Corridor "J". This project involves the construction of a four lane, restricted or limited access, divided highway. Funding for this project is expected to be primarily from federal and state monies.

27. Widening of South Jefferson Avenue. This project involves widening to five lanes South Jefferson Avenue from Interstate 40 to State Highway 111. Funding would primarily involve state monies.

28. Extension of East Davis Road. This project involves extending East Davis Road to South Maple Avenue. Funding would primarily involve local monies.

29. Construction of Jeffery Circle Extension to State Highway 111. This project involves the construction of a three lane street from Neal Street East to State Highway 111. This project would be funded primarily by private monies.

30. Construction of Connector Street from Bunker Hill Road to South Jefferson Avenue. This project involves the construction of a three lane connector street from Bunker Hill Road to South Jefferson Avenue south of Interstate 40. Funding would involve local and possibly private monies.

A principal improvement to the Cookeville transportation system identified in the Major Street Plan is the construction of the State Route 451 along the northern fringe of the municipality. State Route 451 is a segment of Corridor "J" which is a part of the Appalachian Development Highway System. This highway system was originally designed to spur economic development. The construction of this highway is important to the City of Cookeville and Putnam County not only to spur economic development but also to provide a much needed continuous east-west transportation route.

The construction of State Route 451 will also complete a major portion of a proposed circumferential route of the municipality on its western and northern fringes. This circumferential route is known as the "Northern Loop". The north-south segment of this circumferential route originates from a proposed new interchange on Interstate 40 and joins State Route 451 at an interchange on State Highway 290.

An additional segment of a circumferential route on the southwestern fringe of the municipality is also identified in the Major Street Plan. This segment, which is known as the "Southern Loop", originates from the proposed Interstate 40 interchange and intersects with State Highway 111 in northern White County. Although this proposed route would be located primarily outside the planning area identified in this study it is important to the municipality's

overall transportation system. It would provide direct access from Interstate 40 to the Upper Cumberland Regional Airport.

The Cookeville Major Street Plan depicts the proposed construction of a number of new local streets. Several improvements to existing streets, such as adding additional lanes or realignments, are also recommended in the Plan. The completion of the projects identified in the Major Street Plan should improve traffic flows in the city.

Street Improvements Plan

As a means of providing a coordinated effort for completing needed improvements to existing municipal streets, the preparation of a systematic Street Improvements Plan is essential. The purpose of this plan is to identify and prioritize local streets for improvement. The necessary improvements can range from general repairs to complete reconstruction. In most cases, however, the improvements consist of street resurfacing. It is important that the street upgrades scheduled in the plan be coordinated with any underground utility repairs or replacements.

To establish the priorities for improvements to the municipality's streets the existing street conditions identified in the 1999 land use inventory can be utilized. Other factors to be considered in determining the priorities are traffic volumes and land use density. When street upgrades involve widening of the pavement surface, it is also important that available rights-of-way be considered.

Illustration 17 depicts the recommended priorities for street improvements in the municipality. Three priority levels are depicted on the illustration. First priority reflects improvements that should be completed in one to two years, second priority reflects improvements that should be completed in three to five years, and third priority reflects improvements that should be completed in more than five years. The improvement of the local street system in the City of Cookeville will primarily be the responsibility of the Public Works Department.

Pedestrian Circulation Plan

Illustration 18 identifies recommended improvements to the City of Cookeville's pedestrian/non-vehicular transportation system. It depicts the suggested location of new sidewalks, greenways and bike trails. The plan is designed to promote the development of an integrated pedestrian/non-vehicular transportation system.

The sidewalk and other non-vehicular transportation system improvements depicted on this plan have been located with the intention of connecting the major residential areas with the various centers of activity throughout the municipality. The completion of the improvements depicted on the Pedestrian Circulation Plan will provide several benefits to the residents of the Cookeville Planning Area. These benefits include enhanced recreational opportunities, expanded alternatives for the movement of people, and a reduction in the reliance of motorized vehicles.

On streets of less than major collector status sidewalks should be constructed at a width of no less than four feet. In commercial areas and on streets of major collector or greater status sidewalks should be constructed at a width of no less than six feet. All greenways should be constructed at a width of at least eight feet and of at least ten feet if intended for walking and biking.

Due to the extensive nature, completion of the improvements identified on the Pedestrian Circulation Plan is expected to take most of the 20-year planning period. Although specific priorities have not been established, many of the recommended improvements should be completed in conjunction with planned major street improvement projects. The completion of the improvements reflected on the Pedestrian Circulation Plan will primarily be the responsibility of the Public Works Department. It is recommended that the municipality's subdivision and land development requirements be revised to require that developers install sidewalks and other non-vehicular transportation systems.

ILLUSTRATION 17
PRIORITIES FOR STREET IMPROVEMENTS

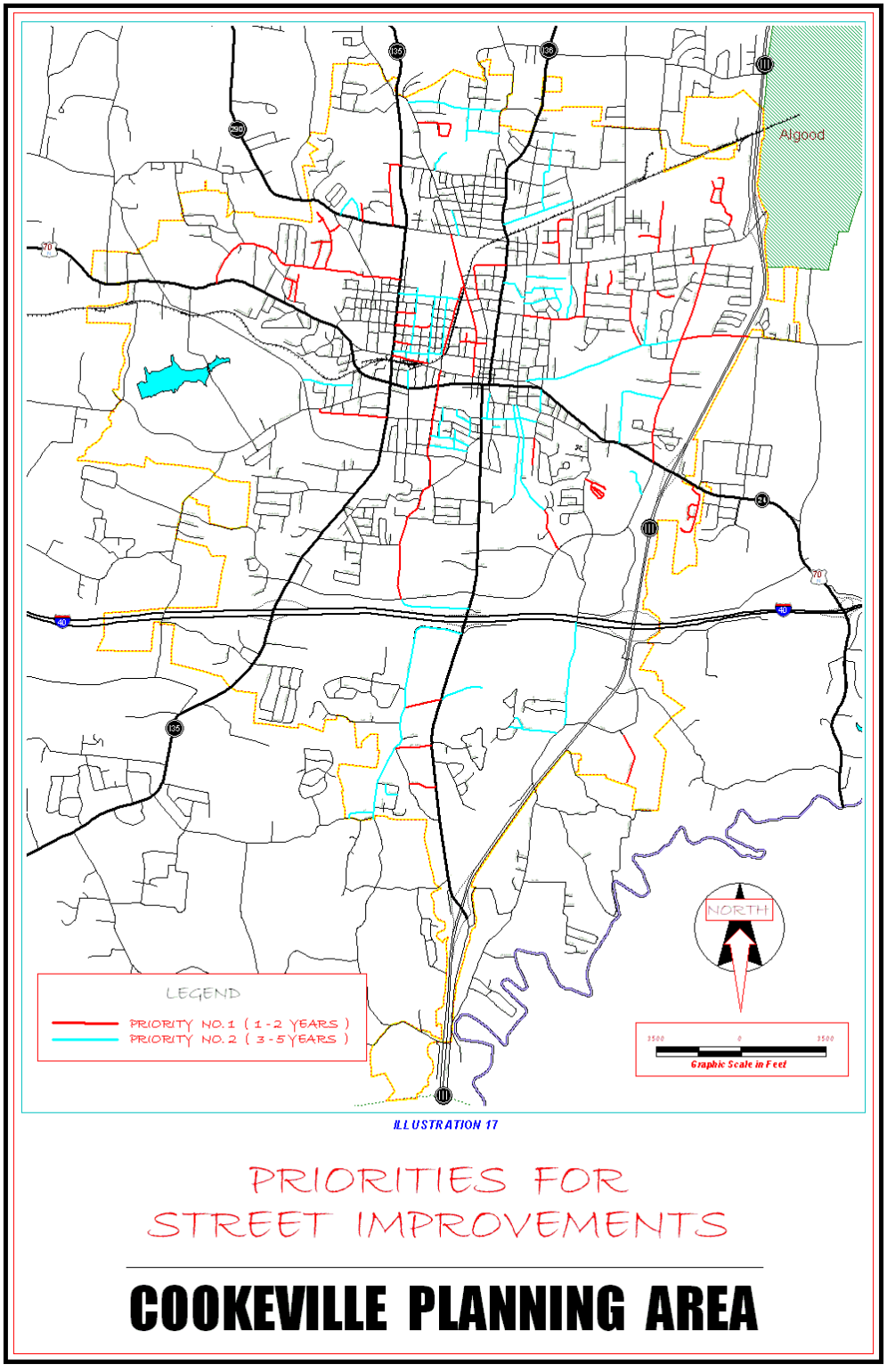
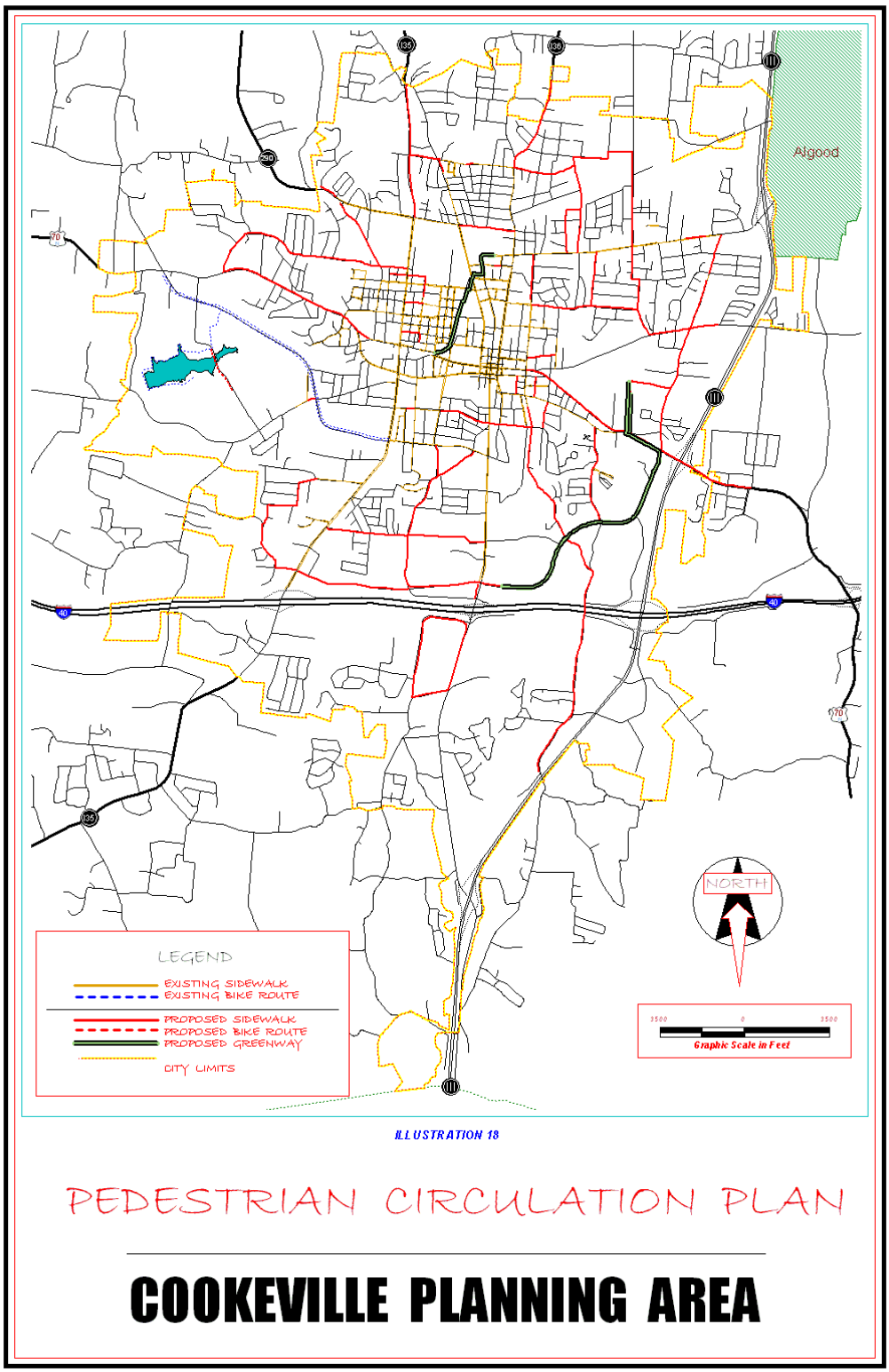


ILLUSTRATION 18
PEDESTRIAN CIRCULATION PLAN



CHAPTER 8

DELINEATION OF URBAN GROWTH AREA

INTRODUCTION

The purpose of this Chapter is to identify an Urban Growth Boundary for the City of Cookeville as required by Public Chapter 1101 of 1998. The process utilized to identify the Cookeville Urban Growth Boundary involves several factors. The primary factors that are considered include historical growth trends, population growth projections, and future land use needs. The capability of the vacant land to meet the future land use needs is also examined. Another consideration is the need for the provision of core infrastructure, urban level services, and public facilities.

HISTORICAL GROWTH

As noted in the existing land use analysis presented in Chapter 5 the land area of the City of Cookeville increased by approximately 12,000 acres during the 35-year period between 1964 and 1999. This represents an annual average increase in land area of approximately 343 acres. Assuming the same rate of growth over the 20-year planning period the City of Cookeville would need an additional 6,840 acres of land area by 2020.

POPULATION PROJECTIONS

According to population projections prepared by the University of Tennessee Center for Business and Economic Research (UT-CBER) the population of the City of Cookeville will be 36,337 in the year 2020. This represents an increase of 14,593 persons and a growth rate of 67 percent for the period between 1990 and 2020. Applying the city's current population density of 1.55 persons per acre (21,744 persons on 14,050 acres) to the year 2020 projected population of 36,337 indicates a total required land area of 22,260 acres or an increase of approximately 8,600 acres.

FUTURE LAND USE NEEDS

The projected future land use needs of the municipality are a primary determining factor for delineating the Urban Growth Boundary. If the projected future land use needs can not be absorbed by the available acreage within the corporate limits then acreage for future growth outside the corporate limits must be identified and preserved for this future growth. To determine future land use needs the inventory of existing land use completed by the Department of Planning and Codes in 1999 is utilized to calculate densities of development. The existing land use densities are then applied to the projected population to estimate future land use needs. Presented in the following are projected land use needs to the 2020 for each of the various land use categories.

Residential

Nearly 30 percent of the total land area or 4,178 acres in Cookeville is occupied by residential land uses. These uses consist of single-family dwellings, multi-family dwellings and mobile homes. Less than two percent of the existing 10,069 housing units in Cookeville are vacant. Assuming that the municipality will experience the projected population growth of 14,600 persons and that the average household size will decline to no less than 2.15 persons, approximately 7,000 new housing units will be needed by the year 2020. Further assuming that the current density of 2.4 dwelling units per acre will continue, then a minimum of approximately 2,920 acres of additional land for residential development will be needed by the year 2020.

As a significant portion of the vacant land in Cookeville is not suitable for development, developers will be hard pressed to find suitable land for development to meet the

demand for even minimum population growth. This will especially be true if traditional single-family homes on large lots is the primary method of meeting this housing demand.

Commercial/Private Services

The City of Cookeville is not only the commercial center for Putnam County but also for a large portion of the Upper Cumberland Region. According to the 1999 inventory, 1,178 acres of land in Cookeville are occupied by commercial and/or private service land use. This results in a commercial/private service density of 18.4 acres per person. When this density is applied to the projected population increase then an additional approximately 795 acres of land will be needed to meet the commercial/private service land use demands by the year 2020.

Industrial

It is expected that the City of Cookeville will continue as the major employment center for Putnam County and for a number of adjacent counties. The 1999 land use inventory indicates that 633 acres of land in Cookeville are use for industrial purposes. This indicates an industrial land use density of 34.3 acres per person. When this density is applied to the projected population increase then approximately 425 additional acres of land will be needed to meet the industrial land use needs by the year 2020.

As there are less than 150 acres of land in the municipality's existing industrial parks available for future industrial development, the acquisition of additional lands will be necessary to meet the projected land use needs. The decision by large industrial development to locate within the municipality could substantially affect the projected future land use needs in this category. It is anticipated the Urban Growth Boundary would be amended as necessary should this occur.

Public/Cultural/Recreational

The importance of the City of Cookeville to Putnam County and the Upper Cumberland Region as a principal provider of public services, cultural and recreational land uses is projected to continue through the 20-year planning period. According to the 1999 inventory 1,480 acres of land in Cookeville are utilized by public services, cultural, or recreational land uses. This results in a density of 14.7 persons per acre. Applying this density to the projected population increase indicates that an additional approximately 995 acres of land will be needed to meet the public service, cultural and recreational land use demands by the year 2020.

Several factors could significantly alter the projected public service, cultural and recreational land use demands. Any substantial expansions of Tennessee Technological University, which is the only 4-year college in the Upper Cumberland Region, or Cookeville Regional Medical Center, which is the primary medical facility for much of the region, will require the acquisition of additional properties. One other potential impact on the future land use needs in this category is the planned development of the Nashville Tech Cookeville Center.

Utilities

The City of Cookeville is the largest provider and location for utilities in Putnam County. Within the municipality approximately 71 acres of land are occupied by various utilities, which includes the facilities necessary for the city's water, sewer, electric and gas systems. The 71 acres represents a density of 306 persons per acre of land used for utilities. When this density is applied to the projected population increase approximately 48 additional acres of land will be needed to meet the land use needs of the various utilities by the year 2020.

Transportation

Land used for transportation purposes occupy approximately 1,970 acres of land in the City of Cookeville. This indicates a density of 11 persons per acre of land occupied by transportation uses. Applying this density to the projected population increase indicates that an additional approximately 1,330 acres of land will be needed to meet the transportation land use demands by the year 2020.

Market Factor

The exact projection of future land use needs is difficult if not impossible due to unpredictable events. Dramatic upswings or downswings in the national economy will affect future land use development. The construction of major thoroughfares will spur construction. A decision by a major employer to locate in the area will affect all areas of land use development.

To account for the impact of unpredictable events a market or safety factor is traditional applied to future land use projections. The utilization of a market factor is especially valid when operating under the limitations of an Urban Growth Boundary. Such a boundary effectively restricts where a municipality can grow and expand. A conservative market factor of 25 percent is utilized in the projected future land use needs for the City of Cookeville.

Summary

Table 18 presents a summary of the year 2020 projected land use needs for the City of Cookeville by land use category.

TABLE 18

PROJECTED LAND USE NEEDS

LAND USE CATEGORY	CURRENT DENSITY PER ACRE	FUTURE ACREAGE NEEDED
RESIDENTIAL	5.2	2,810
COMMERCIAL	18.4	790
INDUSTRIAL	34.3	425
PUBLIC, CULTURAL, RECREATIONAL	14.7	995
UTILITIES	306.0	50
TRANSPORTATION	11.0	1,330
SUBTOTAL		6,400
Plus 25 % Market Factor		1,600
TOTAL		8,000

VACANT LAND

According to the 1999 land use inventory there are approximately 4,542 acres of vacant land within the City of Cookeville. However, an estimated 1,273 acres or 28 percent of this vacant land has physical or other constraints that significantly limit its potential for development. This leaves approximately 3,269 acres of land within the municipality for future development. As noted previously, an additional 8,000 acres of land will be necessary to meet the city's future land use demands to the year 2020. If all of the vacant land suitable for development in the municipality is utilized, then an estimated 4,731 acres will still be needed to meet the future needs.

PUBLIC INFRASTRUCTURE, SERVICES, AND FACILITIES

Much of the fringe area around the City of Cookeville has already developed at urban density; however, without the urban services necessary to support it. The lack of or substandard infrastructure, urban services, and public facilities in areas developed at urban densities can result in unsafe and

unpleasant living conditions. The City of Cookeville has the capacity to provide the necessary infrastructure, services, and facilities to a substantial area outside its current corporate limits. In fact, for many of the services and facilities necessary for urban density development, the City of Cookeville is the only available entity with the capability of providing such services and facilities.

The City of Cookeville Water Quality Department either serves or provides the water for a vast area surrounding the municipality. Development of the area around the municipality is dependent on the City of Cookeville's ability to produce potable water.

Several residential subdivisions with hundreds of single-family homes have been developed on the edge of the municipality. Most of the homes are located on lots of approximately 20,000 square feet in size and are served by subsurface sewage disposal systems. Many of these systems can be expected to fail over the next 20 years, resulting in potential health problems. The provision of a public sewerage treatment system will be the best solution and the City of Cookeville has the only public sewer system.

The City of Cookeville is a principal provider of recreational services and facilities for Putnam County. Many of the residents in the fringe area of Cookeville already utilize the recreational services and facilities operated and maintained by the city. Existing and planned municipal recreational facilities can adequate serve a substantial area outside the current corporate limits.

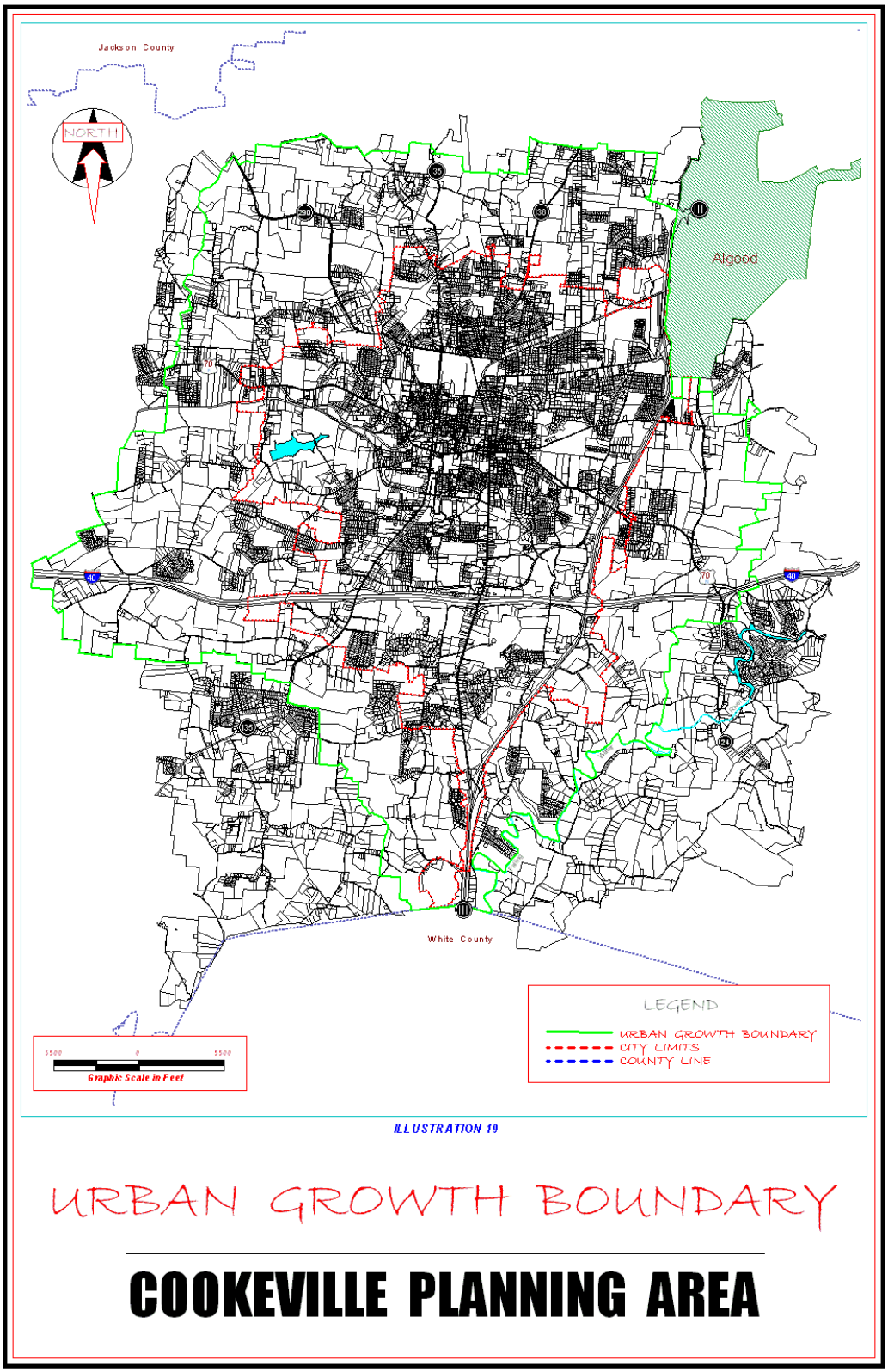
Summary

The City of Cookeville's Departments of Water Quality Control, Electric and Gas are the primary providers of utilities in Putnam County. Each of these departments already serve significant portions of the city's potential growth area. The city is the only utility that has the capability of providing sewer service in the potential growth area. Each of the city's utilities has the capacity for substantial growth.

URBAN GROWTH AREA

Illustration 19 reflects the location of the proposed urban growth area boundary for the City of Cookeville to the year 2020. The area depicted is intended to comply with the provisions of Public Chapter 1101 of 1998. The Urban Growth Boundary was defined utilizing the following criteria: (1) the area is reasonably compact but large enough to accommodate 20 years of growth; (2) the area is contiguous to the existing municipal boundary; (3) the area is reasonably likely to experience growth over the next 20 years, based upon history, economic and population trends, and topographic characteristics; (4) the City of Cookeville is better able than other municipalities to efficiently and effectively provide urban services to the area; and (5) the area reflects the municipality's duty to fully develop the area within the current boundaries, while controlling and managing growth outside those boundaries, taking into account the impact on agriculture, forests, recreation, and wildlife.

ILLUSTRATION 19
URBAN GROWTH BOUNDARY



CHAPTER 9

THE DEVELOPMENT PLAN

INTRODUCTION

A primary concern for most progressive communities is whether they will be able to guide and provide for their future growth and development. The Cookeville Comprehensive Plan, through the Development Plan presented in this Chapter, establishes how the municipality can best accommodate spatial growth during the twenty-year planning period. The Development Plan should serve as a general guide for the City of Cookeville and its urban growth area. It is derived from an analysis made of past events affecting development, governmental structure, natural factors, socio-economic factors, existing land use and the existing transportation system. It is also directly based on several major assumptions, factors, issues and trends.

The Development Plan requires the establishment of development goals reflective of the level of the growth desired. Objectives based on the development goals, and policies to achieve these objectives, are presented in this Chapter. These goals, objectives and policies represent detailed guidelines for future development decisions. These goals, objectives and policies are further reflected in the Future Land Use Concept Plan which is intended as a general guide for physical development decisions.

MAJOR ASSUMPTIONS, FACTORS, ISSUES AND TRENDS

The major assumptions, findings, and trends identified in the preparation of this plan are presented below. These assumptions represent the findings of the previous chapters, and are the forces which frame the goals, objectives, and policies of this plan. The major assumptions, factors, issues and trends identified in this plan that will directly affect the future land use and transportation of the City of Cookeville, are as follows:

1. The local government will continue to support economic and community development and the municipality will continue to have a strong planning program.

2. The municipality currently has funds available, although limited, for capital budgeting and the implementation of a public improvement program.

3. Regional planning authority will allow the municipality to have some control over development in its urban growth area.

4. Natural factors, primarily flooding, sinkholes, and topographic constraints, moderately limit areas for development in the municipality and its urban growth area.

5. Moderate population growth is projected for the municipality and county during the planning period.

6. The elderly sector of the municipality's population is expected to moderately increase as a percentage of the total population.

7. The percentage of the population with incomes below the poverty level is not expected to increase.

8. Retail, public and private services, and manufacturing are projected to be the primary sources of employment for the municipality and county during the planning period.

9. Tennessee Tech University and the Cookeville Regional Medical Center will continue to grow and expand during the planning period.

10. There are no concentrations of dilapidated or deteriorated housing located within the municipality.

11. The municipality has little vacant commercial parcels or floor space, which indicates the need for additional commercial properties.

12. The municipality's CBD has become a viable location for private and public service enterprises and is expected to remain so.

13. The municipality has a limited number of vacant industrial parcels available for development and there are no large areas of undeveloped land available for large-scale industrial development.

14. The municipality is projected to continue to be a primary provider of locations for large-scale commercial and industrial developments.

15. Interstate 40 and State Highway 111 will continue to serve as major transportation routes.

16. The primary transportation problems in the municipality are the lack of a complete circumferential route and an inadequate amount of continuous streets through the city.

17. The municipality's water and sewer treatment capacities will be expanded, if necessary, to meet the projected demands for future development.

18. The extension and upgrading of utility lines will be necessary to accommodate significant growth and development.

19. The municipality does not have enough unconstrained vacant land to satisfy future land use needs.

20. Annexation into the urban growth area is expected to provide some of the necessary lands for future residential and commercial development.

DEVELOPMENT GOALS

To adequately plan and allocate for its future land use, it is necessary that a community establish general developmental goals. In the context of a future land use plan, a goal is a general statement reflecting the objectives in the areas of land development, transportation, and service delivery the community wants to achieve. The overall goal of this land use plan for the City of Cookeville is to provide a quality living and working environment for the residents of the municipality.

The following goals are general statements that the Cookeville Planning Commission believes to be the desires of the citizens regarding the future development of the municipality.

1. To preserve, protect and enhance the quality of life in Cookeville while encouraging a more harmonious and higher standard of development.

2. To maintain the environment and preserve the natural beauty of the Cookeville area.

3. To provide for adequate housing to meet the needs of all residents while ensuring that all residential developments provide pleasant and harmonious living environments, are served by adequate vehicular and pedestrian circulation systems, are served by adequate infrastructure, and are properly related to other municipal land uses.

4. To provide for an adequate supply of goods and commercial services with varied sites suitable for a variety of outlets.

5. To retain and expand the industrial development base to provide for the essential employment needs of Cookeville and Putnam County.

6. To promote and support those activities that are designed to maintain Cookeville as the public and private service center for the Upper Cumberland Region.

7. To provide adequate and efficient public facilities and services, and to provide a diversity of cultural and recreational opportunities.

8. To provide utility services which meet and anticipate the needs of the municipality.

9. To provide an efficient and effective transportation system with appropriate linkages and capacities.

10. To encourage the development of vacant land which has less natural restrictions and which has the necessary infrastructure.

OBJECTIVES AND DEVELOPMENT POLICIES

Both objectives and policies are utilized to achieve the goals established in this plan. Objectives are more specific, measurable statements of the desired goals. Policies represent rules or courses of action that indicate how the goals and objectives of the plan will be realized.

The objectives and policies contained in this document represent the official public policy guidelines concerning land use and transportation matters for decision-making by the City of Cookeville. The policies are presented as guidelines to be followed by developers, builders, neighborhood groups, civic organizations, and other private and public interests engaged in and concerned about growth and development in the community. The policies are also presented so that interested individuals and groups can better anticipate the City's decisions on future matters.

In the following section general growth management objectives and policies are presented. This section is followed by objectives and policies for each of the specific land use categories.

GENERAL DEVELOPMENT AND GROWTH MANAGEMENT

Growth has always been viewed as an inherent component of urban settlements. Most cities understand that growth is necessary for long-term viability and most encourage growth to varying extents. However in more and more communities, the costs and benefits of continued growth have emerged as public issues. There is often hesitation over accommodating further development with its consequences of greater numbers of residents and higher densities, economic expansion, rapid consumption of land, and alteration of the natural environment.

The City of Cookeville fully anticipates growth and understands its importance as a part of those forces that beneficially affect the community's quality of life. At the other end of the spectrum, the policy of growth at any cost has long-term detrimental impacts and is not supported by the municipality. The approach taken by Cookeville will be that of managed growth. To guide general growth and development the following objectives and policies are adopted.

A. Objective - Assure the protection and integrity of the natural environment by implementing measures to minimize the adverse impacts of development to soils, slopes, vegetation, wetlands and other natural features.

   Policies

   1. Ensure that areas less suitable for development, due to natural factors, are developed only when appropriate remedial measures are taken.

   2. Decisions on development proposals shall be based on an analysis of soils, slope, depth to bedrock, and location relative to sinkholes and floodable areas.

3. Where the condition of the land is in doubt, and it appears that an unsuitable condition might exist, the potential developer shall be responsible for undertaking the necessary studies to prove the feasibility of the land to support the proposed development.

4. All development proposals will be assessed for the appropriateness of engineering design and the installation of all necessary drainage facilities and appurtenances.

5. In each drainage basin, the effect of future development on drainage and flooding should assist in formulating land use decisions within that basin.

6. The City should not accept the dedication of drainage facilities or appurtenances which have not been designed and installed in accordance with approved standards and these development policies.

7. The City shall ensure that the pre-development run-off discharge rate of any site is not increased as a result of development. Proposed future developments should not increase flooding potential, substantially alter drainage patterns, or degrade natural water quality.

8. Areas located in a designated floodplain should be developed only in conformance with the National Flood Insurance Program.

9. Major natural drainage ways, including sinkhole retention areas, which are a part of the natural system of dispersing normal flood run-off in any drainage basin, shall not be altered unless in accordance with the provisions of the City of Cookeville and appropriate state and federal regulations.

10. Ground water shall be protected by restricting the use of septic tanks to appropriate soil types and land formations.

11. Development proposals involving soil disturbance shall be in conformance with appropriate sediment and erosion control measures.

12. Areas of excessive slope should be conserved as open space if development would cause soil and/or water degradation, or where the terrain possesses special scenic or recreational value.

13. Areas with slopes in excess of ten percent should only be developed where engineering documentation is available to prove that no adverse affects will occur to housing construction, road stability, drainage and erosion.

14. Mature vegetation, particularly trees, should be protected and replanting should be required where existing vegetation is removed or disturbed during construction.

15. Vegetation should be used as an alternative to man-made devices for buffering, insulation, erosion control and water quality protection, whenever practical.

16. The City shall develop appropriate criteria or measures to ensure the protection of environmentally sensitive and other valuable areas.

B. Objective - Coordination of the demand for public services with the City's capacity to supply them.

Policies

1. All new development, whether public or private, shall have appropriate infrastructure which shall be properly installed at the expense of the developer.

2. All future expansions or extensions of the City's services, facilities, or utilities should be in conformance with an adopted phasing plan based on the Community Facilities Plan and Capital Budget.

3. Services provided by the City should be used as a tool to direct or discourage development in specific directions.

4. Availability and capacity of existing services and utilities should be used as criteria in determining the location of higher intensity uses in the City and in decisions concerning annexation.

5. To aid developers in determining those areas most conducive to development, status reports on the infrastructure system should be routinely updated.

6. Developments with requirements beyond existing levels of police and fire protection, parks and recreation, and utilities shall only be allowed to develop when such services can be adequately provided and maintained.

7. Inventories of existing public and private recreational facilities and of community needs should be used as input for planning future facilities and prioritizing the upgrading of existing recreational areas.

8. Appropriate infill development should be encouraged to enhance existing development and to make more efficient use of existing services and utilities.

C. Objective - Preservation of the City's fiscal stability.

Policies

1. Fiscal decisions concerning capital improvements and expenditures shall be based on a Community Facilities Plan and a multi-year Public Improvements Program and Capital Budget. These documents should be reviewed and updated annually by the Planning Commission and the City Council.

2. The City should establish annexation criteria in a long-range urban fringe study/annexation plan through which it will consider annexation proposals.

3. Urban development proposals that are contiguous with existing development within the City limits, or consistent with the City's phasing and annexation plans, should be encouraged through the extension of services.

4. Services provided by the City should be in conformance with an adopted phasing plan and, with the exception of water, natural gas and electricity, shall not be provided outside the City.

5. The City should participate in the establishment of a permanent source of funds to provide financing for economic development.

6. The City should continuously seek grant and loan opportunities to assist in the financing of infrastructure and capital facility improvements.

7. The City should encourage the preservation of the tax base through the practice of sound land use decisions.

D. Objective - Protection and enhancement of present and future livability.

Policies

1. The City should establish livability standards or criteria for assessing the impacts of development projects on the continued livability of the community. For growth management these standards or criteria should assess:

   a. Environmental impacts such as water quality degradation, destruction of wetlands, etc.

   b. Social impacts such as public safety, availability of community services, etc.

   c. Economical and fiscal impacts such as budget constraints, job creation or loss, etc.

   d. Impacts to transportation systems and public services and facilities, such as traffic volumes, water production and treatment capacity, sewer treatment capacity, etc.

2. Land use, site planning, and urban design criteria should be utilized to promote pleasant, functional and understandable relationships between land uses.

3. Planning for community facilities and services should be based on the principal of maintaining or increasing the current levels of service provision.

4. Community development should concentrate on ways to encourage young people to remain in Cookeville/Putnam County to live and work.

RESIDENTIAL

To ensure the most appropriate development of existing and future residential areas in Cookeville and its urban growth area, the following developmental objectives and policies are adopted:

A. Objective - Provide for a variety of housing types and densities for a wide range of family incomes, sizes and life-styles while protecting and maintaining existing neighborhoods.

Policies

1. The City should promote the location of new residential developments in environmentally safe and pleasing areas.

2. The City should allow housing types ranging from single-family structures to multi-family developments, including mobile homes properly located in mobile home parks.

3. High density infill developments should be permitted only in locations which are comparable with surrounding residential densities.

4. Land use controls should be used to foster a variety of housing types compatible with the natural landscape.

5. The City should encourage and concentrate high-density housing development in the central city area and along major traffic corridors with access to retail business, pedestrian amenities, cultural activities, schools and parks.

6. The City should encourage low-density housing along local streets within proximity to service centers, which are buffered from excessive noise, traffic, and conflicting development.

7. Higher density residential uses should locate in planned unit developments or in close proximity to existing higher density developments.

8. In response to erosion and drainage considerations, hillside or slope developments should reflect design considerations and densities to minimize negative impacts.

9. The City should encourage the rehabilitation of existing residences, which can be purchased by low and moderate-income residents.

10. The City should discourage the conversion of single-family dwellings to multi-family dwellings.

11. The City should encourage the preservation and revitalization of older neighborhoods.

12. The City should encourage sound development in suitable areas by maintaining and improving transportation facilities.

13. New residential development should be designed to encourage the neighborhood concept and should be situated to be easily accessible to collector or arterial status streets.

14. Transitional land uses or areas (linear greenbelts) or other design elements should be provided between residential neighborhoods and commercial areas in order to enhance the compatibility of land uses.

B. Objective - Ensure that new residential developments meet appropriate standards and guidelines.

Policies

1. All residential subdivisions, multi-family developments and mobile home parks shall be designed in compliance with appropriate site development standards.

2. The City should ensure that the existing housing stock continues to be maintained and that new residential construction is developed to appropriate standards and guidelines.

3. New residential development shall not be allowed in those areas where infrastructure is unavailable or inadequate to support such development.

4. Residential developments shall be designed so as to minimize the impact from contiguous incompatible uses and to enhance the aesthetics of such developments.

COMMERCIAL AND PRIVATE SERVICES

Although the Cookeville Central Business District (CBD) is no longer the primary location for commercial and private service development, it remains as a focal point for the municipality. Like many older CBD's, this area has experienced some structural deterioration, however; the Cookeville CBD has very little vacant floor space. This can be partly attributed to an influx of private services, especially professional services, to the downtown area. Furthermore, in recent years there have been significant efforts to restore the downtown area.

Over the past several decades the City of Cookeville has experienced significant commercial and private service development along major thoroughfares branching out away from the downtown area. Corridors of commercial development first located on Spring and Broad Streets, then to Jefferson and Willow Avenues, and more recently to Interstate Drive, Jackson and Neal Streets. Many of these thoroughfares, especially Jefferson and Willow Avenues, have unfortunately developed primarily in a strip commercial fashion with excessive entrance and exit points. Due to this type of development, traffic congestion has become a noticeable problem.

The vital commercial areas of the community should be protected and enhanced to help ensure their continued development in a planned environment which will strengthen the economy of the entire county. To guide the continuation and expansion of these essential commercial activities, the following objectives and policies are adopted:

A. Objective - Take appropriate measures to ensure that the City of Cookeville remains as the center for commercial and private service land uses in Putnam County.

Policies

1. Future commercial developments and redevelopments shall be in compliance with a comprehensive plan for all commercial growth and development.

2. In conjunction with the Chamber of Commerce, the City should recruit and retain business and service outlets that fulfill local market demands.

3. The City should encourage and support the expansion of existing commercial areas and those that will result in the consolidation of commercial activities at central locations.

4. The City should promote the CBD as a public and private services focal point of the community.

5. The City should limit commercial services in the CBD to low intensity uses and low traffic generators.

6. The City should encourage the adaptive reuse of existing structures in the CBD.

7. The City should expand the off-street parking options within the CBD area.

B. Objective - Ensure that new commercial developments meet appropriate standards and guidelines.

Policies

1. All commercial developments shall be designed in compliance with appropriate site development standards.

2. Commercial development shall be approved in only those areas where infrastructure is available and adequate to support such development.

3. Commercial development should be designed so as to minimize negative impacts to the existing transportation system.

4. Strip commercial developments should be discouraged in favor of cluster developments with limited entrance and exit points.

5. Commercial uses which are high intensity traffic generators shall be located away from the CBD and on major collector or arterial status roads.

6. All new large-scale commercial developments shall be located on frontage or access roads with controlled ingress and egress points, when feasible.

7. All commercial and private service developments shall be provided with an adequate number of off-street parking spaces.

8. Commercial developments should be designed so as to minimize negative impacts to residential developments and to enhance the aesthetics of such developments.

9. To the extent feasible, landscaping or other screening shall be provided between commercial and residential land uses.

10. Neighborhood commercial areas should be provided to make convenience goods and services available to residential neighborhoods.

INDUSTRIAL

The City of Cookeville is projected to remain as the primary location in Putnam County for manufacturing and industrial uses. Coordination between the municipal officials and the Chamber of Commerce has resulted in the location of numerous industries in the municipality. There is a need for additional industrial lands as there are only approximately 150 acres of land currently available in the municipality for manufacturing/industrial development. Efforts should also be taken to ensure that existing industries are retained and are able to expand when feasible.

To guide the continuation and expansion of these industrial activities, the following objectives and policies are adopted:

A. Objective - Retain the existing industrial base, provide areas for light industrial development within the Lemon Farris Industrial Park, and secure additional land for industrial development.

Policies

1. The City should support improvements in the local economy by providing new industrial site locations and maintaining and improving existing industrial site locations.

2. Existing industrial parks should be provided adequate service and be expanded as needed, new industrial parks and sites should be planned and developed, and adequate public services should be provided to private industrial parks.

3. To provide for additional industrial land and employment in Cookeville and provide city services to those industrial activities, the City should adopt a policy to annex additional industrial properties where it is determined that such annexations are feasible.

4. The City Council and Planning Commission should support appropriate street and traffic improvements at locations suitable for the expansion of existing industrial areas.

5. Public officials should cooperate with, and actively support, the Putnam County Industrial Board and the Chamber of Commerce in their efforts to attract industrial prospects and to retain and promote the expansion of existing industries.

6. Based on locally developed criteria, industrial land uses known or suspected of having harmful impacts on the health, safety, and welfare of people, and those activities and uses which would degrade, retard, or otherwise harm the natural environment, or the economic potential of the community, shall be discouraged from locating in the City.

B. Objective - Provide appropriate standards and guidelines for new industrial development and for expansion of existing industrial uses.

Policies

1. All industrial developments shall be designed in compliance with appropriate site development standards.

2. Industrial uses should locate near transportation facilities that offer the access required by the industry. Such uses should not be allowed to create demands that exceed the capacity of the existing and future transportation network.

3. Industrial development should locate within the City consistent with the phasing plan for infrastructure, where the proper sizing of facilities such as water, sewer and transportation has occurred or is planned.

4. To the extent feasible, landscaping or other screening shall be provided to reduce the conflict and soften the impact between industrial uses and other land uses.

PUBLIC AND SEMI-PUBLIC

Even though public and semi-public facilities usually only consume a relatively small percent of an area's total development, these facilities are extremely important land uses within a community. This is especially true for the City of Cookeville as the county seat and primary provider of services in Putnam County. These uses should be convenient to the population and enhance the community's appearance, while at the same time creating the least possible conflict with adjacent land uses.

It is imperative that during the site design process for public and semi-public facilities, particular attention should be paid to the following items: the location of buildings in relation to parking and service areas; the relationship of buildings to existing and proposed streets; adjoining land uses; and the natural beauty of surrounding areas. The objectives and policies to be used as guidelines for public and semi-public uses are as follows:

A. Objective - Provide adequate and efficient public services and facilities which meet appropriate standards and guidelines.

Policies

1. The City should prepare a Comprehensive Community Facilities Plan based on local standards and locational criteria.

2. Public facilities and services should be improved and expanded in accordance with an adopted Public Improvement Program and Capital Budget.

B. Objective - Provide a diversity of quality cultural and recreational opportunities.

Policies

1. Decisions concerning the provision of recreation facilities shall be guided by a Community Facilities Plan for such facilities, and shall be consistent with the Capital Budget. The Leisure Services Department's Master Plan should be used to direct detailed attention of both recreational facilities and programs.

2. The City should promote the joint use of parks and other public facilities, especially schools.

3. The City should enhance the opportunities for passive recreation through the creation of a city-wide greenway system which includes hiking and biking trails.

4. Community and neighborhood parks should be developed and appropriately located within the City.

5. The City should maximize the use of public recreational land through close coordination with federal, state and local officials.

6. The City should promote efforts to document, preserve and protect historic sites and structures.

7. The City should recognize the cultural contributions of religious, ethnic and educational institutions, and coordinate their efforts with publicly supported cultural institutions, events and performances.

8. The City should support and encourage cultural festivals as vehicles for bringing the arts to the public at low cost.

UTILITIES

Land development without the extension of adequate utilities is costly to the general public. The City of Cookeville is fortunate that it has the capability through its Water Quality Control, Electric, Natural Gas, and Public Works Departments to control the extension of utilities in most of its planning region. In order to achieve proper development and facilitate saving public funds, it is extremely important to coordinate the extension of utilities with the community's development plan. Therefore, the following objectives and policies should be adopted by all agencies responsible for the operation or extension of public utilities:

A. Objective - Provide adequate and efficient public utility facilities.

Policies

1. To meet future needs and provide for future growth, long range plans for expansion and enhancement of public utility facilities shall be developed by each of the applicable municipal departments and shall be incorporated in the municipality's Community Facilities Plan and capital budget process.

2. All new development should have adequate utilities which shall be properly installed at the expense of the developer.

3. The City should ensure that the municipal water, sewer, electric, natural gas, and storm sewer systems are adequate to meet current and future needs.

4. The health of residents shall be protected through the production of State approved potable water and the safe and efficient collection and treatment of wastewater.

B. Objective - Provide appropriate standards and guidelines for utility facility improvements and extensions.

Policies

1. Adequate utilities should be extended into urbanizing areas on a priority basis with a rate differential between such areas and the municipality. These extensions shall meet health and safety standards.

2. Water and sewer lines of adequate size and location shall be required in all new developments and redevelopments.

3. Underground stormwater drainage systems, where appropriate, should be required in new developments and redevelopments wherever feasible.

4. The use of underground electrical, telephone and cable television utilities shall be required in new developments.

5. The location of utility structures for storage of equipment, pump stations or similar structures should be adequately buffered and landscaped so as not to detract from the surrounding area.

6. The water distribution system should be periodically evaluated to ensure that water lines are of adequate size to provide adequate pressure for fire fighting, and that a suitable number of fire hydrants are present in all developed area.

7. The water quality and facility guidelines set forth in the 201 Facility Plan shall be followed.

8. The City should require appropriate maintenance and repair of any privately controlled drainage facilities or appurtenances which tie into any portion of the public or other existing natural drainage systems.

VACANT LAND AND OPEN SPACE

The land use survey indicated that there were 4,542 acres of vacant land in the City of Cookeville. As the community grows, a significant amount of this land will be pressed into urban development. Unfortunately, the largest portion of this land either cannot be developed or would be cost prohibitive to develop due to natural factors. In addition, some of this vacant land would best be utilized as open space. To guide the future development of the vacant lands in the City of Cookeville and its projected growth area, the following objectives and policies are adopted:

A. Objective - Ensure that adequate open space is provided in the municipality to enhance its aesthetic quality.

   Policies

   1. Appropriately located public open spaces and general recreational uses should be provided to serve the local residents as well as visitors. These areas should be readily available and designed to serve all age groups.

   2. The City should ensure that adequate amounts of open space areas are available for future populations.

   3. Open space should be included as a requirement to serve every major development.

   4. Places of rare natural beauty and areas of historic interest should be preserved and maintained.

   5. All publicly-owned land should be examined for its potential open space or recreational use before being sold or disposed of by the City.

B. Objective - Ensure that appropriate standards and guidelines are followed for development of vacant land and for the provision of open space.

   Policies

   1. Public support and approval of development proposals that result in the conversion of prime farmlands should be reserved for those developments consistent with this plan and required for urban growth and development.

   2. Areas of excessive slope should be conserved as open space, when possible, if development would cause significant soil and/or water degradation, or where the terrain possesses special scenic or recreational value.

   3. Vegetation should be used as an alternative to man-made devices for buffering, insulation, erosion control and water quality protection.

   4. Filling and excavation in floodplains shall only be allowed when consistent with National Flood Insurance Program regulations and allowed only after careful review of appropriate alternatives.

   5. Mature vegetation, especially along stream banks should be protected from indiscriminate removal in order to enhance the aesthetic value of the landscape as well as to control erosion.

6. Consistent with National Flood Insurance Program regulations, the City shall prohibit any development in areas that have been officially designated as floodways.

7. The City should encourage light recreational and open space uses such as greenbelts within designated floodplains.

8. The City shall develop appropriate criteria and measures to ensure the protection and enhancement of environmentally sensitive and other valuable areas.

TRANSPORTATION

The future transportation system in Cookeville and its projected growth area will be affected by a number of factors. These factors include the existing street pattern, major impediments to traffic, location of major traffic generators, parking needs, growth trends, construction of new thoroughfares, and the location preferences of new development. Although the municipality cannot control all the factors that will influence its future transportation system, it can provide some direction. The following objectives and policies are presented as a guide to achieving an adequate and efficient future transportation system:

A. Objective - Provide a transportation system that will adequately meet the future needs for growth and development.

   Policies

   1. All new development, whether public or private, should have an adequate transportation system which shall be properly installed at the expense of the developer.

   2. All new major streets should be located in a manner that will minimize disruption to neighborhoods, open space-recreational areas, or commercial areas.

   3. All segments of the transportation system should be designed and located to meet future as well as present demands.

   4. Wherever possible, off-street parking shall be required for existing land uses. All new land uses, except for commercial and private service uses in the CBD, shall be required to provide off-street parking facilities.

   5. On-street parking for existing uses shall be permitted only where adequate street widths are available and where such parking will not reduce the current level of service of the street.

   6. Sidewalks should be extended throughout the City and should be maintained in good repair.

   7. Sidewalks shall be required in new residential development.

   8. Storm sewers and curbs and gutters shall be encouraged on all new streets.

   9. Older streets in the City should be upgraded or improved through a street improvements program.

B. Objective - Provide appropriate standards and guidelines for the construction of new streets and other transportation facilities.

   Policies

   1. Streets should be related to the topography and designed to minimize the points of traffic conflict and turning movements.

2. All new streets and other public ways shall be designed to incorporate storm water drainage systems that are adequate in size to handle runoff from anticipated developments.

3. All streets and other public ways shall be designed so as to provide the least interference with natural drainage ways.

4. All new streets and other public ways shall be designed and located in a manner that offers the maximum protection from flood and erosion damage.

5. New streets should be designed to incorporate appropriate landscaping to heighten the aesthetic and functional appeal both to motorist and surrounding residents.

6. Street signage and other safety features should be required at the time of development.

THE FUTURE LAND USE CONCEPT PLAN

The goals, objectives and policies of the Development Plan are visually represented in the Future Land Use Concept Plan. It is based on the same factors from which these goals, objectives and policies were derived including natural factors, existing land use patterns, and the existing transportation system. The Future Land Use Concept Plan reflects a decision-making process culminating in a desired development pattern for the municipality. It is intended for use in conjunction with the goals, objectives and policies to form a framework to guide future land development decisions. These elements provide the mechanisms for coordinating and promoting different types of development based on the desires of the municipality while conserving and protecting the quality of life and natural environment.

The Future Land Use Concept Plan for Cookeville and its urban growth area was created by a series of overlays utilizing the Major Street Plan as a base. The overlays reflect the existing parameters and patterns of development including the natural factors discussed in Chapter 3, the population and employment projections presented in Chapter 4, and the existing land use, utilities and transportation facilities analyzed in Chapter 5. With the Major Street Plan as the basis, locational and spatial patterns for residential, commercial, and industrial land uses were identified. This technique also allowed the municipality to make decisions where a mixture of land uses was suggested by the overlaying process. While several conceptual land use and spatial patterns were possible, Illustration 20 represents the municipality's choice of conceptual patterns based on local needs and desires in conformity with adopted policies.

Future Land Use Classifications

The spatial patterns of land use depicted on the Future Land Use Concept Plan are based on several land use classifications. These land use classifications are defined as follows:

Rural Residential – Open space, agricultural land and single-family residential development at a density of two dwelling units per acre or less.

Low Density Residential – Single-family residential development at a density of between two and four dwelling units per acre.

Mixed Density Residential – Single-family, two-family and multi-family residential development at a density of between four and eight dwelling units per acre.

High Density Residential – Multi-family and manufactured residential development at a density of greater than eight dwelling units per acre.

Local Commercial – Commercial, public and private service uses of a neighborhood – scale (market area of one to two miles) or community-scale (market area of two to five miles).

Regional Commercial – Commercial and private service uses of a regional-scale.

Commercial/Residential Mixed Use – Commercial and private services of a neighborhood or community-scale and single-family, two-family and multi-family residential developments at a density of between four and eight dwelling units per acre.

Industrial – Light to medium impact industrial developments and wholesale and distribution uses.

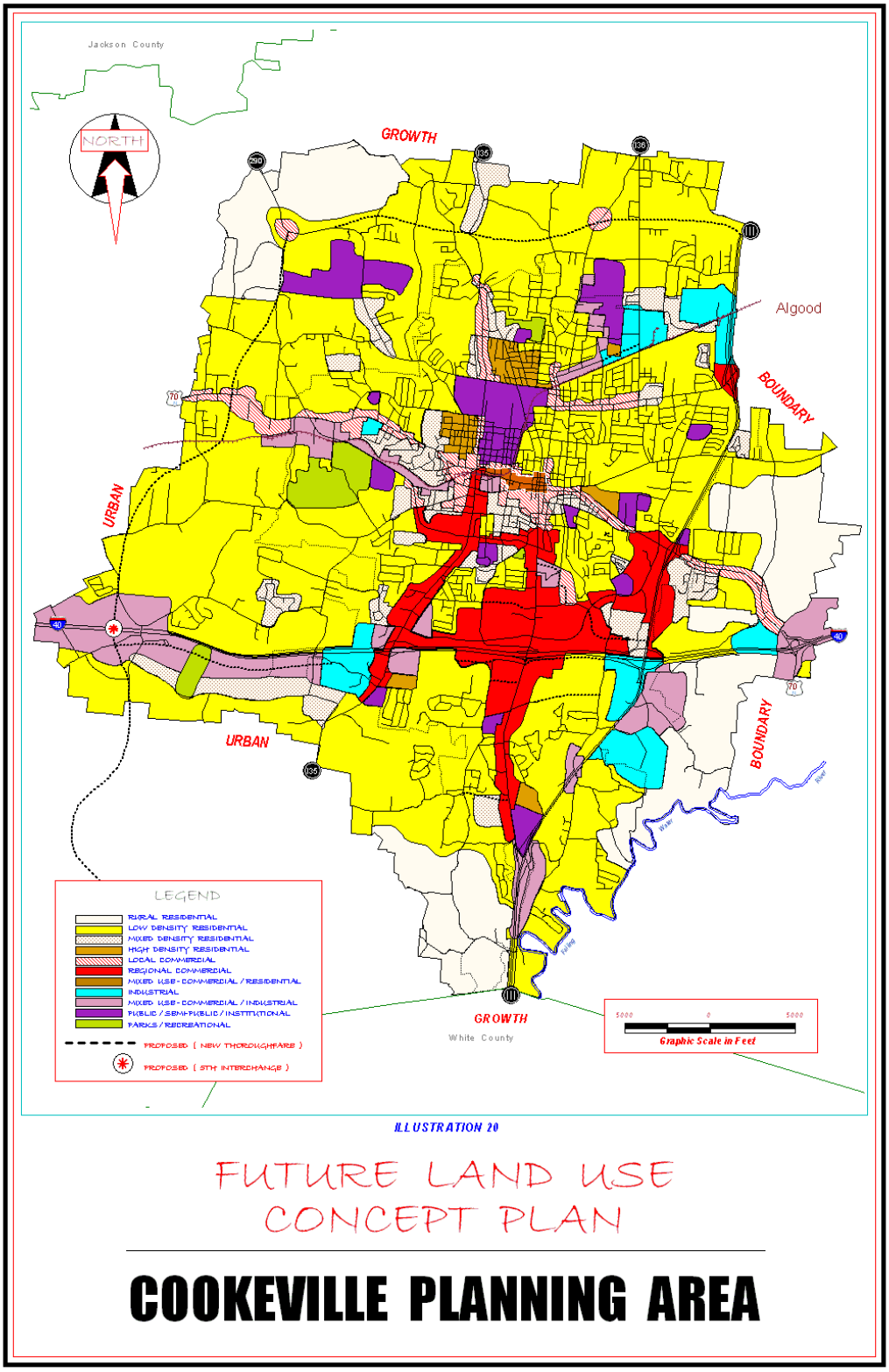
Commercial/Industrial Mixed Use – Commercial and private service uses of a regional nature and light industrial developments.

Public/Semi-Public/Institutional – Community facilities, governmental and quasi-government developments and related private service uses.

Parks/Recreational – Public parks and recreational facilities.

ILLUSTRATION 20

FUTURE LAND USE CONCEPT PLAN



Conceptual Land Use and Spatial Patterns

Three courses of action, reflecting development policies identified in this chapter, influenced many of the land use and spatial concepts of the Future Land Use Concept Plan. First, most long-range development, particularly low-density residential, will have to occur in the unincorporated urban growth area where a limited quantity of suitable land is available, and where utilities may be feasibly provided. Second, limitations on the availability of utilities will encourage development and redevelopment on the limited supply of suitable land currently in the municipality. Finally, allowing some mixture of compatible land uses in new developments and re-developments will make the most efficient use of the limited land supply and existing utilities.

A major goal of the Cookeville Future Land Use Concept Plan is to preserve the quality of life in the municipality by protecting the established residential areas and by identifying areas for future residential development. Low to moderate density residential development is indicated on the Concept Plan where such developments represent the existing dominant pattern. It is intended to maintain these areas in their present densities with close proximity to commercial and employment areas yet buffered from excessive noise and traffic and from incompatible developments. Low to moderate density residential areas are the predominant land use in the municipality and the unincorporated urban growth area and it is intended that these areas will be protected and preserved.

In keeping with adopted policies, higher density residential developments are indicated along major traffic corridors and in close proximity to the primary commercial/employment/educational areas. These areas are also located in the vicinity of existing higher density residential areas. A large higher density residential area is depicted north of 12th Street. This area has direct access to Tennessee Tech University. Additional areas for higher density residential use are located along Willow Avenue, U.S. Highway 70N, and South Jefferson Avenue.

Maintaining and expanding the importance of Cookeville as the commercial and private service hub of the Upper Cumberland Region is a primary goal of this plan. The principal commercial areas along Willow and Jefferson Avenues and along East 10th and Spring Streets are expected to continue to be prime locations for commercial and private service development and re-development. It is anticipated most of the new commercial development will occur within corridors along East Neal Street/Old Kentucky Road, West Jackson Street, Bunker Hill Road, and along South Jefferson Avenue south of Interstate 40.

A regional commercial/light industrial area is identified in the urban growth area in corridor along a westward extension of Gould Drive to a proposed Interstate 40 interchange west of Mine Lick Creek Road. A similar such area is depicted in the vicinity of the Interstate 40 - Highway 70N intersection. Areas of commercial/private service development of neighborhood and community-scales are located in the urban growth area in corridors along Highway 70N and at intersections of existing and proposed major thoroughfares.

Another goal reflected in the Cookeville Future Land Use Concept Plan is to maintain Cookeville as the public service and cultural center of Putnam County and the region and the CBD as the center of such activity within the municipality. The expanded CBD area of mixed-use development will include transitional residential living, retail specialty shopping, governmental services, financial services, cultural activities, and business and professional services. Development standards and policies in this area will favor a compact urban business area with centralized parking. The area is also intended to serve pedestrian clientele and central city residents.

The goal of maintaining the prominence of Cookeville as a provider of public services is further addressed in the Concept Plan by an expansion of the medical/commercial/private service area around the Cookeville Regional Medical Center. The Concept Plan depicts an expansion of this area to the west. By connecting this area with Willow Avenue a direct route from a major arterial to the hospital can be provided.

It is anticipated that the City of Cookeville will continue its role as the primary provider of industrial development in Putnam County. The three existing major industrial areas in the city, which are situated in the northeast, southeast, and southwest sections of the municipality, are expected to continue as principal locations for new and expanded industrial development. Of these three existing industrial areas, the Lemon Farris Industrial Park has the greatest potential for new industrial development.

In the unincorporated urban growth area two areas of light industrial development are identified. The first is located along a proposed extension of Gould Drive in a westward direction to the proposed location of an Interstate 40 interchange in the vicinity of Mine Lick Creek Road. The second is located northwest of the intersection of Interstate 40 and Highway 70N. The development of both of these areas is dependent upon the provision of the necessary infrastructure.

The final feature of the Future Land Use Concept Plan is the identification of park and recreation lands. In addition to the existing recreational facilities located within the city limits, a new park area is identified off Bunker Hill Road at the Ensor Sink. In the urban growth area a site for the future development of park and recreational facilities is identified along Cane Creek east of Mine Lick Creek Road. Although not specifically identified on the Concept Plan, it is further anticipated that smaller neighborhood and community-scaled parks will be located in areas identified for residential development.

CHAPTER 10

PLAN IMPLEMENTATION

INTRODUCTION

In this Chapter several methods for implementation of the objectives and policies developed in this plan are reviewed. Many of these methods for implementation are already being utilized by the City of Cookeville. The Planning Commission and the City Council may need to examine the effectiveness of current practices or regulations in achieving the stated objectives and policies. Where the identified methods are not currently being used, the municipality should consider taking the appropriate steps to do so.

Also, in this Chapter an Implementation Schedule is presented. It is intended to provide specific strategies for implementing the objectives and policies recommended in this plan. The Implementation Schedule proposes individual strategies for each of the specific land use categories, establishes time frames for completion, and identifies the parties responsible for implementation.

METHODS FOR IMPLEMENTATION

There are many types of programs available to a municipality for plan-implementation, including construction of physical facilities, provision of services, regulation of land use and development, project review, and fiscal policies. Several specific methods of plan implementation are identified for Cookeville to utilize in the execution of this plan. Each of these methods are reviewed within this section.

Planning Commission Project Review

Under Tennessee Code Section 13-4-104, after the adoption of a plan, no public improvement project can be authorized or constructed in the municipality until and unless the location and extent of the project have been submitted to the Planning Commission for its review. This review authority enables the Planning Commission to ensure that all public improvement projects are in compliance with the Comprehensive Plan.

The Cookeville Regional Planning Commission generally has been given the opportunity to review major public improvement projects prior to inclusion in the municipal budget. This should be an annual step in the City's budgetary process and should be complemented by the preparation of a public improvements program. All utility, public works, drainage, and transportation projects should be reviewed by the Cookeville Regional Planning Commission prior to incorporation into the municipality's Public Improvement Program and Capital Budget.

Regional Planning Authority

The Cookeville Planning Commission has been designated by the State as a municipal-regional planning commission. This designation gives the City planning jurisdiction over a region extending beyond its corporate limits. Within its Planning Region, the Cookeville Planning Commission has the authority to develop general plans for development, to review and approve any subdivision proposals, and to review and comment on any public capital improvements. Extra-territorial zoning can also be enacted within the Planning Region. In some portions of the Planning Region the City has already extended its corporate limits beyond the original Planning Region boundary. Therefore it would be beneficial for the City to request that the Tennessee Department of Economic and Community Development revise the Cookeville Planning Region so that it corresponds with the Urban Growth Boundary.

Zoning

Zoning is a legal mechanism that can assist the municipality in implementing a future land use plan. A zoning ordinance is designed to regulate the type and intensity of land use. It divides a community into specific districts corresponding to the intended use of the land as guided by the policies of the future land use plan. For each district, zoning regulates the location, height, bulk, and size of buildings and other structures, the percentage of the lot that may be occupied, the sizes of yards, courts and other open spaces, and the density of population. Zoning can assure the proper location of residential, commercial, and industrial uses. It can protect street right-of-ways so that future widening is feasible. It can also prohibit overcrowding of building lots. In addition, zoning can help stabilize property values and can help prevent deterioration of neighborhoods.

Zoning regulations were first adopted by the City of Cookeville in 1949 through Ordinance No. 388. The current Zoning Code was adopted in 1988 by Ordinance No. 88104. This code needs to be updated and revised to implement the policies presented in this plan. Specific revisions that are necessary include the provision of general landscaping requirements and the modification of the residential zoning requirements to provide further protection for residential property owners while at the same time increasing housing alternatives. There is a need for Historic Zoning to preserve the historic and cultural properties of the municipality. Also extra-territorial zoning for the unincorporated portions of the Cookeville Planning Region should be given consideration at some point during the planning period.

Subdivision Regulations

Subdivision regulations, used in a coordinated manner with zoning, are another legal mechanism to carry out the recommendations of the Comprehensive Land Use Plan. Like zoning, these regulations control private development. They serve as guidelines for the conversion of raw land into building sites. Subdivision regulations provide the guide by which a Planning Commission can review all proposed plats for subdivision in an equitable manner. These controls are necessary if sound, economical development is to be achieved. Through enforcement of these regulations, the design and quality of subdivisions will be improved, resulting in better living conditions and greater stability of property values for the individual property owner. Such controls over land subdivision ensure the installation of adequate utilities that may be economically serviced and maintained. These controls are also used in providing a coordinated street system and to ensure that sufficient open space for recreation and other public services is provided.

Subdivision regulations were first adopted by the Cookeville Regional Planning Commission in 1961. The current regulations were adopted in 1990. These regulations were updated and revised in 1999 to implement the policies presented in this plan. Major revisions include requirements for the construction of sidewalks and for the installation of underground utilities. The revised Subdivision Regulations should be adopted in early 2000.

Codes Enforcement

There are various types of codes that municipalities can adopt to ensure that construction standards are sufficient to protect the health and safety of occupants. The housing code is designed to ensure that existing dwellings are safe, sanitary, and fit for human habitation. Other codes, such as building, electrical, fire, gas, and plumbing codes, provide minimum standards for the construction of new buildings and facilities, and the alteration of existing structures and facilities. These codes are uniform in character and are applied to the municipality as a whole.

A system of codes functions only if accompanied by an inspection system. Code enforcement ensures the adequacy of new residential, commercial and industrial structures while also detecting and preventing the deterioration of existing facilities through periodic inspection. By reducing blight, property values become more stable and tax bases protected.

The City of Cookeville has adopted the Southern Standard Building Codes for construction. The municipality, through its Planning and Codes Department, employs four certified building inspectors and a codes enforcement official. Specific emphasis should be directed toward the enforcement of all existing codes.

Utility Extension Policies

Another significant tool for effective land use planning is the control over the extension of municipally owned and operated utility services. Utility extension policies can be used for controlling the location and timing of development in a rational, coherent and efficient fashion. Since utility services, such as water and sewer, are so important to any major development, the refusal to extend such services into an area generally assures that only limited development can occur.

Within the City of Cookeville and its planning region, the extension of utilities is generally the responsibility of the developer. The municipality generally does not extend sewer service outside its corporate limits. Water, electricity, and natural gas are provided to limited services area outside the corporate limits at an additional cost to the customer.

Public Improvements Program And Capital Budget

A public improvements program and capital budget provides the means through which the local government can effectively undertake a properly planned and programmed approach toward utilizing its financial resources in the most efficient way possible to meet the service and facility needs of the community. The public improvements program identifies recommendations for capital improvements, estimates their costs, and identifies possible financing alternatives. The capital budget is a method of developing and scheduling a way to finance the projects identified in the public improvements program.

The City of Cookeville does not currently follow a multi-year public improvements program and capital budget. It is necessary that this important planning tool be developed and kept up to date.

Infill Development

Utilization of existing, developable vacant land within a municipality is often an overlooked mechanism to implement a future land use plan. In most cases, these areas tend to be served by existing infrastructure such as streets, water, sewer, electric and gas; thereby eliminating normal costs associated with additional development. An abundance of vacant developable land is a costly luxury to a municipality. It results in under utilization of infrastructure due to low density development. Infill development of serviced areas will expand the local tax base while better utilizing the infrastructure system.

Although there are only limited areas where an infill strategy can be fully utilized in the City of Cookeville, it is recommended that a vacant land and resource development study be completed. This study should identify those areas available for immediate development and those needing certain services, facilities, or zoning amendments. A primary purpose of this study should be to promote infill development. Targeting vacant land areas that need services or facilities in the public improvements plan and capital budget will help to accomplish the infill strategy.

Annexation

Historically, as the population of municipalities increased, so has that of the suburban fringe areas that surround them. Residents and businesses are attracted to these fringe areas primarily because they can reap many of the benefits which municipalities provide without having to bear the costs. Serious consequences such as public health hazards, substandard services, wasteful duplication of services, inequitable distribution of tax burdens and benefits, and undesirable development resulting from non-existent or poor planning and zoning controls, can develop from a failure to annex.

Municipalities can best plan for and deliver the urban services required by fringe areas through annexation. If a municipality fails to expand its corporate limits, development will locate in the urban fringe where it will contribute little to the finances of the municipality, while increasing pressure on the facilities and services provided by the municipality.

Annexation has been an underutilized growth mechanism for the City of Cookeville. To ensure orderly development and future growth through annexation, it is recommended that the Planning Commission prepare a Fringe Area Study. This study should examine the unincorporated territory within the Urban Growth Boundary, with the intent of identifying those properties with the highest feasibility for annexation. It should include a multi-year annexation schedule which can be considered for implementation by the City Council.

Citizen Participation

Citizen participation is an important factor in determining the success of a land use plan. An informed citizenry that is willing to work to achieve the goals, objectives, and policies set forth in this plan can be a tremendous asset. Citizens can offer support for programs designed to achieve community goals. Successful citizen participation can be achieved through a public education program designed to inform the community of the various purposes and reasons for the actions of both the Planning Commission and the City Council. Specific efforts should be taken to obtain input from the general public through organizational public meetings, public hearings, and surveys. News articles should also be utilized to educate the public regarding the work activities of the Planning Commission.

The municipality recognizes the need for citizen participation in the planning process. An example of this is the 2020 Vision Workshops held by the City in 1998. Many of the goals and objectives identified by the focus groups in 1998 have been incorporated into this Plan. Efforts should be made to ensure continued public participation in all aspects of implementing this plan.

Local Leadership

The Cookeville City Council bears most of the responsibility for the implementation of this land use plan. As the municipality's decision makers, they have the authority to adopt appropriate implementation strategies that will fulfill the goals, objectives and policies developed in this Plan. It is important that the legislative body maintain a close working relationship with the Planning Commission so that the planning process is properly coordinated.

IMPLEMENTATION SCHEDULE

The Cookeville Comprehensive Future Land Use Plan is an advisory document intended to serve as a guide for the development of the municipality over the next twenty years. Specific strategies for policy implementation are necessary if the goals and objectives of this Plan are to be achieved. The Implementation Schedule provides an outline of the methods for achieving the goals and objectives and implementing the policies established in the Development Plan. It presents individual strategies for each of the specific land use categories, establishes time frames for completion, and identifies those with primary responsibility for plan implementation.

The recommended time frame for the implementation of each of the strategies is indicated by one-two years, three-six years, or seven + years periods. These time frames are subject to revision depending upon changes in priorities as determined by the City Council. Programs that are continuous in nature have been classified as "on-going".

Many of the tools can be implemented by assigning existing municipal staff, addressing issues with legislation, or continuing existing programming. Only as these program items are selected from this Implementation Schedule by the Cookeville City Council, in consultation with the Municipal Departments, will a detailed financial analysis and work schedule program be drafted.

Perhaps the most important item called for in the Implementation Schedule is the preparation of a Community Facilities Plan and Public Improvements Program. Once completed the Community Facilities Plan and Public Improvements Program should be reviewed every two years and used in the preparation of the municipality's operational and capital budgets. Continuous monitoring of the implementation of the Development Plan will be carried out principally through an annual review of departmental work programs. Funding for specific projects and strategies will be evaluated and updated on a regular basis.

The following implementation strategies are intended as tools to carry out the development policies established in Chapter 9. The municipality should ensure that the specific development policies are addressed in the applicable implementation strategies.

CITY OF COOKEVILLE COMPREHENSIVE FUTURE LAND USE PLAN IMPLEMENTATION SCHEDULE				
General Development and Growth Management	**Policy Reference**	**Time Frame**	**Primary Responsibility**	**Comments**
Prepare and implement a Comprehensive Drainage Manual and Plan.	A.1., A.2., A.3., A.4., A.5., A.6., A.8., A.10., A.11.	3-6 years	Public Works, Planning and Codes, Planning Commission	This is a strategic plan and incorporated by reference into the Subdivision Regulations and in site plan provisions of the Zoning Code. These should also apply to all public projects.
Prepare and implement a Comprehensive Stormwater Management Plan.	A.1., A.2., A.3., A.7., A.8.	3-6 years	Public Works, Planning and Codes, Planning Commission	This is a strategic plan and incorporated by reference into the Subdivision Regulations and in site plan provisions of the Zoning Code. These should also apply to all public projects.
Prepare and implement erosion and sediment control regulations.	A.1., A.2., A.3., A.8., A.13., A.14., A.15., A.16.	1-2 years	Public Works, Planning and Codes, Planning Commission, City Council	Incorporated by reference into the Subdivision Regulations and in site plan provisions of the Zoning Code. These should also apply to all public projects.
Review the floodplain management regulations and revise as necessary to comply with current FEMA regulations.	A.1., A.2., A.8., A.9.	Subsequent to revisions in the National Flood Insurance Program	Planning Commission, City Council	Incorporated by reference into the Subdivision Regulations and the Zoning Code.
Review the zoning code and subdivision regulations and revise as necessary to ensure that measures are included to minimize the adverse impacts of development on soils, slopes, wetlands, vegetation, surface and ground water quality, floodplains and natural features.	A.1., A.2., A.3., A.8., A.12., A.15., A.16.	1-2 years	Planning and Codes, Planning Commission, City Council	Input from the Natural Resources Conservation Service, U.S.G.S., Corps of Engineers, TVA, and Environment & Conservation officials should be obtained.

General Development and Growth Management (Cont.)	Policy Reference	Time Frame	Primary Responsibility	Comments
Prepare updated Community Facilities Plan, Public Improvements Program and Capital Budget and revise annually as necessary.	B.2., B.3., B.5., B.7., C.1., C.3., C.4., C.5., D.3.	1-2 years	City Departments, Planning Commission, City Council	
Revise the zoning code site plan review provisions as necessary to ensure that development occurs within the capabilities of the City's water, sewer, and street systems.	B.1., B.3., B.4., B.5., B.6., B.8., C.3., D.1., D.2.	1-2 years	Planning and Codes, Planning Commission, City Council	The development policies in the Comprehensive Land Use Plan should be reviewed for applicability.
Prepare a comprehensive Fringe Area Study and Annexation Plan to include standard criteria for annexation, a schedule of phased annexations, and plan of services.	B.3., B.4., B.5., B.6., C.2., D.1., D.3.	1-2 years	Planning and Codes, Planning Commission, City Council	This is a strategic plan and should be developed prior to any annexation action.
Develop and implement an impact analysis system to evaluate development proposals.	B.1., B.5., B.6., C.7., D.1., D.3.	3-6 years	Planning and Codes, Planning Commission, City Council	The Urban Land Institutes Impact Analysis Series should be utilized as part of the decision process for rezoning and subdivision developments.
Prepare a comprehensive Open Space Plan.	A.12., B.7.	7 + years	Planning and Codes, Planning Commission, Leisure Services	This is a strategic plan and should be prepared in conjunction with any Recreation or Greenbelt Plans.
Develop and promote programs for future high school graduates to acquaint them with job opportunities in Cookeville and Putnam County.	D.4.	3-6 years	Chamber of Commerce, School Board, and Industrial Development Board	The municipality should promote high school apprenticeship programs with businesses and industries.

General Development and Growth Management (Cont.)	Policy Reference	Time Frame	Primary Responsibility	Comments
Prepare an environmental management plan which will include, at a minimum, the following measures: 1. Conservation of exhaustible resources; 2. Identification of environmentally sensitive and valuable areas, such as wildlife habitats, wetlands, and prime agricultural land; 3. Identification of areas which pose developmental hazards due to geological conditions; 4. Requirements for developers to mitigate negative impacts on environmentally sensitive and valuable areas; 5. Promotion of the preservation of environmentally sensitive and valuable areas, including prime agricultural land into open spaces or historic preserves. 6. Encouraging landscaping of open spaces with appropriate native or drought resistant varieties of vegetation along with attractively developed green areas to provide a balanced and pleasing cityscape.	A.16.	3-6 years	Planning and Codes, Public Works, Environmental Consultant, Natural Resources Conservation Service, Environment and Conservation, Wildlife Resources, Planning Commission	This is a strategic plan and should be incorporated by reference into the Subdivision Regulations and the site plan review requirements of the Zoning Code. The natural factors affecting development identified in the Comprehensive Plan should be utilized. The takings issue, regarding property rights, should be evaluated prior to any regulatory actions that significantly limit the use of property. This should reflect the Vacant Land and Open Space Plan.

Residential Land Use	Policy Reference	Time Frame	Primary Responsibility	Comments
Prepare a Housing Study.	A.2., A.4., A.5., A.12., A.13.	3-6 years	Planning and Codes, Planning Commission	This is strategic plan that should utilize a neighborhood analysis as well.
Develop a plan for addressing special housing needs, i.e. low-income, handicapped, and elderly.	A.9.	3-6 years	Planning Commission, Board of Realtors, Home Builder's Association, and Local Housing Authority	Special exclusions for group homes in zoning and ADA legislation should be reviewed for compliance.
Provide for adequate qualified staffing to implement a consistent code enforcement program with an emphasis on correction and prevention of substandard housing.	A.11., B.1., B.2.	On-going	City Council, Planning and Codes	Consider cross-training.
Develop and maintain a housing inventory reflecting types, conditions and availability.	A.1., A. 9., A.10., B.2.	On-going	Chamber of Commerce, Board of Realtors, Planning and Codes	Inventory would be done in conjunction with the Housing Study.
Develop and utilize incentives to encourage the production of low and moderate-income and elderly housing units.	A.9., A.11.	3-6 years	City Council	Zoning and Subdivision Regulations should be reviewed for cost impacts vs. long-term advantages.
Review the Zoning Code and Subdivision Regulations and revise as necessary to ensure that appropriate standards and guidelines for residential development are included to address the recommended policies.	A.1., A.3., A.4., A.5., A.6., A.7., A.8., A.10., A.11.,A.14., B.1., B.2., B.3., B.4.	1-2 years	Planning and Codes, Planning Commission, City Council	

Commercial Land Use	Policy Reference	Time Frame	Primary Responsibility	Comments
Prepare a marketing strategy to entice new business and retain existing business.	A.2., A.3.	3-6 years	Chamber of Commerce, City Council, Industrial Development Board	
Promote the creation of a Central Business District (CBD) Development Authority which will prepare CBD redevelopment goals and implementation strategies.	A.4., A.5., A.6.	3-6 years	Chamber of Commerce, City Council, Planning Commission	
Review the Zoning Code and Subdivision Regulations and revise as necessary to ensure that appropriate standards and guidelines for commercial development are included to address the recommended policies.	A.5., A.6., B.1., B.2., B.3., B.4., B.5., B.6., B.7., B.8., B.9., B.10.	1-2 years	Planning and Codes, Planning Commission, City Council	
Prepare and update as necessary a vacant floor space inventory reflecting locations and square footage.	A.6.	1-2 years	Chamber of Commerce, Board of Realtors, Planning and Codes	

Industrial Land Use	Policy Reference	Time Frame	Primary Responsibility	Comments
Prepare a marketing strategy to retain existing industries and to entice non-polluting light industries.	A.2., A.3., A.4., A.5., A.6.	3-6 years	Chamber of Commerce, City Council, Industrial Development Board	Input from the TN Department of Economic and Community Development should be obtained.
Research and utilize state and federal funding programs. Seek grants or professional assistance.	A.1., A.2.	On-going	Planning Commission, City Council, Chamber of Commerce, Industrial Development Board	Local officials should remain up-to-date on grant programs and policies.
Develop standards and criteria for proposed industrial uses to discourage those determined to have harmful impacts.	A.6.	3-6 years	Planning Commission, City Council, Chamber of Commerce, Industrial Development Board	This should be a policy document for industrial recruitment such as protective covenants or environmental ordinances.
Review the Zoning Code and Subdivision Regulations and revise as necessary to ensure that appropriate standards and guidelines for industrial development are included to address the recommended policies.	B.1., B.2., B.3., B.4.	1-2 years	Planning and Codes, Planning Commission, City Council, Chamber of Commerce, Industrial Development Board	

Public and Semi-Public Land Use	Policy Reference	Time Frame	Primary Responsibility	Comments
Prepare a comprehensive Community Facilities Plan.	A.1., A.2., B.1., B.2., B.3., B.4., B.6., B.7.	1-2 years	City Departments, Planning Commission, City Council	This plan should be used in the preparation of a Public Improvements Program and Capital Budget and should be updated every 2 years.
Revise and update as necessary Recreation Master Plan.	B.1., B.2., B.3., B.4., B.5., B.7., B.8.	3-6 years	Leisure Services, Planning Commission, City Council	This is a strategic plan and should be include reference to the Vacant Land and Open Space Plan.
Research and utilize state and federal funding programs. Seek grants or professional assistance.	B.2., B.3., B.5., B.6.	On-going	City Departments, Planning Commission, City Council	Local officials should remain up-to-date on grant programs and policies.
Adopt Historic Zoning Provisions and prepare appropriate historic zoning regulations.	B.6.	1-2 years	Planning and Codes, Planning Commission, Historic Zoning Commission, City Council	Utilize any local historic groups as well as the Tennessee Historical Commission.
Secure an agreement with the county, other municipalities, and school board for the joint use of cultural and recreational facilities.	B.2., B.7.	1-2 years	Leisure Services, City Council, County Commission, School Board, PARTAS	Utilize model agreements developed by PARTAS.
All public and semi-public land uses shall be reviewed and approved by the Planning Commission as required by state enabling legislation.	A.1., A.2., B.1.	On-going	Planning Commission	Plans for public buildings and land uses should be included in the Community Facilities Plan and Public Improvements Program.

Utilities	Policy Reference	Time Frame	Primary Responsibility	Comments
Develop a comprehensive utility expansion, extension, and improvement program as a component of the Community Facilities Plan.	A.1., A.2., A.3., A.4., B.1., B.6., B.7., B.8.	3-6 years	Water Quality Control, Electric, Natural Gas, Public Works, Planning and Codes, Planning Commission, City Council	This is a strategic plan and is also part of the Public Improvements Program and Capital Budget.
All utility extensions and expansions shall be reviewed and approved by the Planning Commission as required by the state enabling legislation.	A.2., A.4.	On-going	Planning Commission	Comply with TCA Section 13-4-104 requiring planning commission review of public projects.
Review the Zoning Code and Subdivision Regulations and revise as necessary to ensure that appropriate standards for utilities are included and that developers are responsible for the installation of required utilities.	A.2., B.2., B.3., B.4., B.5.. B.8.	1-2 years	Planning and Codes, Planning Commission, Water Quality Control, Electric, Natural Gas, Public Works, City Council	The Planning Commission and City Council should jointly discuss the development of city standards. Local Government Public Works Standards, recognized Model Community Facilities Standards should be incorporated by reference into the Subdivision Regulations and Zoning Code.

Vacant Land and Open Space Land Use	Policy Reference	Time Frame	Primary Responsibility	Comments
Prepare a Vacant Land and Open Space Plan.	A.1., A.2., A.3., A.4., B.1.	7 + years	Planning and Codes, Leisure Services, Planning Commission	This strategic plan should be utilized in conjunction with the Recreation Plan.
Explore all available methods for acquiring open space, i.e., conservation easements, development rights, zoning restrictions, dedication on subdivision plats, donations, negotiated purchase.	A.2., A.3., A.4., A.5	On-going	Planning and Codes, Leisure Services, Planning Commission, City Council	Care should be taken to ensure that property rights violations, takings do not become an issue.
All proposed plans for open space and recreation areas shall be submitted to the Planning Commission for review and approval as required by state enabling legislation.	A.2., A.3., A.5., B.1.	On-going	Leisure Services, Planning Commission	Comply with TCA Section 13-4-104 requiring planning commission review of public projects.
Review the Zoning Code and Subdivision Regulations and revise as necessary to ensure that appropriate standards and guidelines are included for the development or preservation of vacant land.	A.1., A.4., A.5., B.1., B.2., B.3., B.4., B.5., B.6., B.7., B.8.	1-2 years	Planning and Codes, Planning Commission, City Council	Utilize the Vacant Land and Open Space Plan.

Transportation	Policy Reference	Time Frame	Primary Responsibility	Comments
Maintain a comprehensive updated Major Street Plan.	A.1., A.2., A.3.	On-going	Planning and Codes, Public Works, Planning Commission, City Council	Subdivision Regulations, subdivision plats, and site plans should be reviewed in the context of the plan.
Update and maintain a street inventory that reflects the condition and maintenance needs of all city streets.	A.3.	On-going	Planning and Codes, Public Works, Planning Commission, City Council	
Prepare a comprehensive Street Improvements Plan which includes plans for street identification, traffic signalization, street lighting, and upgrading or improvement of older streets.	A.1., A.2., A.3., A.8., B.5.	3-6 years	Public Works, Planning and Codes, Engineer, Planning Commission, City Council	This is a strategic plan and should be incorporated into the Public Improvements Program and Capital Budget.
Complete a sidewalk inventory and prepare a Sidewalk Improvement Plan.	A.6., A.7.	1-2 years	Public Works, Planning and Codes, Planning Commission, City Council	This is a strategic plan and should supplement the Street Improvements Plan.
Maintain an Official City Street Map.	A.1.	On-going	Planning and Codes, Public Works, Planning Commission, City Council	This should be considered a legal document to reflect those streets for which the municipality is responsible for maintenance.
Develop street construction and acceptance standards.	B.1., B.2., B.3., B.4., B.5.	1-2 years	Public Works, Planning and Codes, Engineer, Planning Commission, City Council	These should be consistent with the Subdivision Regulations.