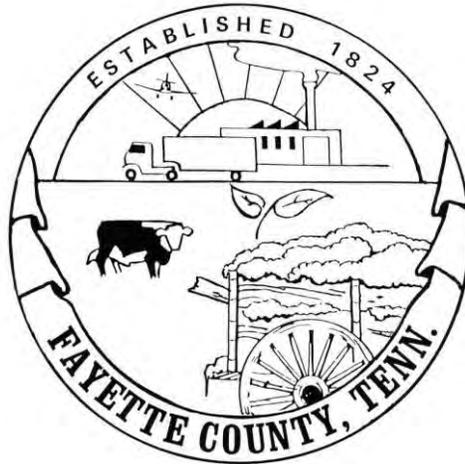


FAYETTE COUNTY GROWTH PLAN AMENDMENT



2015

Rhea "Skip" Taylor

Fayette County Mayor

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PROPOSED AMENDMENT TO FAYETTE COUNTY GROWTH PLAN

INTRODUCTION

The Growth plan of Fayette County Tennessee was adopted in August, 2003, after a long legal process. The plan is to be a document that provides a rational and well thought out process for growth within Fayette County, so that all our resources and assets are used in a responsible manner. The Growth Plan is to be modified when in the opinion of the local government an adjustment should be made. At that time a justification for the change should be crafted that addresses the criteria used to adopt or amend a growth plan. This document shall stand as the justification for amending Fayette County's Growth Plan.

OVERVIEW

As County Mayor of Fayette County, it has become apparent that the creation of a large industrial park on our northern boundary, called the "Memphis Regional Megasite" or just "Megasite", will create issues which must be addressed for the benefit of the immediate region around the Megasite and for the whole County. For these reasons, I am proposing an amendment to Fayette County's Growth Plan which shall add land to the existing Planned Growth Area at the intersection of U.S. Interstate Highway 40 and State Highway 222, and defined by an attached map

PROCESS

The Growth Plan was adopted by the Tennessee legislature as an attempt to make annexation and growth within Tennessee less political and more rational. The process is codified within Tennessee law as Tennessee Code Annotated 6-58-101 et al. According to the law, a Coordination Committee was initially established to review plans proposed by each city and the County concerning areas where growth could occur. Cities established Urban Growth Boundaries around their city limits where they could rationally expect growth within a twenty year period. The County likewise could establish areas called Planned Growth Areas where growth could occur. Also land that was not in a city or town already and not planned to be within an Urban Growth Boundary or as a Planned Growth Area would remain as Rural Areas within the County. Once approved by the Coordination Committee, each town or city and the County must unanimously approve the plan. If there was any dissent, then the plan would go back to the Coordination Committee for another review. This process would continue until a city or town or the County declared an impasse, and mediators would decide the process.

To amend the plan, the process is very similar with the exception that there is no deadline for adoption and the initial plan stays in effect until an amendment is adopted. When an amendment is proposed, the proposing entity notifies the other parties of the proposal. Within 60 days of the notification, the County Mayor is to call the Coordination Committee to order to discuss the request. The proposing side is burdened with the responsibility of persuading the committee of the need for the amendment.

PROPOSAL

The proposed amendment for Fayette County's Growth Plan would add 7 parcels of 643.7 acres to the existing Planned Growth Area surrounding the I-40/Hwy 222 Interchange. The Megasite already owns 247.7 acres of the proposed addition. The property can best be described as farm land with rolling hills. The addition to the Planned Growth Area will guide the development by planning where that development should occur.

The growth plan is to provide a unified physical design for the development of the local community. The Megasite is located mainly in southern Haywood County and consists of a total of 4100 acres, with about 247 acres of that in northern Fayette County. The development is encouraged by the designation of a Planned Growth Area in Haywood County's Growth Plan and the State of Tennessee Megasite Authority. The construction of the infrastructure and the development of the site will impact the local community, both Fayette and Haywood. Since there is no line separating the community between the counties, the growth plan requires inclusion so that the local community is adequately informed and can make the necessary decisions concerning the new development. In addition, the growth plan is to encourage a pattern of compact and continuous development within Planned Growth Areas. The additional acres of the Megasite in Fayette County and the remaining acres in the corner created by the I-40 interchange will almost certainly be viewed as having high development potential. To inform current and future developers and to address Fayette County's own development goals, a compact area must be defined that shows where development will be considered.

The Megasite may increase the potential need for services related to growth, but the fiscal impact upon Fayette County will be small. Vehicle traffic will be mainly borne by U.S. Interstate 40 and State Hwy 222, both maintained by the Tennessee Department of Transportation (TDOT). Industrial-grade utilities consisting of water, sewer, electricity, rail and data are being brought into the area for the Megasite development by the State of Tennessee. Housing and residential growth will go toward those areas currently able to provide residential utilities. Those areas include Stanton, Somerville and Brownsville. The remaining services that will affect the area are law enforcement and emergency services. Haywood County is planning for an ambulance and fire station in the area. Fayette County is addressing both fire and ambulance needs in the vicinity as a result of the closing of the Methodist Hospital in Somerville. Any additional

ambulance service by Fayette County can be addressed in our current ambulance review and should not incur additional costs. Law enforcement, in the form of Fayette County Sheriff's department, will be asked to patrol the area more often and to coordinate with Haywood County's Sheriff's Department. Additional labor and associated costs will be incurred, but should be minimal.

The area defined is a compact region that is just south of the main Megasite area in Haywood County. The proposal deliberately works around the historically significant area of Fredonia and the churches there. The exclusion of the property plus a buffer between the proposed addition and Fredonia will help to conserve and protect that area. The compact nature of the area will also enable development to address any natural hazards, such as flooding and water runoff, and to protect surrounding farmland outside of the Planned Growth Area from undesired sprawl.

The current Planned Growth Area around the intersection is not large enough nor situated where a dense residential base would develop. The additional area will not change that situation. There is little likelihood of the area incorporating into a municipality or that it will be annexed anytime soon. Utilities for residential development will be very limited since utilities built for the Megasite will not be available for other types of development. This will prohibit any high density residential development in the area. Labor can easily commute to the area from as far away as Memphis and Jackson, which will further decrease the pressure on residential population increase in the area

A large development, such as the Megasite, will bring economic benefits. The development will help Fayette County with possible additional opportunities for jobs, investment and revenue. The Megasite will look to employ approximately 1500 jobs with an automotive manufacturer. Additional suppliers to an auto plant would add another 2000 jobs throughout West Tennessee. Population growth for Fayette County has only increased an estimated 0.7% since the 2010 Census, but The University of Tennessee estimates that Fayette County will grow 11.2% in the next 5 years. With an increase in our workforce of 16,480 by the same 11.2 percentage as our population, there will be a need for an additional 1,846 jobs within Fayette County during that same time. The added jobs will help to employ the increased population and to pay for services totally unrelated to the Megasite.

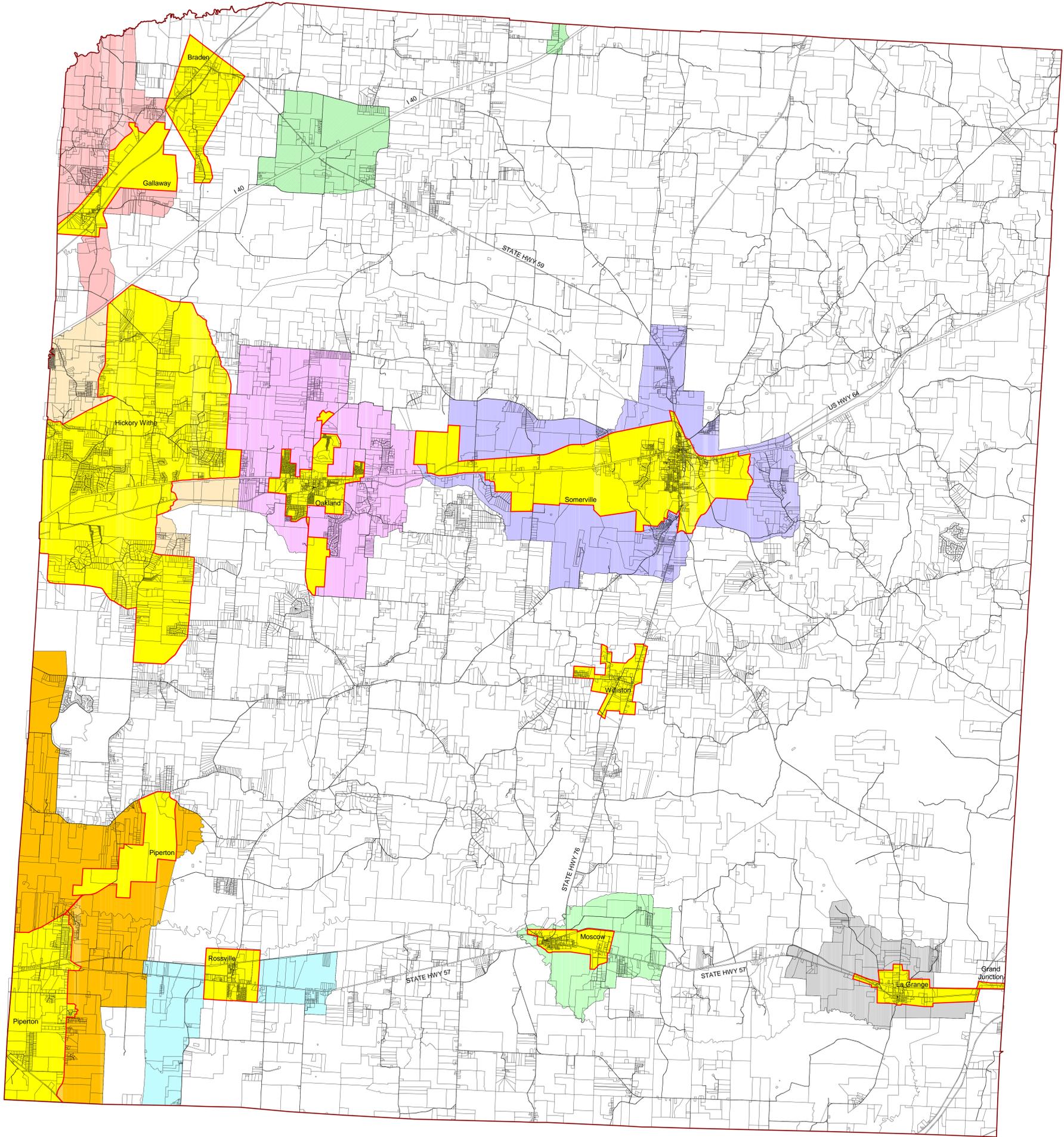
SUMMARY

As presented, the proposal addresses the current need to have a planning region for the proposed Megasite, but is compact enough so that sprawl does not start. With the infrastructure that comes with the Megasite project, the area will most certainly be a target for new business and industry. Amending the Growth Plan addresses the need for information and services; for protection from sprawl; for conserving historic and natural areas; and for economic growth of the County.

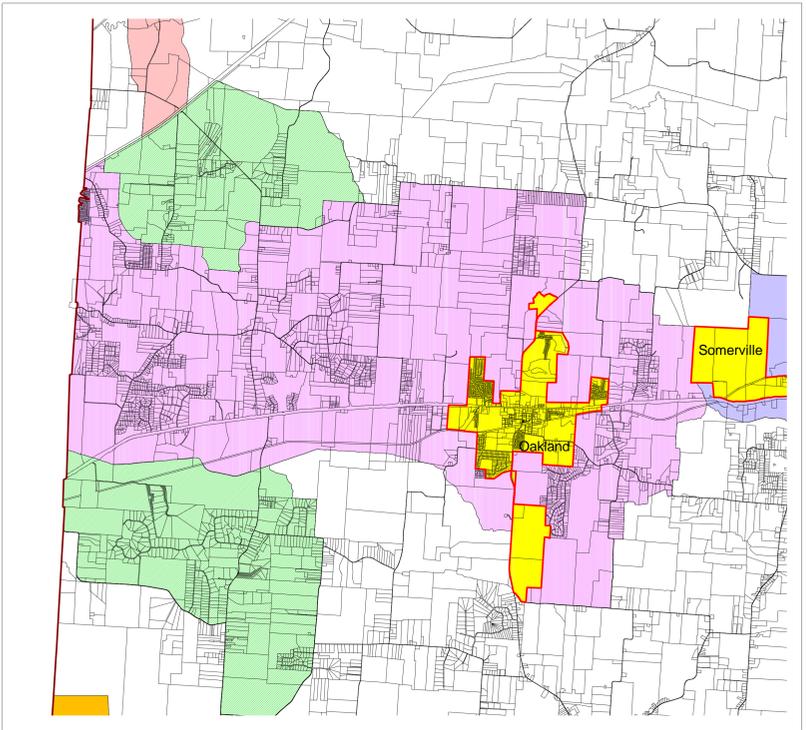
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Fayette County Growth Plan

August 2003



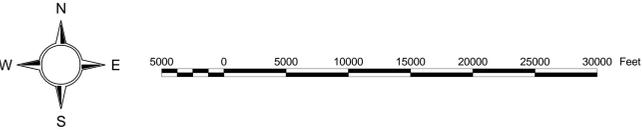
Alternative "A"



Alternative "B"

Alternatives A and B are identical with the exception of the Hickory Withe Area. Alternative A assumes that Hickory Withe continues as an incorporated municipality with identified Urban Growth Boundaries. Alternative B assumes that portions of the Hickory Withe area are within the Oakland Urban Growth Boundary, with the remaining territory identified as County Planned Growth Area.

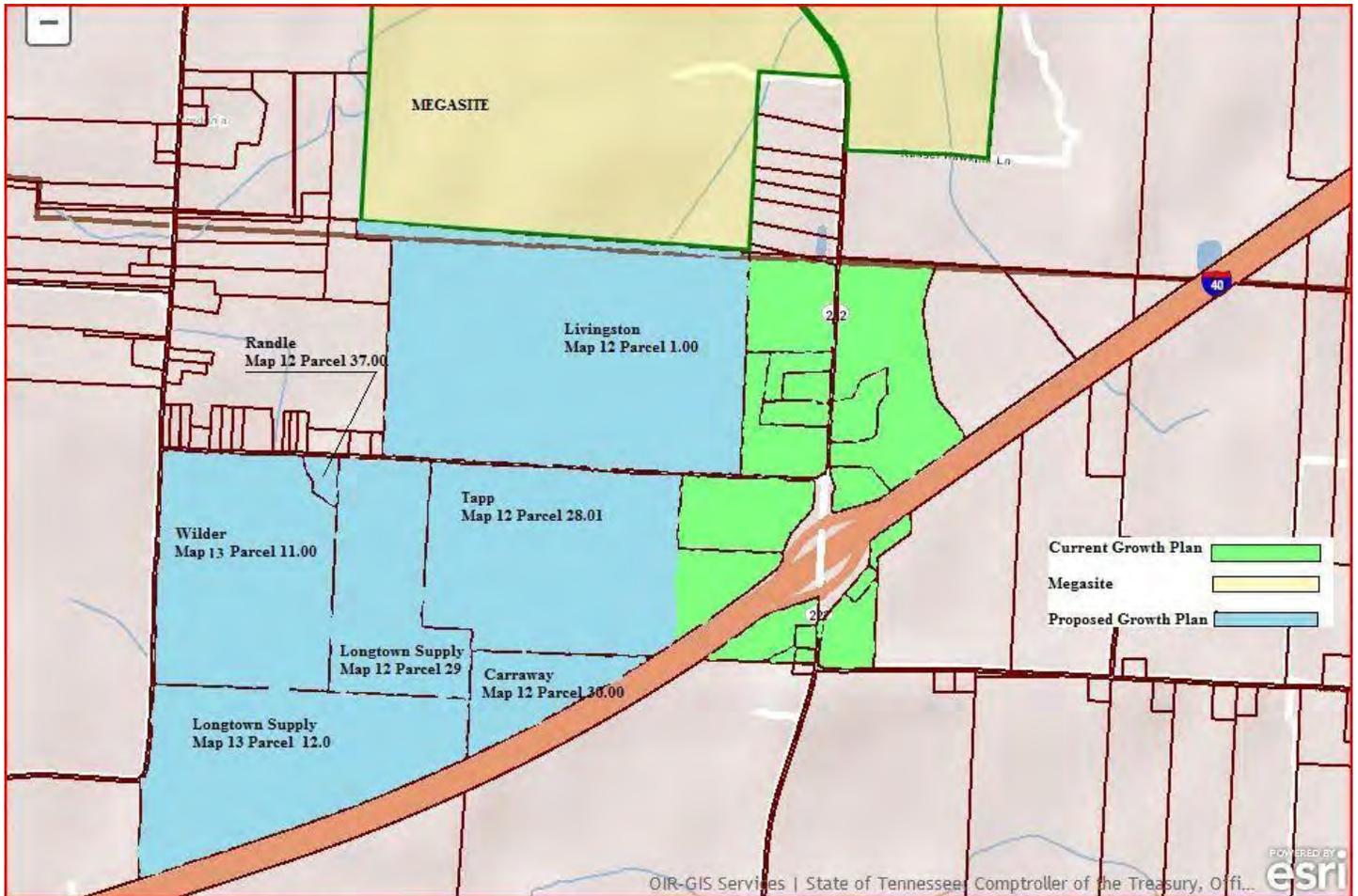
- Fayette County
- Parcels
- Municipalities
- Gallaway Urban Growth Boundary
- Hickory Withe Urban Growth Boundary
- La Grange Urban Growth Boundary
- Moscow Urban Growth Boundary
- Oakland Urban Growth Boundary
- Piperton Urban Growth Boundary
- Rossville Urban Growth Boundary
- Somerville Urban Growth Boundary
- Planned Growth Area
- Rural



Map Prepared For:
 State of Tennessee Secretary of State
 Administrative Procedures Division
 August 2003
 This is not an engineering map



PROPOSED ADDITIONAL AREA TO BE INCLUDED IN FAYETTE COUNTY'S PLANNED GROWTH AREA



LIST OF PROPERTIES IN GROWTH PLAN ADDITION

Fayette County
Growth Plan

Planned Growth Area - I-40 and
Hwy 222

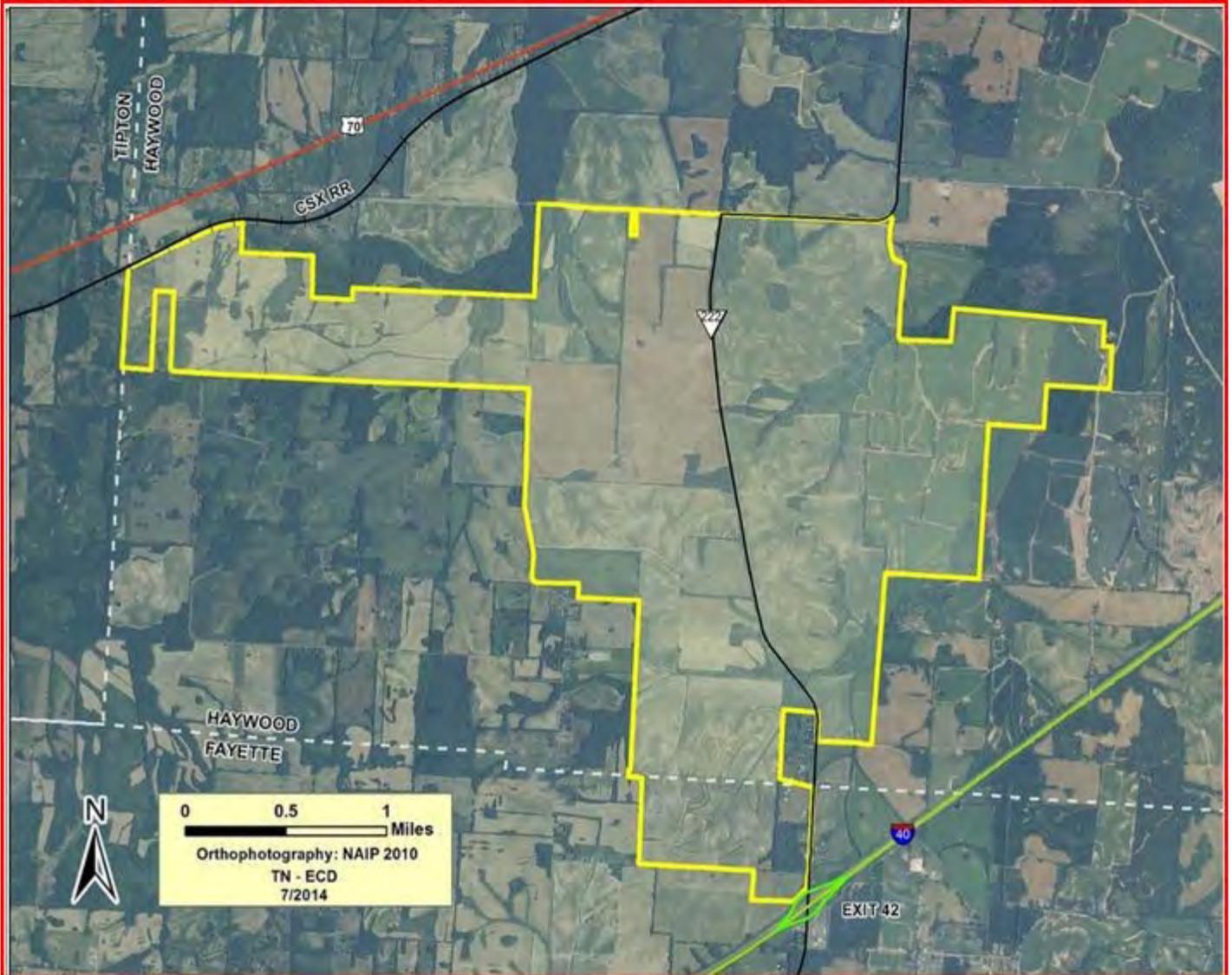
Last Name/Company	First Name	<u>Property Assessor</u>		Total Acres In Parcel	Proposed Additional Acres to Growth Area
		Map	Parcel		
Carraway	Morton	012	030.00	23.0	23.0
State of Tennessee		012	001.00	247.7	247.7
Longtown Supply		013	012.00	151.0	97.0
Longtown Supply		012	029.00	58.5	58.5
Randle	Wendell	012	037.00	2.1	2.1
Tapp	Robert	012	028.01	122.4	122.4
Wilder	John Jr.	013	011.00	93.0	93.0
Additional Acres to Proposed Planned Growth Area					643.7

MEMPHIS REGIONAL MEGASITE

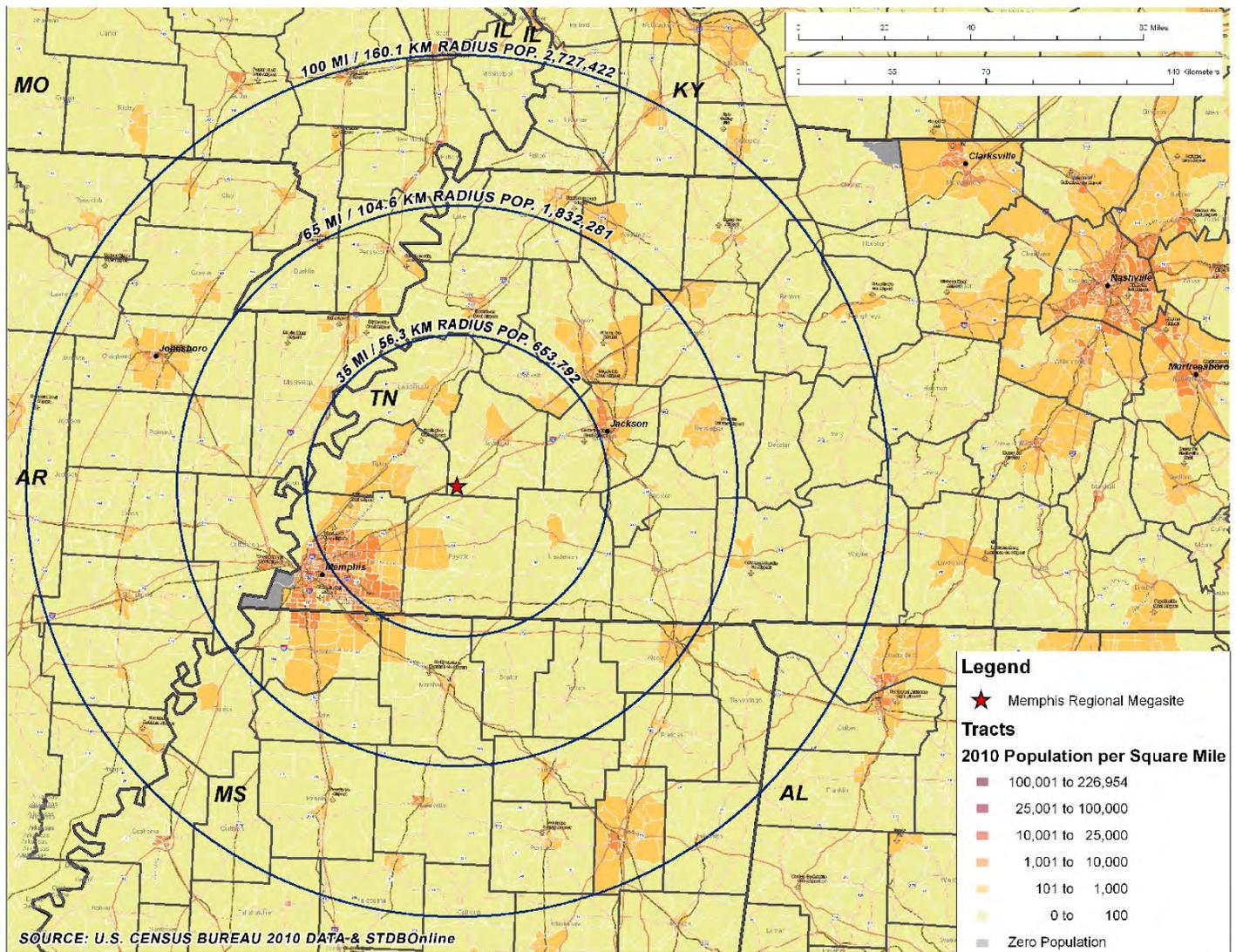
The Memphis Regional Megasite came about through a 2002 Tennessee Valley Authority initiative called the Certified Megasite Program. This program covered all the states that TVA served. The purpose of the program was to identify prospective sites for automotive manufacturers. The Megasite designation told a company that the site was near a four lane Interstate grade highway; had rail accessible on the site; was relatively level and clear of trees; had basic utilities, such as water, sewer, electricity and data, nearby; and had an adequate population for a workforce. This certification process not only cut down on the time needed for a company to evaluate a site, but put the site in better standing among other sites which had not been certified. Megasite certification assured a prospective company that not only did it meet the requirements to be a Megasite, but also the site is for sale, developable, and free of obstacles from easements and geotechnical issues. Certifying a Megasite assured a company not only did it have the attributes required, but that homework had been done so that a company could move forward with a project quickly. The site was certified in 2006 and the State of Tennessee later purchased not only the original 1700 acres that were certified, but an additional amount needed for the present 4100 acres.

In TVA's territory of seven states, there were 25 sites submitted, but only a few were certified. Haywood County was one of the first to submit a site. In 2009, the State of Tennessee saw the benefit of the program and committed to buying the land for the Megasite. With that commitment, Tennessee started installing or helped to install the necessary infrastructure of water, sewer, roads, data access and rail. To date, there has been \$106 million dollars spent or committed toward the project. There are millions more to be spent before the project is complete. The goal of the project is an automotive manufacturer. One automotive plant would put typical investment at the site of between \$500 million and One Billion dollars. It would employ upwards of 1500 individuals and have spin off jobs in nearby towns of at least that many, making items to be used in the manufacturing process. The Memphis Regional Megasite is major program for the State of Tennessee and is being marketed to all interested automotive manufacturers in the world. At the current stage of development of the site, the State anticipates being able to have the site ready for production within 18 months.

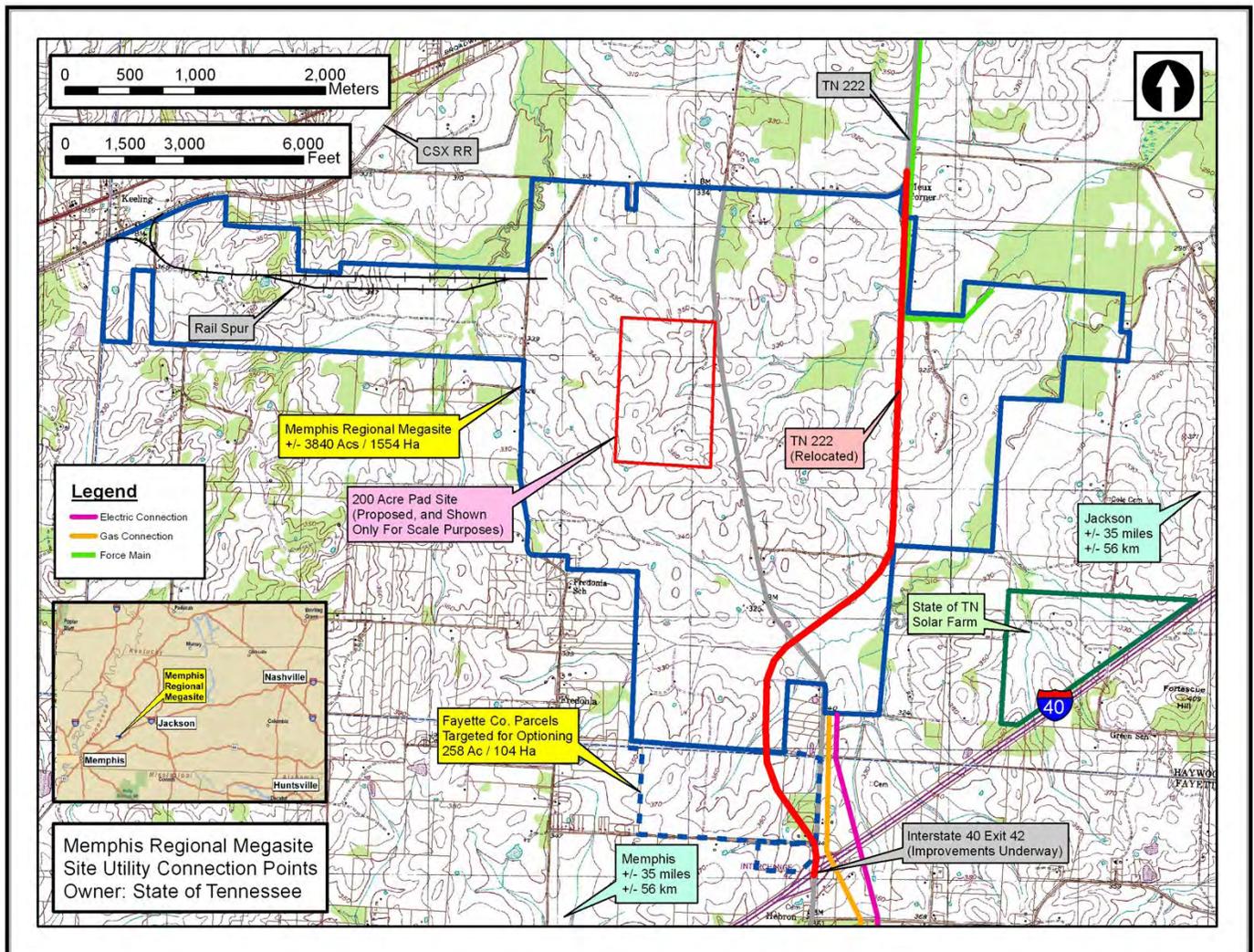
AERIAL VIEW OF THE MEMPHIS REGIONAL MEGASITE



POPULATION AND DISTANCE MAP AROUND THE MEMPHIS REGIONAL MEGASITE



UTILITIES AND INFRASTRUCTURE MAP FOR THE MEMPHIS REGIONAL MEGASITE



POPULATION PROJECTIONS FOR FAYETTE COUNTY 2015

UNIVERSITY OF TENNESSEE

County: Fayette

Year: 2015

MAKE SELECTIONS HERE

2015 Fayette Population by Age Group

Age Group	Female	Male	Grand Total
under 5	1,153	1,207	2,360
5 to 9	1,348	1,447	2,795
10 to 14	1,360	1,435	2,795
15 to 19	1,240	1,438	2,678
20 to 24	1,006	1,142	2,148
25 to 29	876	831	1,707
30 to 34	1,260	1,121	2,381
35 to 39	1,307	1,270	2,577
40 to 44	1,311	1,329	2,640
45 to 49	1,302	1,321	2,623
50 to 54	1,667	1,661	3,328
55 to 59	1,957	1,838	3,795
60 to 64	1,856	1,768	3,624
65 to 69	1,540	1,613	3,153
70 to 74	1,086	1,000	2,086
75 to 79	790	633	1,423
80 to 84	453	375	828
85 and up	429	261	690
Grand Total	21,941	21,690	43,631

[Click Here For POPULATION BY RACE Options](#)

Note: Selecting "All" will give the sum of all Tennessee Counties, plus the State total.

2015 Fayette Population by Age Group

Est. Population: 43,631

Female 21,941
Male 21,690

Source: Tennessee State Data Center, August 2013

POPULATION PROJECTIONS FOR FAYETTE COUNTY 2020

UNIVERSITY OF TENNESSEE

County Fayette ▾

Year 2020 ▾

MAKE SELECTIONS HERE

2020 Fayette Population by Age Group

Age Group	Female	Male	Grand Total
under 5	1,184	1,241	2,425
5 to 9	1,298	1,371	2,669
10 to 14	1,484	1,588	3,072
15 to 19	1,448	1,631	3,079
20 to 24	1,191	1,337	2,528
25 to 29	983	1,050	2,033
30 to 34	1,020	906	1,926
35 to 39	1,414	1,284	2,698
40 to 44	1,452	1,412	2,864
45 to 49	1,409	1,455	2,864
50 to 54	1,447	1,487	2,934
55 to 59	1,950	1,919	3,869
60 to 64	2,245	2,133	4,378
65 to 69	2,032	1,964	3,996
70 to 74	1,589	1,603	3,192
75 to 79	1,029	897	1,926
80 to 84	666	501	1,167
85 and up	536	354	890
Grand Total	24,377	24,133	48,510

Click Here For
POPULATION BY RACE
Options

2020 Fayette Population by Age Group

Female 24,377 Male 24,133

Est. Population: 48,510

Source: Tennessee State Data Center, August 2013

Note: Selecting "All" will give the sum of all Tennessee Counties, plus the State total.

TENNESSEE DEPARTMENT OF LABOR REPORT—DECEMBER 2014

Labor Force Estimates - Tennessee Counties

Release: 1:30 PM CT on 01/29/2015

	December, 2014 pre.				Nov. '14 rev.		Dec. '13	
	Labor Force	Employed	Unemployed	Rate	Rate	Change	Rate	Change
Anderson County	34,710	32,560	2,150	6.2	6.2	0.0	7.1	-0.9
Bedford County	21,910	20,630	1,290	5.9	6.0	-0.1	7.0	-1.1
Benton County	6,720	6,100	630	9.3	8.6	0.7	9.8	-0.5
Bledsoe County	4,700	4,330	370	7.9	7.6	0.3	9.0	-1.1
Blount County	61,330	57,780	3,550	5.8	5.4	0.4	6.2	-0.4
Bradley County	49,460	46,670	2,790	5.6	5.8	-0.2	6.1	-0.5
Campbell County	15,910	14,590	1,320	8.3	8.0	0.3	10.1	-1.8
Cannon County	6,450	6,090	360	5.6	5.4	0.2	5.7	-0.1
Carroll County	12,870	11,620	1,250	9.7	9.6	0.1	10.9	-1.2
Carter County	25,550	23,890	1,660	6.5	6.2	0.3	7.7	-1.2
Cheatham County	20,270	19,160	1,110	5.5	5.6	-0.1	5.5	0.0
Chester County	7,830	7,330	500	6.4	6.5	-0.1	6.9	-0.5
Claiborne County	12,110	11,070	1,040	8.5	8.3	0.2	10.5	-2.0
Clay County	3,190	2,890	300	9.3	8.7	0.6	10.1	-0.8
Cocke County	14,650	13,350	1,300	8.9	8.1	0.8	9.6	-0.7
Coffee County	25,800	24,360	1,440	5.6	5.7	-0.1	6.2	-0.6
Crockett County	6,350	5,850	510	7.9	7.7	0.2	9.6	-1.7
Cumberland County	22,590	20,630	1,970	8.7	7.7	1.0	8.9	-0.2
Davidson County	333,470	316,350	17,120	5.1	5.2	-0.1	5.6	-0.5
Decatur County	5,260	4,790	480	9.1	8.5	0.6	9.3	-0.2
DeKalb County	8,970	8,420	550	6.1	6.0	0.1	7.0	-0.9
Dickson County	24,420	23,030	1,390	5.7	5.2	0.5	6.1	-0.4
Dyer County	16,020	14,740	1,280	8.0	8.0	0.0	10.0	-2.0
Fayette County	16,480	15,200	1,290	7.8	7.9	-0.1	10.3	-2.5
Fentress County	7,800	7,240	560	7.1	6.8	0.3	8.0	-0.9
Franklin County	19,300	18,210	1,090	5.6	5.5	0.1	6.5	-0.9
Gibson County	18,860	17,030	1,830	9.7	9.5	0.2	11.5	-1.8
Giles County	13,080	12,230	840	6.5	6.3	0.2	7.8	-1.3
Grainger County	9,180	8,490	690	7.5	7.4	0.1	9.5	-2.0
Greene County	28,030	25,590	2,440	8.7	7.9	0.8	9.6	-0.9
Grundy County	5,800	5,320	480	8.2	7.6	0.6	8.1	0.1
Hamblen County	27,400	25,580	1,820	6.6	6.9	-0.3	7.4	-0.8
Hamilton County	159,740	149,580	10,160	6.4	6.4	0.0	7.2	-0.8
Hancock County	2,030	1,840	200	9.7	9.8	-0.1	10.5	-0.8
Hardeman County	10,240	9,320	920	9.0	9.0	0.0	11.0	-2.0
Hardin County	10,900	10,000	890	8.2	7.7	0.5	10.1	-1.9
Hawkins County	24,370	22,740	1,630	6.7	6.5	0.2	6.3	0.4
Haywood County	8,090	7,360	730	9.0	8.8	0.2	11.0	-2.0
Henderson County	11,280	10,220	1,060	9.4	8.9	0.5	10.3	-0.9
Henry County	13,080	11,960	1,120	8.5	8.2	0.3	9.7	-1.2
Hickman County	10,080	9,390	680	6.8	6.4	0.4	7.3	-0.5
Houston County	3,800	3,490	310	8.2	7.8	0.4	8.7	-0.5
Humphreys County	8,950	8,310	640	7.1	6.6	0.5	7.8	-0.7
Jackson County	4,900	4,540	360	7.4	7.2	0.2	8.9	-1.5
Jefferson County	22,690	21,040	1,650	7.3	6.9	0.4	8.6	-1.3
Johnson County	7,090	6,590	510	7.1	6.9	0.2	8.5	-1.4
Knox County	224,600	213,260	11,340	5.0	5.1	-0.1	5.7	-0.7
Lake County	2,680	2,440	250	9.2	9.1	0.1	9.9	-0.7

To see maps of state, metropolitan area, and county unemployment rates, go to the Bureau of Labor Statistics web site:

<http://data.bls.gov/map/servlet/map.servlet.MapToolServlet?survey=la>

This site will be updated with state data on 1/27/15 and with metro/county data on 2/4/15.

FAYETTE COUNTY GROWTH PLAN

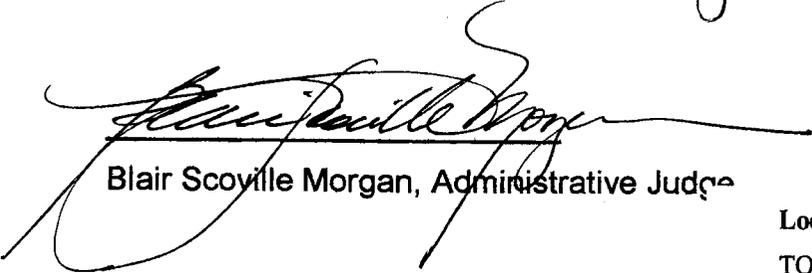
A Report to the
Administrative Law Judge Panel

By
Bill Terry, AICP

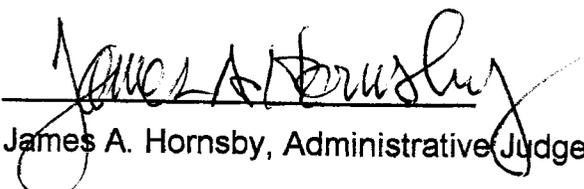
August 2003

By authority of, and in compliance with, *Tennessee Code Annotated*, Section 6-58-101 et seq., this Comprehensive Growth Plan for Fayette County, Tennessee, is hereby adopted by the three-member panel of Administrative Judges assigned by the Tennessee Secretary of State, Administrative Procedures Division to resolve the impasse impeding agreement by the participating entities within the county.

Adopted this the 18 day of August, 2003


Blair Scoville Morgan, Administrative Judge

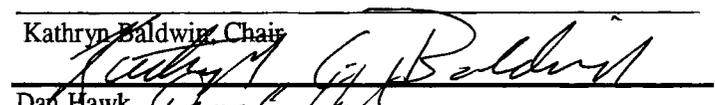

Robert Fellman, Administrative Judge


James A. Hornsby, Administrative Judge

Local Government Planning Advisory Committee

TO: Approve Fayette County Growth Plan

DATE: 8-27-03


Kathryn Baldwin, Chair

Dan Hawk
Department of Economic & Community Development

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GROWTH PLAN SUPPLEMENT FOR FAYETTE COUNTY

All of the municipalities in Fayette County and the county government are in a declared "impasse" under Public Chapter 1101 for the purposes of adopting a growth plan as required in the Act. The effect of the impasse is that all governments in Fayette County have appeared before an Administrative Law Judge Panel to present their respective cases, but the panel has to make a decision regarding whether the requirements of the Act have been met. The hearing phase of process has now passed, and considerable information has been offered and placed into the official record. The panel has considered the record and found that more needs to be done to develop a growth plan that is in agreement with the Act. This report and plan arises out of the hearings and supplements the plans and reports prepared and submitted by the various governmental entities in the county to the Administrative Law Judge Panel.

INTRODUCTION

Prior to entering into the details of Public Chapter 1101, it would, perhaps, be meaningful to briefly examine the antecedents of the Act. The concept of growth boundaries is certainly not new and did not originate with this Act. The planning profession, in the preparation of long-range plans, has long promoted the idea of boundaries, actually dating back into the 1960s or earlier. In fact, the early theory of community planning generally included some description of a boundary or region for the limits of urban expansion.

Perhaps the earliest such boundary dates back to the 16th Century. As noted by V. Gail Easley in her treatise *Staying Inside the Lines* published by the American Planning Association¹, "in 1580, Queen Elizabeth I issued a proclamation forbidding any building within three miles of the city gates, and thereby, created England's first greenbelt". The purpose for this greenbelt was to create a buffer to prevent the spread of the plague, but a concomitant motive was to preserve an adequate supply of farmland near the city.

In more modern times this idea was promulgated as a planning region, that is, an area outside of the city in which the future expansion of the city was planned or a public service boundary, the line beyond which no urban type service would be provided. The term "urban growth boundary" was formalized into law in the State of Oregon in 1973, and the City of Lexington, Kentucky adopted one in 1958.

The basic concept has always been to define an area for urban development, in which urban services would be provided, to prevent urban or suburban sprawl and to preserve open space or farmland. Thus, Public Chapter 1101 represents Tennessee's effort to build upon the earlier legacy of urban and regional planning and provide a mechanism and a system for communities in the state to jointly

¹ Easley, V. Gail, *Staying Inside the Lines*. Planning Advisory Service Report Number 440, Chicago, Ill.; American Planning Association, 1993.

plan for the future and for incentives for such planning and penalties for failure to plan for future growth.

CHAPTER I

BACKGROUND FOR PUBLIC CHAPTER 1101

PROVISIONS FOR A GROWTH PLAN

In 1998, the General Assembly adopted a bill that became Public Chapter 1101, also known as the "Growth Policy, Annexation and Incorporation Act of 1998." The Act is codified in the *Tennessee Code Annotated* as Title 6, Chapter 58, Sections 6-58-101 through 6-58-115. It was the intent of the legislature to establish a comprehensive growth policy for the state and to provide a framework in which local governments in Tennessee could cooperatively develop county and city plans and policies to address future growth issues and solve annexation controversies. Section 3 of the Act stated that the General Assembly intends to establish a growth policy for the state that:

- (1) Eliminates annexation or incorporation out of fear;
- (2) Establishes incentives to annex or incorporate where appropriate;
- (3) More closely matches the timing of development and the provision of public services;
- (4) Stabilizes each county's education funding base and establishes an incentive for each county legislative body to be more interested in education matters; and
- (5) Minimizes urban sprawl.

The Act in Section 5 {TCA 6-58-104} provides for a new entity in local government, the county coordinating committee, which is charged with the responsibility of developing a countywide growth plan. Such a plan is to include urban growth boundaries for cities and planned growth and rural areas in the county outside of municipalities as well as other information related to growth issues. Subsection (a)(2) states further that the recommended growth plan shall be in conformance with the provisions of Section 7 {TCA 6-58-106}.

In the event that any municipality or the county rejects the recommended growth plan, an impasse may be declared, and this action generates the dispute resolution process through the offices of the Secretary of State. The Secretary of State then appoints a dispute resolution panel of administrative law judges to mediate or resolve the dispute. Essentially, after an impasse is declared, the panel must follow Section 5 (b)(3) {TCA 6-58-104 (b)(3)}, which demands that:

- (1) The panel attempts to mediate the dispute;

- (2) If that fails, the panel recommends a non-binding resolution;
- (3) If that fails, then the various governments in the county may submit final recommendations to the panel; and
- (4) The panel adopts a growth plan.

The section states further that "...The growth plan adopted by the panel shall conform with the provisions of Section 7." Since the panel is bound by the law, it is important to identify the salient parts of Section 7 that will have an impact on the plan as adopted.

Section 7 of the Act contains all of the planning requirements that must be a part of the growth plan. As with any piece of legislation, interpretation of the language is essential in effectuating the terms of the law. In this case there are some general criteria and some specific language. The section is divided into three subparts to provide guidelines for urban growth boundaries, planned growth areas and rural areas.

Urban Growth Boundaries

Section 7(a)(1) {TCA 6-58-106(a)(1)} provides the general criteria for urban growth boundaries. Specifically, it is stated that the urban growth boundaries of municipalities shall:

- (A) Identify territory that is reasonably compact yet sufficiently large to accommodate residential and nonresidential growth projected to occur during the next twenty (20) years;
- (B) Identify territory that is contiguous to the existing boundaries of the municipality;
- (C) Identify territory that a reasonable and prudent person would project as the likely site of high density commercial, industrial and/or residential growth over the next twenty (20) years based on historical experience, economic trends, population growth patterns and topographical characteristics; (if available, professional planning, engineering and/or economic studies may also be considered);
- (D) Identify territory in which the municipality is better able and prepared than other municipalities to efficiently and effectively provide urban services; and
- (E) Reflect the municipality's duty to facilitate full development of resources within the current boundaries of the municipality and to manage

and control urban expansion outside of such current boundaries, taking into account the impact to agricultural lands, forests, recreational areas and wildlife management areas.

Section 7(a)(2) {TCA 6-58-106(a)(2)} includes the language that requires a planning approach to the development of the urban growth boundaries. Specifically, the municipality shall:

(A) Develop and report population projections which shall be developed in conjunction with the University of Tennessee;

(B) Determine and report the current costs and projected costs of core infrastructure, urban services and public facilities necessary to facilitate full development of resources within the current boundaries;

(C) Expand such infrastructure, services and facilities throughout the territory under consideration for inclusion within the urban growth boundaries;

(D) Determine and report on the need for additional land suitable for high density industrial, commercial and residential development, after taking into account all areas within the municipality's current boundaries that can be used, reused or redeveloped to meet such needs;

(E) Examine and report on agricultural lands, forests, recreational areas and wildlife management areas within the territory under consideration for inclusion within the urban growth boundaries, and

(F) Examine and report on the likely long-term effects of urban expansion on such agricultural lands, forests, recreational areas and wildlife management areas.

Planned Growth Areas

The requirements for the designation of planned growth areas are contained in Section 7(b)(1) {TCA 6-58-106(b)}. The general criteria for planned growth areas are very similar to those for urban growth boundaries with the exceptions being related to the nature of the county as compared to the nature of a municipality. These general criteria are a part of Section 7(b)(1) {TCA 6-58-106(b)(1)}, and the differences can be noted in subsections (B), (D) and (E) as follows. The county is to:

(A) Identify territory that is reasonably compact yet sufficiently large to accommodate residential and nonresidential growth projected to occur during the next twenty (20) years;

(B) Identify territory that is not within the existing boundaries of any municipality;

(C) Identify territory that a reasonable and prudent person would project as the likely site of high density commercial, industrial and/or residential growth over the next twenty (20) years based on historical experience, economic trends, population growth patterns and topographical characteristics; (if available, professional planning, engineering and/or economic studies may also be considered);

(D) Identify territory that is not contained within urban growth boundaries; and

(E) Reflect the county's duty to manage natural resources and to manage and control urban growth, taking into account the impact to agricultural lands, forests, recreational areas and wildlife management areas.

The major difference is in subsection (E). A municipality is charged with the duty to facilitate full development of the resources within the existing corporate boundaries and to manage and control urban expansion outside of its boundaries. A county is charged with the duty to manage natural resources and to manage and control urban growth. The major emphasis in this difference is that a municipality should direct growth first into the area within its existing boundary while a county must not only control and manage growth but also manage the natural resources of the county, presumably to lessen the impact of urban growth on the natural resources.

The planning requirements for a planned growth area again are similar to those for an urban growth boundary with certain subtle differences that relate to the unincorporated nature of a county. Section 7(b)(2) {TCA 6-58-106(b)(2)} states that before formally proposing any planned growth area, the county shall:

(A) Develop and report population projections which shall be developed in conjunction with the University of Tennessee;

(B) Determine and report the current costs and projected costs of core infrastructure, urban services and public facilities throughout the territory under consideration for inclusion within the planned growth area and to examine the feasibility of recouping those costs by imposition of fees or taxes within that area;

(C) Determine and report on the need for additional land suitable for high density industrial, commercial and residential development, after taking into account all areas within the current boundaries of municipalities that can be used, reused or redeveloped to meet such needs;

(D) Determine and report on the likelihood that the territory under consideration for inclusion with the planned growth area will eventually incorporate as a new municipality or be annexed;

(E) Examine and report on agricultural lands, forests, recreational areas and wildlife management areas within the territory under consideration for inclusion within the planned growth area, and

(F) Examine and report on the likely long-term effects of urban expansion on such agricultural lands, forests recreational areas and wildlife management areas.

The major difference here with requirements for an urban growth boundary is that prior to recommending a planned growth area, the county must first take into account the growth and development that may take place within the municipalities. The county must also evaluate the possibilities that any planned growth area under consideration may incorporate or be annexed into an existing city and must examine the feasibility of paying for urban type services with additional fees or taxes.

Rural Areas

The final aspect of a county growth plan is the recommendation of rural areas by the county. According to the Section 7(c)(1) of the Act {TCA 6-58-106(c)(1)}, a rural area shall:

(A) Identify territory that is not within urban growth boundaries;

(B) Identify territory that is not within a planned growth area;

(C) Identify territory that, over the next twenty (20) years, is to be preserved as agricultural lands, forests, recreational areas, wildlife management areas or for uses other than high density commercial, industrial or residential development; and

(D) Reflect the county's duty to manage growth and natural resources in a manner which reasonably minimizes detrimental impact to agricultural lands, forests, recreational areas and wildlife management areas.

In the establishment of rural areas the county is responsible for not only identifying the areas that are to be preserved for the uses spelled out in the Act, but also to manage growth and resources in such a manner that will minimize the impact on these areas.

Goals and Objectives

One additional section of the Act provides direction and establishes goals and objectives for the growth plans. Section 8 {TCA 6-58-107} is often ignored but is a vital element of the planning process. It states that the “purpose of a growth plan is to direct the coordinated, efficient, and orderly development of the local government and its environs that will, based on an analysis of present and future needs, best promote the public health, safety, morals and general welfare.” The goals and objectives of a growth plan established by this section include the need to:

- (1) Provide a unified physical design for the development of the local community;
- (2) Encourage a pattern of compact and contiguous high density development to be guided into urban areas or planned growth areas;
- (3) Establish an acceptable and consistent level of public services and community facilities and ensure timely provision of those services and facilities;
- (4) Promote the adequate provision of employment opportunities and the economic health of the region;
- (5) Conserve features of significant statewide or regional architectural, cultural, historical or archaeological interest;
- (6) Protect life and property from the effects of natural hazards, such as flooding, winds, and wildfires;
- (7) Take into consideration such other matters that may be logically related to or form an integral part of a plan for the coordinated, efficient and orderly development of the local community; and
- (8) Provide for a variety of housing choices and assure affordable housing for future population growth.

MINIMUM PLANNING REQUIREMENTS

The previous section of this report analyzed the language in the Act that provides for the growth plan, the processes involved and the planning requirements. In order to review the adequacy of plans that were prepared based on those directives, it is necessary to go further into the details of the preparation of a growth plan. For a plan to be in compliance with Section 7 of the Act, there are certain basic elements of preparation of the plan in which a municipality or a county must engage to arrive at the conclusions demanded by the Act. A great

deal of background information is needed that forms a basis for decision-making. This section of the report provides a description of the types of analyses that are fundamental in the preparation of a plan and provides a basis for the evaluation thereof.

The county coordinating committee develops the county growth plan. In developing this plan, the committee must consider the recommendations of municipalities for urban growth boundaries and of the county for planned growth areas and rural areas and follow the procedures outlined in the Act. In order for the committee to do its job, all governments within the county must submit an individual plan that provides adequate information that can be formulated into a countywide plan. Each entity has a responsibility.

Responsibility of Municipalities

The development of a municipal growth plan that includes the designation of the urban growth boundary should include a thorough analysis of land use and services within the jurisdiction as well as an analysis of growth trends. This involves a detailed discussion of the following areas:

- Existing land use in the community differentiated into the amount of residential, commercial, industrial, transportation and vacant land, by number of acres;
- Analysis of the physiographic limitations of the land base including topography, streams and bodies of water, flood plains, wetlands, bedrock geology, and soils with regard to its capability for various types of land uses;
- Existing land devoted to agriculture, forests, recreation and wildlife management areas;
- Analysis of the potential for future growth that includes population analysis and projections and other factors that may be identified;
- An analysis of the vacant land available in the community and its capability to absorb future growth;
- A description of the need for additional land outside the municipality for high density development of all types after the available land within the municipality has been used, reused or redeveloped;
- An analysis of the likely long-term effects of urban expansion on the agricultural, forest, recreational and wildlife management area lands;
- An urban public services inventory and analysis to cover all the public services offered by the municipality and the services identified by the Act as required for a plan of services;
- An analysis of the current costs of services and the projected costs for services required to accommodate the full potential of complete development within the current bounds of the municipality and throughout the territory of its proposed urban growth boundary;
- Identification of the territory proposed for the urban growth boundary.

Responsibility of the County

The county is responsible for the identification of planned growth areas, if any, and rural areas within the county's jurisdiction. The planning requirements for the designation of the planned growth area are fundamentally the same as those for an urban growth boundary. The only difference is that the county has to describe the need for high density development **after** the available land within the municipalities' corporate and urban growth boundaries has been developed. Also, the likelihood that new incorporations will occur or the area will be annexed must be addressed. All other elements needed to justify the plan and planned growth areas are the same.

The county has a greater responsibility in the establishment of rural areas. One problem evident to date throughout the state in the establishment of rural areas is that in most cases it appears that this was considered to be a final action in the plan, and rural areas have been recommended merely as land left over after every possible scenario for growth has been promulgated. The charge placed on the county by the Act has been basically ignored. This charge is two-fold: (1) to identify territory that is to be preserved as agricultural areas, forests, recreational areas and wildlife management areas and (2) that reflects the county's duty to manage growth and natural resources in a manner which reasonably minimizes detrimental impact upon these areas.

In order to establish rural areas and to comply with the legislative mandate, much more analysis and planning must be done than just declare as rural areas whatever is leftover. In reality the analysis and planning for the rural areas should be done in the initial phase of growth plan preparation so that the information derived can form the basis for the other aspects of the county growth plan. The type of information required for inventory and analysis of the natural assets extant in the county includes the following:

- Soil types and prime or unique agricultural land;
- Land in farming activities;
- Land in forest cover;
- Land in recreational areas or wildlife management areas;
- Streams, rivers, lakes, wetlands and floodplains; and
- Critical wildlife habitats and other critical natural areas.

This information must also be analyzed with regard to development pressures that will impact the agricultural and open space areas. Development pressures include conversion of land to residential, commercial and industrial uses, new schools, and the growth induced by new roads and construction of water and sewer lines. All of this basic or core information must be an integral part of the process that establishes urban growth boundaries, planned growth areas and rural areas.

With this information the county can then recommend the rural areas and if the need is fully developed, planned growth areas. In contrast, without it, the amount of rural area and planned growth area would be difficult to justify.

PLANNING TERMINOLOGY

The term “plan” is used throughout this report, and it was used in the hearings before the panel in various ways. For purposes of this report and perhaps to clarify the term as used for different kinds of plans, it is necessary to define the types of plans that may be discussed. Chapter 1101 refers to a **growth plan**, and the requirements of the growth plan have been presented thoroughly in the above text. Additionally, under the umbrella of local government planning, there is also a **comprehensive plan** and a **land use plan**. None of these type plans is exactly the same as a growth plan although there are certain elements that are common to all of them.

A comprehensive plan for a community is the most complete type of plan that may be prepared in a community (city, town or county). If a community has a current comprehensive plan (may also be known as a general plan as provided in TCA 13-3-301 for counties and 13-4-201 for municipalities), it would also have all of the necessary information required to prepare a growth plan. The subject areas covered by such a plan as conceived within the planning profession would include:

- A history or background of the area;
- An analysis of the physiographic characteristics of the area;
- An analysis of the economic growth and development of the area;
- An analysis of population trends and a future projection;
- An analysis of growth patterns and trends, the types of land uses and the amount of land devoted to each type use;
- An analysis of housing trends and conditions;
- An analysis of major thoroughfares and traffic conditions;
- An analysis of the community or public facilities provided by the governmental entity;
- A clear statement of goals and objectives;
- The development of future plan for land use, thoroughfares and community facilities; and
- A recommendation of tools that may be used to implement the plan. These would include the adoption and enforcement of a zoning ordinance and subdivision regulations and the preparation and adoption of a capital improvements plan and budget.

A land use plan includes the first four elements listed above plus a long-range plan for future land use. So, a growth plan is a combination of different planning

elements normally included in a comprehensive plan plus a proposal and description of the growth boundaries proscribed by the Act. A growth plan is broader than a land use plan but somewhat less encompassing than a comprehensive plan. In the remainder of this report when referring to a type of plan, the above clarifications or definitions will be used as a standard. The use of the word "plan" will refer to a growth plan envisioned by the Act. The other type plans will be appropriately identified.

CHAPTER II

ANALYSIS OF PLANS BY JURISDICTION

As noted previously, the purpose of this report is to supplement the work of the county and respective communities that has already been submitted and to bring the county growth plan into compliance with the Act; not to start from a base beginning. In order to identify deficiencies that exist in those documents, it is necessary here to analyze those reports and documents with regard to the requirements of the Act. The analysis of growth plans as submitted by each municipality and by the county will be done using the above minimum planning requirements as a guide. The contents of the plans will be compared to those requirements by developing a list of elements or sections that each plan should contain and noting whether the matter is adequately covered. The issue of whether the stated goals and objectives of the Act have been observed will also be addressed.

Some of the growth plans may embody assumptions or conclusions that the community has developed but with which this writer cannot justify and may not agree. If this is the case, then the reasons for the disagreement will be given. Each governmental entity will be examined individually herein and taken in alphabetical order.

Braden

The Town of Braden did not participate in any of the dispute resolution process nor was any data submitted either by the town or for the town. The first county plan that was produced by the Fayette County Coordinating Committee also did not include any data for Braden. Yet, the county map entitled "Fayette County Growth Boundaries Agreement as of 12-19-00" shows a large area outside of the town for an urban growth boundary. No area is given for the existing town limits nor for the urban growth boundary, however, the size of the urban growth boundary appears to be more than double the size of the town.

The population of Braden was 293 in 1980, 354 in 1990, and 271 in 2000. No population projections were made, and there were no analyses made relative to the need to accommodate future growth. Due to the fact that no information relative to urban services has been provided and the other factors needed for a growth plan, no conclusion can be reached regarding whether the town is best able to provide services for this region. Therefore, no urban growth boundary has been justified.

Gallaway

The Town of Gallaway has submitted a report proposing urban growth boundaries. The report does not represent a complete plan, but it does address certain aspects of the Act. The following list presents the report in the context of compliance with Section 7.

- **Does the plan include an analysis of existing land use?** The report contains a land use survey in Exhibit B. The town also submitted a table of future land use needs to the panel on the record identified as Exhibit 126. These two items cover the number of acres utilized by residential, commercial, industrial, institutional, and transportation land uses. However, the numbers in the tables do not agree. Therefore, a question is raised with regard to the applicability of the data.
- **Is there an analysis of physiographic characteristics of the area?** A general description of the land base with an emphasis on land in flood plains is included.
- **Have agricultural, forest, recreation and wildlife management areas been identified?** The report mentions these type areas, but they are not located on any map nor is any discussion relative to their importance included.
- **Has the area's potential for future growth including population projections been evaluated?** Population projections are included, and a substantial amount of growth is projected with the 2000 population growing by over 200 percent in 2020. The methodology used is apparently based on number of lots approved for building development, an assumption relating to growth in suburban Shelby County and a relationship to the total county and census division population. However, a direct relationship of the town's projection for 2020 to the other numbers is not given. Additionally, no rational basis has been given for the county projection.
- **Does the plan include an analysis of vacant land and its capacity to absorb future growth within the community?** An analysis of vacant land has been included, and a total amount of land available was estimated.
- **Does the plan include a description of the need for additional land outside the municipality for high-density development of all types after the available land within the municipality has been used, reused or redeveloped?** This item is included in the report. The relationship between the size of the city, the urban growth boundary and population projections has not been fully developed. For example, the table shown

as Exhibit 126 indicates that 1,190 acres are needed for future land development in Gallaway. Exhibit B indicates that 1,457 acres of unconstrained vacant land are available within the town limits, but the proposed urban growth boundary contains 8,500 acres. Using the population projection provided in the report, which is questioned, and applying a density factor for future development, total residential land needs in 2020 would be 1,015 acres. This number is reasonably comparable to the identified need in the report. The justification for 8,500 acres in an urban growth boundary must be based on other factors.

- **Have the likely long-term effects of urban expansion on the agricultural, forest, recreational and wildlife management area lands been evaluated?** The report states generally that Gallaway is committed to the protection of these lands, yet there is no plan or detail to indicate how this would be accomplished.
- **Does the plan include an urban public services inventory and analysis?** The report includes this analysis.
- **Does the plan include an analysis of the current costs of services and the projected costs for services required to accommodate the full potential of complete development within the current bounds of the municipality and throughout the territory of its proposed urban growth boundary?** Costs of services are included, however, the ability of the town to pay the costs is not covered.
- **Does the plan identify the territory proposed for the urban growth boundary and provide a basis for the area?** As noted, the urban growth boundary is proposed, but the justification for the size of the area is open to question.

Hickory Withe

The Town of Hickory Withe contracted with a private consulting firm to prepare a plan in 1999. This plan is known as the *Urban Growth Boundary and Service Delivery Plan*. It provides a basis for evaluating the town's growth boundary and whether the requirements of the Act have been met.

- **Does the plan include an analysis of existing land use?** A land use analysis is included. This analysis provides adequate information to examine the types of land uses and the amount of land used by various categories.
- **Is there an analysis of physiographic characteristics of the area?** No detailed analysis of physical conditions is provided other than to note the number of acres identified as undevelopable/floodplain.

- **Have agricultural, forest, recreation and wildlife management areas been identified?** There is no specific analysis of these type areas other than to note how many acres of land are utilized as agricultural/rural.
- **Has the area's potential for future growth including population projections been evaluated?** There is a detailed analysis of population, and a range of projections is included. The methodology is an acceptable approach, but the total number derived is based upon certain assumptions that may or may not occur. However, the projections are made using a rational basis to achieve the result.
- **Does the plan include an analysis of vacant land and its capacity to absorb future growth within the community?** No separate analysis of vacant land or its potential to absorb growth is included.
- **Does the plan include a description of the need for additional land outside the municipality for high-density development of all types after the available land within the municipality has been used, reused or redeveloped?** This report does contain a land use plan for future use of the land area of the town and urban growth boundary. Most development is planned to be very low density with less than six percent of the area being proposed for higher intensity uses such as commercial or office. This type plan will result in much more land being classified as low density residential than if higher densities were proposed. Land development occurring in a density range of one dwelling unit per one to five acres leaves the possibility that a large amount of growth could be accommodated by infill in these areas.
- **Have the likely long-term effects of urban expansion on the agricultural, forest, recreational and wildlife management area lands been evaluated?** No specific treatment is offered for these type areas of land classification.
- **Does the plan include an urban public services inventory and analysis?** This subject is addressed in an adequate manner.
- **Does the plan include an analysis of the current costs of services and the projected costs for services required to accommodate the full potential of complete development within the current bounds of the municipality and throughout the territory of its proposed urban growth boundary?** This issue is covered in a general manner, and some cost figures are included. The town does not offer a high level of public services at this time, but an approach toward providing some services is proposed using a capital improvement plan to develop a system. No resources are proposed to finance the improvements, and the capital

improvement plan, if fully developed, would need to include a financial plan.

- **Does the plan identify the territory proposed for the urban growth boundary and provide a basis for the area?** A large urban growth boundary is proposed, and the basis for the area is discussed. The population projections when related to density do not support the area proposed. Consequently, other factors are used to provide a rationale for the area.

La Grange

The Town of La Grange is indeed a unique community. A large part of the corporate limits is included in a historic district that is listed on the National Registry of Historic Places. This designation occurred in 1975. Due to its status as a historic area and the state of preservation of the buildings, the town began a definitive planning process for historic preservation in the 1980s. As a result, a zoning ordinance that included provisions for historic zoning was adopted in 1986, and at the same time a historic zoning commission was created and appointed. Later, a long-range plan, the *La Grange 2010 Vision*, was produced and adopted by the town in 1989. This plan provides the basis for the land use analysis, physiographic features and other information needed for a growth plan.

- **Does the plan include an analysis of existing land use?** The plan includes the required land use analysis. However, the plan is twelve years old. Due to the general lack of new growth and development, it is assumed that not that many changes have occurred that would alter the analysis.
- **Is there an analysis of physiographic characteristics of the area?** The plan includes an analysis of soils, topography, vegetation cover and flood plains. This is entirely adequate for planning purposes.
- **Have agricultural, forest, recreation and wildlife management areas been identified?** This area has been adequately covered.
- **Has the area's potential for future growth including population projections been evaluated?** Future growth and the area needed to accommodate it were included in the plan. This has been supplemented by a plan of services report prepared in 1999 and submitted as a part of the record. Here again, even though the town has been losing population, an increase is projected based on county trends.
- **Does the plan include an analysis of vacant land and its capacity to absorb future growth within the community?** This item has been

adequately described. It was noted in the plan that future growth could be accommodated within the town limits.

- **Does the plan include a description of the need for additional land outside the municipality for high-density development of all types after the available land within the municipality has been used, reused or redeveloped?** This area is not well developed. The plan was prepared as community plan based upon generally accepted standards for community planning. This particular requirement of the Act has not been updated by the town.
- **Have the likely long-term effects of urban expansion on the agricultural, forest, recreational and wildlife management area lands been evaluated?** This area was discussed in a general manner that is adequate for purposes of a growth plan.
- **Does the plan include an urban public services inventory and analysis?** The plan included a basic analysis of services offered by the town.
- **Does the plan include an analysis of the current costs of services and the projected costs for services required to accommodate the full potential of complete development within the current bounds of the municipality and throughout the territory of its proposed urban growth boundary?** This requirement was met with the plan of services and estimated cost summary developed in 1999 as a supplement to the town's plan and submitted to the County Coordinating Committee and adopted by the town.
- **Does the plan identify the territory proposed for the urban growth boundary and provide a basis for the area?** Obviously, the plan developed in 1989 does not address issues required by the Act. However, the County Coordinating Committee recommended an urban growth boundary as a part of the county map. Supplemental materials developed by the town address the issue. The basis for the growth boundary is developed in the stipulation of facts submitted by the town as Exhibit 92.

Moscow

The City of Moscow submitted a report proposing an urban growth boundary. The report does not represent a complete plan, but it does address certain aspects of the Act that are required to propose a boundary. The following discussion evaluates the report in the context of compliance with Section 7.

- **Does the plan include an analysis of existing land use?** The report contains a land use survey in Exhibit B. This survey is adequate for determining the land base of the community.
- **Is there an analysis of physiographic characteristics of the area?** There is no specific analysis of these characteristics. Floodplains are noted and presented in the survey.
- **Have agricultural, forest, recreation and wildlife management areas been identified?** The report mentions these type areas and purports to protect them, but no specific measures are included.
- **Has the area's potential for future growth including population projections been evaluated?** Population projections are included in the report, and a substantial amount of growth is projected. The methodology used is apparently based on the number of lots approved for building development, a comparison of growth rates in suburban Shelby County and a relationship to the total county and census division population. However, a direct relationship of the town's projection for 2020 to the other numbers is not given. The 2000 population of 422 is projected to grow by 237 percent to a figure of 1,422. Here again, the total population figure used for the county has not been justified.
- **Does the plan include an analysis of vacant land and its capacity to absorb future growth within the community?** This question has been answered adequately.
- **Does the plan include a description of the need for additional land outside the municipality for high-density development of all types after the available land within the municipality has been used, reused or redeveloped?** This item is included in the report. The current size of the city is 730 acres, but the urban growth boundary proposed represents an eight-fold increase in land area or an additional 6,800 acres. This area is not related to the projected increase in population, and no discussion of existing or future density of development is provided. The future land needs identified in Exhibit 120 indicates that 1,380 acres are needed by 2020. Thus, other factors must come into the equation.
- **Have the likely long-term effects of urban expansion on the agricultural, forest, recreational and wildlife management area lands been evaluated?** This area is discussed in a very general manner and is particularly related to the floodplains of the region. No specific means of protection are mentioned.
- **Does the plan include an urban public services inventory and analysis?** This item is included.

- **Does the plan include an analysis of the current costs of services and the projected costs for services required to accommodate the full potential of complete development within the current bounds of the municipality and throughout the territory of its proposed urban growth boundary?** Some service costs are provided, but no level of service is proposed.
- **Does the plan identify the territory proposed for the urban growth boundary and provide a basis for the area?** An urban growth boundary is proposed, and as noted above, the size of the area is subject to question.

Oakland

The Town of Oakland has submitted the Oakland Urban Growth Boundary report identified as Exhibit 61 as prepared by the state Local Planning Office in 1999. Additional information was also submitted to supplement this report as Exhibits 65, 75, 80, 86, 87, and 88. These items do not represent a complete plan, but they do address certain elements contained in the Act.

- **Does the plan include an analysis of existing land use?** The report includes a land use survey and a description of the land use categories. This would be considered to be adequate for meeting the requirements of the Act. However, Exhibit 86 represents another analysis that depicts the amount of land by zoning classifications. The problem is that the total land area shown by the two tables is not similar. The report indicates that Oakland contains 1,715 acres while the zoning table reflects 2,500 acres. The more meaningful information is how much land is actually used by category, but the total acres that comprise the town are also a needed figure. Which one is accurate?
- **Is there an analysis of physiographic characteristics of the area?** This item is not addressed other than a section of the land use table referring to physically constrained land.
- **Have agricultural, forest, recreation and wildlife management areas been identified?** This item was also not covered in any definitive way.
- **Has the area's potential for future growth including population projections been evaluated?** Population projections are included, however, their applicability is questioned by the town. Since the report was prepared before the 2000 census was taken, it uses the UT projections with a 2000 population of 743 and a 2020 population of 849. The actual 2000 census showed a population of 1,279. Thus, the tabulated population in 2000 exceeds the UT 2020 projection by over 400

people. Table 2 in the report also contains an estimate of 2000 population and a 2020 projection, but the source of these numbers and how they were derived is not given.

- **Does the plan include an analysis of vacant land and its capacity to absorb future growth within the community?** Vacant land potential is fully covered.
- **Does the plan include a description of the need for additional land outside the municipality for high-density development of all types after the available land within the municipality has been used, reused or redeveloped?** The need for additional land is discussed, but with the use of the low projections, the need is not established. Local objectives for additional land are presented, but again the need is not well developed.
- **Have the likely long-term effects of urban expansion on the agricultural, forest, recreational and wildlife management area lands been evaluated?** These areas are not addressed.
- **Does the plan include an urban public services inventory and analysis?** A complete inventory of services is provided. It also includes descriptions of levels of service provided and to be provided.
- **Does the plan include an analysis of the current costs of services and the projected costs for services required to accommodate the full potential of complete development within the current bounds of the municipality and throughout the territory of its proposed urban growth boundary?** The report contains a well-developed analysis of costs.
- **Does the plan identify the territory proposed for the urban growth boundary and provide a basis for the area?** The report proposes an urban growth boundary but doesn't provide a map or size of the area. A separate land use summary shown on Exhibit 87 indicates that the proposed urban growth boundary is 20,567 acres. If the current acreage in the town is 1,715 acres as indicated in the report, the acreage of the urban growth boundary is an increase of over 10,000 percent. The basis for such a difference is not developed.

Piperton

The City of Piperton prepared an *Urban Growth Boundary Report* in 1999 and updated the report in 2001 presented to the panel as Exhibit 133. The report is not a complete comprehensive community plan; however, it does contain the elements of a land use plan for the future. It also contains substantive land use

policy statements to guide future development. An extensive analysis of population trends is also presented in the report that includes local input, the report of the Regional Economic Development Center at the University of Memphis, and an analysis prepared by Land Development Solutions, LLC, a planning consulting firm.

- **Does the plan include an analysis of existing land use?** A land use inventory and analysis is provided.
- **Is there an analysis of physiographic characteristics of the area?** A general discussion of floodplains, slopes and some soil characteristics is included.
- **Have agricultural, forest, recreation and wildlife management areas been identified?** These areas have not been identified by locations on maps, and there is no specific discussion relating to them. However, the value of such areas and plans for their protection is woven into the policy planning elements, and specific regulations and opportunities for open space protection have been adopted. There is a basic recognition of the value of preservation of these lands expressed throughout the document.
- **Has the area's potential for future growth including population projections been evaluated?** The report contains extensive information on population trends and projections as well as future growth potential. Analysis and projections are provided by the city, and additional analyses prepared by the Regional Economic Development Center at the University of Memphis and by the city's planning consulting firm, Land Development Solutions, are included. A decision must be made regarding which projection is the most feasible to use for growth planning purposes.
- **Does the plan include an analysis of vacant land and its capacity to absorb future growth within the community?** This is covered.
- **Does the plan include a description of the need for additional land outside the municipality for high-density development of all types after the available land within the municipality has been used, reused or redeveloped?** Table 4 of the report includes this description. It is based upon a population projection selected for the report that relates population to density to number of acres required. The city also projects extensive commercial and industrial land needs as well as the associated support land uses that would accompany this type development. These needs are based upon an assumption that the completion of Highway 385 with three interchanges in the Piperton area will result in a significant demand in the area. Such an assumption contains a basic logic, but it is entirely dependent upon the city developing a public sewer system that

can serve such development. This type development can't be supported on septic tank systems.

- **Have the likely long-term effects of urban expansion on the agricultural, forest, recreational and wildlife management area lands been evaluated?** The long-term effects are embodied in the policy statements and in the land use regulations that are designed to conserve these land areas.
- **Does the plan include an urban public services inventory and analysis?** An inventory and analysis is included in the report.
- **Does the plan include an analysis of the current costs of services and the projected costs for services required to accommodate the full potential of complete development within the current bounds of the municipality and throughout the territory of its proposed urban growth boundary?** The report contains a plan to provide public services and some cost estimates. Where cost is not detailed, a method for paying the cost is proposed. A detailed water and sewer plan is included along with alternatives and cost estimates.
- **Does the plan identify the territory proposed for the urban growth boundary and provide a basis for the area?** A large urban growth boundary is proposed that exceeds 27,000 acres, a 330 percent increase in the area of the city. This is in addition to the 6,414 acres in the existing city, 4,467 of which are vacant. Using the projections and assumptions provided by the city in the report, a case can be made for this area, and the city has made such a case. However, there are several areas where the assumptions may be challenged. The resolution of these issues will be in how much growth is projected and the other factors that affect the determination of the urban growth boundary.

Rossville

The Town of Rossville has submitted two documents to support its urban growth boundary designation, a comprehensive plan and a summary report on the urban growth boundaries. Both were prepared by a consulting firm for the town. The plan is prepared in accord with standards of generally accepted planning practice and is entirely adequate for a town the size of Rossville. The summary report provides the basis for the urban growth boundaries and is designed to address the requirements of the Act.

- **Does the plan include an analysis of existing land use?** A land use survey and analysis is included.

- **Is there an analysis of physiographic characteristics of the area?** There is no specific analysis of these characteristics, however, floodplains and constrained lands are brought into the analysis.
- **Have agricultural, forest, recreation and wildlife management areas been identified?** These areas are not addressed in a specific manner.
- **Has the area's potential for future growth including population projections been evaluated?** Population analyses and projections are provided, and a basis is given for the projections. The methodology used is apparently based on the number of lots approved for building development, a comparison of growth rates in suburban Shelby County and a relationship to the total county and census division population. However, a direct relationship of the town's projection for 2020 to the other numbers is not given. The projected population of 4,000 by 2020 represents a rate of growth of over 900 percent. Another fundamental problem here, as in some of the other towns' approach, is the use of a large 2020 population number for the county. This number has not been adequately justified with a valid methodology for projection purposes.
- **Does the plan include an analysis of vacant land and its capacity to absorb future growth within the community?** A vacant land analysis is included, but the amount of future growth that it can accommodate is not.
- **Does the plan include a description of the need for additional land outside the municipality for high-density development of all types after the available land within the municipality has been used, reused or redeveloped?** An additional table for future land needs was submitted as Exhibit 111. No calculations were provided that related future land needs to projected population, and existing vacant land was apparently not considered.
- **Have the likely long-term effects of urban expansion on the agricultural, forest, recreational and wildlife management area lands been evaluated?** This was not addressed as a specific topic.
- **Does the plan include an urban public services inventory and analysis?** Public services offered by the town are included in the plan.
- **Does the plan include an analysis of the current costs of services and the projected costs for services required to accommodate the full potential of complete development within the current bounds of the municipality and throughout the territory of its proposed urban growth boundary?** Some costs of services are included but others are not. It is noted that water capacities will have to be increased, however, no capacity estimates are given and no costs are included.

- **Does the plan identify the territory proposed for the urban growth boundary and provide a basis for the area?** An urban growth boundary is proposed that is a 1,700 percent increase over the size of the existing town. Using without question the 2020 population of 4,000, calculating the number of dwelling units required and then applying an assumed density, a total land need of 1,481 acres is derived to house the projected population. The proposed urban growth boundary contains 22,620 acres of which 18,096 is unconstrained for development. Here again, some other basis must be used to justify the size of the urban growth boundary.

Somerville

The Town of Somerville has submitted an *Urban Growth Boundary Report* to propose and support the establishment of an urban growth boundary. In addition, a variety of other documents ranging from the town budget to the zoning ordinance was submitted for information purposes. All of these together do not constitute a comprehensive plan or a land use plan. The report does address certain required elements to comply with the Act.

- **Does the plan include an analysis of existing land use?** A land use survey and analysis is included in the report.
- **Is there an analysis of physiographic characteristics of the area?** There is no analysis of the soil, slope or other physiographic data other than the quantification of floodplains and agricultural lands.
- **Have agricultural, forest, recreation and wildlife management areas been identified?** These areas have not been identified nor analyzed in a specific manner.
- **Has the area's potential for future growth including population projections been evaluated?** Population projections and an analysis have been incorporated into the report. There is also an effort to justify a population number for 2000 that is greater than the number reported by the U. S. Census Bureau. The method of projection is apparently a combination of an extrapolation of the trends that lead to the town's conclusion that the census is flawed and a comparison of growth trends from the city of Collierville in Shelby County. This process yields two projections for 2020. The lower number is 6,795, a 170 percent increase from 2000, and the higher number is 11,947, a 374 percent increase. It is questionable which number should be used for the 2020 projection.
- **Does the plan include an analysis of vacant land and its capacity to absorb future growth within the community?** A vacant land analysis is

included. The capability of the vacant areas to absorb future growth is not assessed.

- **Does the plan include a description of the need for additional land outside the municipality for high-density development of all types after the available land within the municipality has been used, reused or redeveloped?** There is a general discussion of the need for additional land outside of the current town limits based on the projections of population and an assumption about the vacant lands that can't or won't be developed because of the heritage of these land areas. The use or reuse of land in the town is not well developed.
- **Have the likely long-term effects of urban expansion on the agricultural, forest, recreational and wildlife management area lands been evaluated?** A discussion of the effects of urban expansion is included in the report.
- **Does the plan include an urban public services inventory and analysis?** The report contains a well-developed analysis of public services offered by the town. A high level of services is provided to the residents of Somerville.
- **Does the plan include an analysis of the current costs of services and the projected costs for services required to accommodate the full potential of complete development within the current bounds of the municipality and throughout the territory of its proposed urban growth boundary?** Again, an extensive analysis of the provision of services and the costs is provided.
- **Does the plan identify the territory proposed for the urban growth boundary and provide a basis for the area?** An urban growth boundary is proposed, however, the report does not provide an acreage that depicts the size of the area. Based on the map that shows all of the urban growth boundaries in the county, it appears that the proposed urban growth boundary is two to three times the size of the current corporate limits. No statistical analysis is provided. For example, using the population projections and average household size in the report and calculating an average density from the land use analysis, a land use projection can be made. Based on the population projection for 2020 of 6,795, the future land need is 1,510 acres for residential purposes while the higher projection of 11,947 yields a need for 2,655 acres. There are 2,757 acres of unconstrained vacant land available in the existing town limits. While these numbers can be manipulated in various ways to reflect an increased need for additional land, the actual basis for the urban growth boundary must be justified using other criteria.

Fayette County

Fayette County has submitted the *Fayette County Growth and Annexation Plan and Plan of Services*. The plan is not a traditional comprehensive or land use plan nor a complete growth plan, but it is designed to address various elements required by the Act. There are some differences in the county's responsibility for rural areas and planned growth areas than the municipalities' responsibility for urban growth boundaries as noted earlier in this report. These will be discussed below.

Rural Areas

The county has proposed that all floodplains, wetlands, the Ames Plantation, land owned by conservation organizations and all governmentally owned property be designated as rural areas. Testimony was given that this area amounted to approximately 120,000 acres. No qualitative analysis of this land area was offered, and no other attention was given to this part of the overall county growth plan.

In the previous section describing the responsibility of the county, it was pointed out that the county is to identify territory that is to be preserved as agricultural areas, forests, recreational and wildlife management areas. No discussion is offered on these subjects. Even though Fayette County is primarily an agricultural county, no analysis is offered concerning the value of the farm economy to the county nor what can be done to protect and preserve the farm economy and the value of farm land. Rather, the emphasis seems to be on the conversion of farmland to subdivisions.

The second responsibility of the county for rural areas is to manage growth and natural resources in a manner that reasonably minimizes detrimental impact on these areas. No plans or proposals for managing growth or minimizing impact are mentioned in the report. Further, no detailed analysis of the natural assets of the county is provided.

Planned Growth Areas

The county has proposed that all land areas outside of urban growth boundaries and not included within the rural area be designated as planned growth area. According to testimony, this area constitutes 180,000 acres. Under the Act, a planned growth area must meet the same criteria as an urban growth boundary, plus consideration must be given to the development that can occur within the urban growth boundaries before a planned growth area is recommended.

- **Does the plan include an analysis of existing land use?** The report includes a table, which quantifies in a general manner the land use within the county jurisdiction. It also includes estimated acreage in the cities' urban growth boundaries.
- **Is there an analysis of physiographic characteristics of the area?** These areas are not included in the report.
- **Have agricultural, forest, recreation and wildlife management areas been identified?** No information on this requirement of the Act is provided.
- **Has the area's potential for future growth including population projections been evaluated?** Population projections are included. As in the cities, the county dismisses the University of Tennessee projections as unreasonable and inapplicable. The county then provides an independent projection of growth that is based on the growth rates experienced in neighboring Tipton County. The projected population for 2020 developed by this method is 44,831. Other projections for the county used by some cities ranged as high as 100,000. As a result, there is no rational basis available for an acceptable projection of future county population. It may also be noted that if the county's projection here is utilized for planning purposes, the municipalities' population projections, urban growth boundaries and the county's planned growth areas as proposed are much too large.
- **Does the plan include an analysis of vacant land and its capacity to absorb future growth within the community?** The land use analysis includes the figure of 136,018 acres of vacant developable land in the county. No further analysis is offered.
- **Does the plan include a description of the need for additional land outside the municipality for high-density development of all types after the available land within the municipality has been used, reused or redeveloped?** The plan discusses the need for land as planned growth area but does not classify it as high density and does not address the land that is available for development within the municipalities. The direction of the discussion appears to be that there is a need for low-density development throughout the county but outside of the existing municipalities.
- **Have the likely long-term effects of urban expansion on the agricultural, forest, recreational and wildlife management area lands been evaluated?** This area is not discussed.

- **Does the plan include an urban public services inventory and analysis?** A complete description of county services is provided. Some conclusions offered as a part of the analysis are open to question. For example, it is stated that the county ambulance service will not be affected by growth in the county. However, as a generally applicable rule, when population grows, the need for emergency services increases in general proportion to the growth of the population. This type issue is not addressed.
- **Does the plan include an analysis of the current costs of services and the projected costs for services required to accommodate the full potential of complete development within the current bounds of the municipality and throughout the territory of its proposed urban growth boundary?** This area is covered. As noted above, the conclusions reached related to the effect of growth on future costs are not well developed.
- **Does the plan identify the territory proposed for the planned growth area and provide a basis for the area?** As noted, a very large planned growth area is proposed. The projections of population are not related to the size of the area, and no information on the planned density of development is provided. No relationship to urban growth boundaries and their capacity to absorb growth is discussed prior to proposing the planned growth area.

SUMMARY

All of the governments within Fayette County with the exception of Braden and Williston² have participated in the formal hearings and presented various kinds of evidence to support their respective positions. All participants have made significant good faith efforts and spent public funds intended to meet the requirements of the Act. As may be expected, some entities' efforts are more complete than others. However, all governmental entities are to be complimented for their active participation and aggressive defense of their proposals.

As noted previously in this report, there are several factors that bear upon whether the requirements of the Act have been met. For purposes of this analysis there are three factors that have the most relevance in the determination of the extent of the growth boundaries and the justification of the growth plans. These are:

² The Town of Grand Junction is incorporated in neighboring Hardeman County but has annexed a small corridor of land in Fayette County near the Town of La Grange. Grand Junction did not participate in the hearings and has no urban growth boundary.

- The extent of the proposed territory as related to the amount of projected growth;
- The territory in which an entity is better able and prepared to provide urban services; and
- The territory that a reasonable and prudent person would project as the likely site of high-density growth over the next twenty years.

These factors are discussed below based upon their relevance to the total county situation.

Growth

A basic issue embodied in the Act as well as in planning for growth in general is the relationship of the amount of new growth projected to the size of the planning areas or in this case the growth boundaries. Throughout this process, the amount of growth in Fayette County and in each municipality has been a key element in the discussion and in the preparation of the various growth plans. Yet, there has been no unanimity of agreement in the total projection of population or in the process used. For example, the population projection for Fayette County ranges from 100,000 in 2020 to approximately 45,000, a difference of 55,000 plus or minus. This is not an acceptable range for planning purposes. Also, individual municipal projections have been made some of which do not have a rational basis for acceptance. Consequently, a basic population projection for the county and each municipality that has been done in a manner that is justifiable, comparable and rational is not available. This is a problem since the size of the urban growth boundaries and the county's planned growth area is directly related to those numbers.

The Act requires that all entities prepare and report on population projections in conjunction with the University of Tennessee. In 1999 the University of Tennessee completed population projections for the state, each county and each municipality. This was a tremendous effort in a very short period of time with very little money. Consequently, the projections have some limitations. The methodology used was basically an extension of historical trends, and while this is valid in a number of cases, in some areas it is not. In a county such as Fayette County that has a history of slow or little growth but which is thought to be on the cusp of a period of rapidly increased growth, the trend line method does not work. All of the entities in the county have agreed that the UT projections do not reflect the realities of their location and possibilities for growth, a conclusion with which this writer agrees. But some kind of projection based on rational methodology must be done.

In order to complete this analysis on growth potential and relate this to growth boundaries, some type of projection must be accepted. Also, some basic measurements of land areas need to be used. Each community and the county has individual documents that address these areas, however, they are not

necessarily consistent. Different bases are used for population projections, and acreage figures do not agree, sometimes within a specific report. During the hearing stage of this process, a document was submitted that contains some basic projections of population and acreage measurements of different areas and boundaries. This is the report entitled *The Rural Nature of Fayette County* prepared by the Tennessee Land Trust. This report contains a substantial amount of factual data that is useful in this analysis. Thus, some data from the report will be used herein and referenced hereafter as the Land Trust Report. The report also contains some text that could be identified as opinion. This text will not be used. The factual data will be included at appropriate places due to its relevance to the analysis and because it provides a consistent basis for comparison. The accuracy of the numbers is not necessarily accepted and may not be used in further planning work on this case. They are used hereinafter merely for comparison purposes and to provide a basis for discussion.

Table I herein shows historic population trends and a 2020 projection. This is taken from Table 3 of the Land Trust Report. Also included within this table are the numbers representing total new growth based on the projections from 2000 to 2020 and the number of new housing units that would be required to house this population. It is notable that the growth rates experienced in Fayette County between 1990 and 2000 are projected to drastically increase by 2020. Even though the county grew by 12.7 percent from 1990 to 2000, an increase of 156 percent is projected by 2020. Some of the towns have projections of even greater proportions. The towns of Hickory Withe, Oakland, Piperton, Rossville and Somerville have projected increases ranging from 164 percent to over 2100 percent.

The amount of new growth and the housing units to house the growth are based on these projections. Total new growth projected amounts to 44,938 people. This in turn will require 17,975 new housing units using an assumed average family size of 2.5 persons per household.

Table I

POPULATION CHANGE 1990 – 2020 AND
NEEDED NEW HOUSING UNITS 2020

Entity	1990 Pop.	2000 Pop.	% Change	2020 Proj.	% Change	Actual Change 2000-2020	Needed New Hsg. Units
Braden	354	271	-23.4	361	33.2	90	36
Galloway	762	666	-12.6	1051	57.8	385	154
Hickory W	0	2,574	0	6,800	164.2	4,226	1,690
LaGrange	167	136	-18.6	167	22.8	31	12
Moscow	384	422	9.9	547	29.6	125	50
Oakland	392	1,279	226.3	12,150	850.0	10,871	4,348
Piperton	612	589	-3.8	13,317	2,161.0	12,728	5,091
Rossville	291	380	30.6	4,000	952.6	3,620	1,448
Somerville	2,047	2,519	23.1	9,590	281	7,071	2,828
Williston	427	341	-20.1	434	27.3	93	37
Total Inc.	5,436	9,177	68.8	48,417	427.6	39,240	15,695
Unicorp.	20,123	19,629	-2.4	25,327	29.0	5,698	2,279
Grand Tot	25,559	28,806	12.7	73,744	156.0	44,938	17,975

Source: U. S. Census of Population, 1990, 2000. Land Trust Report, 2020 Projection. Housing units needed for 2020 were calculated.

Table II indicates the 2000 population of all areas and calculates the total number of households. This is then related to total acreage in these areas to achieve a measure of density of development in the county and each municipality. It is immediately obvious that all development has occurred at a very low density, not even approaching urban area criteria, when the grand total of the available acreages is included. The towns of Somerville, Rossville, Moscow, Williston, and Oakland have built up areas that are developed at a higher density, and individual subdivisions are developed at one dwelling unit per acre in some cases. But overall, when the vacant lands in the towns are included, they add up to very low development density.

TABLE II

POPULATION, HOUSEHOLDS, LAND AREA
AND DENSITY - 2000

ENTITY	2000 POP	HSEHLDS	INSIDE CITY		
			ACRES**	ACRES	UNITS
		*		PER	PER
				HSEHLD	ACRE
Braden	271	108	2307	21.4	0.05
Gallaway	666	266	2199	8.27	0.12
Hickory W	2,574	1030	17,652	17.14	0.06
LaGrange	136	54	1025	19.01	0.05
Moscow	422	169	811	4.8	0.21
Oakland	1,279	512	2610	5.1	0.20
Piperton	589	236	6197	26.26	0.04
Rossville	380	152	1106	7.28	0.14
Somerville	2,519	1008	7975	7.91	0.13
Williston	341	136	1054	7.75	0.13
Sub Total	9,177	3,620	42,936	11.7	0.09
Unicorp.	19,629	7,852	407,624	51.90	0.04
Total	28,806	11,427	450,560	39.10	0.03

* Assume 2.5 persons per household/unit.

** Taken from Table 7, Land Trust Report.

Table III represents land area totals for the towns and the county as well as vacant land available for development within each respective area. The urban growth boundaries are then added in to get a total acreage of land that is available for future urban-type development. This is a "crude" measurement since the existing development within the growth boundaries is not factored out. However, it does provide a rough estimate of available land. It is notable that approximately 25,000 acres of vacant land is available within existing corporate boundaries. Another 105,114 acres are contained in the urban growth boundaries for a total of 129,950 acres of land in the urban growth boundaries and vacant land in town limits. The county identifies another 136,018 acres as vacant and developable. This yields a total of 265,968 acres of vacant and developable land.

TABLE III

LAND AREAS BY ACREAGE

Entity	Total Acreage	Vacant Land*	UGBs	Vacant and UGBs
Braden	2,307	1,154	6,451	7,605
Galloway	2,199	1,457	8,374	9,831
Hickory Withe	17,652	12,118	9,999	22,117
LaGrange	1,025	580	6,849	7,429
Moscow	811	120	6,270	6,390
Oakland	2,610	1,192	20,552	21,744
Piperton	6,197	4,467	19,862	24,744
Rossville	1,106	464	10,726	11,190
Somerville	7,975	2,757	16,031	18,788
Williston	1,054	527	--	527
Subtotal	42,936	24,836	105,114	129,018
Unincorp.	407,624	136,018		136,018
Grand Total	450,560	160,854		265,968

* Generated from individual reports from each entity.
Braden and Williston based on estimates.

Taking this process a step further, Table IV uses the total land area available as vacant in the towns and the urban growth boundary areas plus the county's vacant land acreage and subtracts a market factor for land that is not available for sale or development due to a variety of reasons. This is based on the knowledge that even though a tract of land is vacant, it may not be available. During the hearings, the term "generational land" was used. Here the term "market factor" will be used to account for those type land areas. The market factor employed here is 25 percent, that is, within any jurisdiction; an average of 25 percent of the land area is not available for sale or development. This figure was derived as an assumed average based upon the experiences of other regions.

Normally in the planning process, a market factor is added to the estimated land needs for a 20-year supply. Here, due to the size of the initial proposal for growth boundaries, the market factor was subtracted in order determine the amount of land available without those acres being included. This was done to see if a suitable amount of land was available for a 20-year supply plus a margin of error. Table IV shows that a more than ample amount of land is available.

TABLE IV

DEVELOPABLE LAND COMPARED TO ACTUAL NEED

Entity	Vacant and UGBs	Minus Market Factor	Total Acres Needed *	Difference in Total Land Need
Braden	7,605	5,704	36	5,668
Galloway	9,831	7,373	154	7,219
Hickory Withe	22,117	16,588	1,690	14,898
LaGrange	7,429	5,572	12	5,560
Moscow	6,390	4,793	50	4,743
Oakland	21,744	16,308	4,348	11,960
Piperton	24,744	18,247	5,091	13,156
Rossville	11,190	8,393	1,448	6,945
Somerville	18,788	14,091	2,828	11,263
Williston	527	395	37	358
Subtotal	129,018	97,464	15,694	81,770
Unincorp.	136,018	102,014	2,279	99,735
Grand Total	265,968	199,478	17,973	181,505

* Based on an assumed future development density of one dwelling unit per acre. This number could vary greatly if a different assumed density were employed.

After adjusting the acreage figures for the market factor, the total number of acres actually needed for future development based upon the projected growth is included. These figures are then subtracted from the total acres available for development. The result gives the number of acres of land that is in excess of the actual need. Thus, there are a total of 199,478 acres of land that might be developed over time within urban growth boundaries and the county's planned growth area. However, future growth projections indicate that 17,973 acres can accommodate the growth leaving 181,505 acres of excess land in the boundaries. If all of this area were developed at an average of one dwelling unit per acre and holding the average family size constant at 2.5 persons, a total of 453,763 people could be accommodated.

Clearly, the size of the urban growth boundaries and planned growth areas cannot be justified by the growth projections, and it should be remembered that the growth projections used herein are still subject to question. The result here is that the future growth can be absorbed within much smaller growth boundaries.

Another factor in consideration of the plans is whether they reflect the goals specified in Section 8 of the Act [TCA 6-58-107]. In most cases the plans did not address the goal of a compact development pattern or the goal of affordable housing. Conversely, most did in some way address the goal of protection of

property from the effects of natural hazards. LaGrange has also done an outstanding job of protecting its architectural and cultural history.

However, in consideration of the complete package of plans and the above discussion on growth and land area, they fail to meet the planning requirements of the Act.

Services

Another factor to be considered in determining growth boundaries is which community is better able and prepared to provide services. Each plan addressed the issue of services in some way although each community may provide a different level or quality of service. None of the communities, however, specify when a certain level of service will be provided within the urban growth boundaries nor in many cases whether the provision of services was financially feasible. Another consideration is that due to simply location, provision of services by one community may be more feasible and practicable than any other. The final result here is that using this area for justification of a growth boundary introduces more flexibility for area than does the above section on growth.

Prudent Person

The idea of a reasonable and prudent person projecting the bounds of growth is one that may have a basis in areas of law, but this Act does not attempt to define what is prudent or reasonable. It also does not address whether one person is more prudent than another. Therefore, this idea introduces a large area of subjectivity to the process. For example, one person may think it reasonable and prudent to include the entire county in a planned growth area. Another equally prudent person may think such an idea is preposterous and that the county should be a rural area. However, there may be some areas of agreement that can be reached in establishing a boundary where this prudent person situation can apply.

CONCLUSION

Based upon the amount of land proposed in growth boundaries and the amount of growth projected, it is here concluded that the plans as submitted do not meet the requirements of the Act. While there are considerations to be given for a service boundary for a community and for the prudent person, the overwhelming disparity in acres of land proposed and acres of land needed cannot be overcome. Of particular concern are the size of the county's planned growth area and the lack of attention given to the importance of rural areas. It is also a concern that small towns with little population have proposed such large areas for future growth.

From the perspective of the panel, it would appear that there are some options to be considered. First, the panel could agree with the above statement and order a complete new plan to be prepared based upon different assumptions. Inherent in this approach would be a different set of population projections preferably done by an independent specialist in this area. One such specialist is the Regional Economic Development Center at the University of Memphis. Perhaps a drawback to this approach is the cost, which would likely be in the area of \$7,000.

Second, the panel could accept parts of the plans that have been prepared, some at considerable effort and expense, and order the communities to alter them in some way to make them more compatible with the Act. If this were done, one approach could be to require that the growth boundaries be reduced in size to more closely agree with the amount of land actually needed to accommodate the projected growth.

Finally, the panel could declare that the plans as presented meet the requirements of the Act. This approach would have to be based upon the use of provision of services or the prudent person theory to justify the growth boundaries. Other aspects of the plans would also be accepted.

CHAPTER III

SUPPLEMENTAL DATA

The first two chapters of this report were prepared after the testimony of all Fayette County governments in hearings before the judges, and the report was presented to the panel in April of 2002. This chapter was prepared to supplement the information presented by the governments and to develop a growth plan for consideration by the panel. The current chapter became necessary when the panel determined that the documents submitted by the Fayette County governments, when considered as a county-wide plan, failed to meet the requirements of Public Chapter 1101. This chapter was begun during the summer of 2002 but was then delayed to permit a new county commission and county mayor, who were elected in August 2002, the opportunity to develop a growth plan at the local level upon which all governments could agree. That effort also failed. Consequently, work on the details of this chapter was started again in December 2002. Another delay was encountered when a request for additional information was made by this writer, and several weeks passed before the information was submitted. Even then, some of the governments did not submit the information.

During the entire process of attempting to reach agreement on a plan and the subsequent hearings before the panel of judges, the participating governments of Fayette County developed a great deal of information. As noted above however, it was determined that additional data and different interpretations of the Act were needed in order to meet the requirements of the Act. Based on instructions from the panel, the intent here is to use the information generated by the various entities to the greatest extent possible and supplement it at appropriate points herein to develop a plan that meets the requirements of the Act.

NATURAL FEATURES

Fayette County lies in the southwestern part of Tennessee and consists of about 704 square miles or 450,560 acres. The county seat of the county is the Town of Somerville located about 40 miles east of Memphis. The county is historically an agricultural area, and while urban and suburban growth has recently been occurring in the county, it is still largely an agricultural county. As the Memphis region continues to grow, it is likely that Fayette County will experience much more population growth and urban development since the development pattern in Shelby County has moved in an eastwardly direction.

Note: During the course of the writing of this report, the Town of Hickory Withe surrendered its charter as a municipality as a result of a legal challenge to the town's incorporation by the Town of Oakland. Through the trial court and court of appeals, Oakland has been successful. An appeal has been made to the state Supreme Court. In order to maintain consistency of analysis, Hickory Withe will continue to be shown as an incorporated city. The final recommendation will show the community as a planned growth area.

From a geological perspective Fayette County lies in the western part of the plateau slope of western Tennessee. Marine sediments of the Coastal Plain underlie the county. The entire county is covered by a loess soil that was deposited in a late period of geologic time. Since it was blown in from the west, the loess is thickest in the western part of the county as compared to the east. It has an average thickness of about 12 feet in the west and about 7 feet in the east.

The county can be described as a variously dissected plain, part of which is highly dissected and hilly, but most is only moderately dissected and generally rolling. No steep slopes exist in the county. The elevation ranges from about 270 feet above sea level near Gallaway in the northwestern corner to 600 feet near LaGrange in the southeast. The average county elevation is about 400 feet.

Drainage is well established in the county, and streams are numerous. The entire area is in the Mississippi River watershed, and all larger streams flow to the west. The Wolf River and Nonconnah Creek drain the southern part of the county. The Loosahatchie River and its tributaries drain the central and northwestern parts while the tributary streams of the Hatchie River drain the northeastern part. The Hatchie River itself is located outside of the county. Floodplains are generally large, and wetlands are common.

Groundwater

Fayette County is also blessed with an abundance of ground water. Most of the county is underlain by an aquifer known as the Memphis Sands. This resource supplies large quantities of high quality water to the county as well as Shelby County, Memphis and other areas. The county is also a recharge area for the aquifer, and therefore, land use policies can have a great impact on the aquifer itself. The normal pattern for recharge of the aquifer is that it is replenished or recharged by rainfall and floodwater that sinks into the wetlands and uplands east of the Memphis area. The county is also underlain by another aquifer known as the Fort Pillow Sand Aquifer although this source is several hundred feet deeper than the Memphis Sands.

All of the municipalities in Fayette County obtain their water from wells that tap the ground water resources. The City of Collierville in Shelby County also has well fields that border Fayette County. In fact, all of the water supplies in Shelby County are supplied by wells. In addition, many private wells exist in Fayette County to supply individual homes and other uses. Records from the Division of Water Supply in the Department of Environment and Conservation indicate that 6,093 wells were drilled in the county since 1964 when records started being kept. The importance of these ground water resources is well established.

There is apparently a great risk to the quality of the water in the Memphis Sands aquifer from land development in the county. In a letter to the Fayette County Planning Commission in March of 2000, Mr. Paul Stoddard, professional geologist, expressed his concern about the potential for impact to the aquifer as a substantial health risk. His concern was based on the fact that most new subdivision development in the county has been and will continue to be with septic tank systems, and their potential for contaminating the recharge areas of the aquifer is great. He recommends that until the proper infrastructure (sanitary sewers) is in place to handle the new growth in the county, minimum lot sizes be increased beyond the standard one acre lot. In the Gray's Creek Area Plan, the Memphis & Shelby County Office of Planning and Development recommended that even with sanitary sewers, densities should not exceed one dwelling unit per acre in the recharge area. If sewers are not available, densities should not exceed one dwelling unit per four acres. There are obvious implications for land use policies in the county for the protection of the aquifer in the future. If all or most of the new growth that is projected to occur in the county occurs on septic tank systems, the worst fears may be realized. Additionally, as more development occurs in the area, more impervious surfaces will cover the land, thus reducing the absorption of rainfall.

The major reason for the threat to the aquifer is due to the lack of a protective soil cover over the formation that holds the aquifer. For example, in Shelby County there is an extensive layer of clay that protects the Memphis Sand. In northwestern Fayette County a relatively thin layer of loess soil covers the Memphis Sand, while in most of eastern and southern Fayette County, the Memphis Sand comes directly to the surface. Consequently, the aquifer's vulnerability to pollution is high, and most development occurring on septic tank waste disposal systems will introduce pollutants into the soil.

Floodplains

As noted previously, Fayette County drains to the west, and a number of streams are involved. All of these streams have substantial floodplains, and these have an impact on the pattern of development. The floodplains are also a part of the aquifer recharge system. Based on the submitted information, there are approximately 67,590 acres of floodplains or about 15 percent of the county.

In the county's proposal for rural areas discussed earlier in this report, the floodplains were the major component of the designation as a rural area in the growth plan. This designation is entirely appropriate for the floodplains. Indiscriminant filling of floodplains for development purposes has a detrimental impact, since such activities limit the ability of the floodplain to store flood waters and affect the Memphis Sand aquifer recharge system.

ENVIRONMENTALLY SENSITIVE AND RECREATION AREAS

The Wolf River, with its associated drainage area, is a most important resource for a variety of reasons. It is unique in that its bed lies in the Memphis Sands and both discharges and recharges from the river and the surrounding wetlands. The river is also important as a unique recreational resource, not only for Fayette County but also the larger population of Shelby County. It provides quality habitat for deer, otter, mink, bobcat, fox, coyote, turkey and a wide range of waterfowl as well as migratory birds. Its floodplain and wetlands store floodwaters and filter the standing and flowing water. The Wolf River watershed also has been identified by the Tennessee Division of Forestry as one of fourteen Forest Legacy Areas in Tennessee and is ranked as one of the four highest priorities in the Legacy program. While most streams in West Tennessee have been channelized, the Wolf in its upper reaches in Fayette County is largely unaltered.

A portion of the county in the northeastern section drains toward the Hatchie River, the only other major river or stream in West Tennessee that has not been channelized and dredged. It is a popular canoeing stream and has outstanding wetland and bottom land hardwood environments. The Loosahatchie River heads up in the area around Somerville and flows to the west into Shelby County, but this river has been channelized and large land areas adjoining it drained.

Public and Private Recreational and Protected Lands

There are several areas along the Wolf River that are in public ownership or are owned by private/non-profit organizations that provide recreational opportunities or protection of critical environmental areas. Due to the fact that Fayette County and most municipalities in the county do not provide publicly owned park and recreation facilities, these land areas become more important. The following list indicates the extent and ownership of the land holdings:

- Wolf River Wildlife Management Area – 4,060 acres
Owned and managed by the Tennessee Wildlife Resources Agency (TWRA)
- Ghost River State Natural Area – 1,526 acres
Owned and managed by the Tennessee Department of Environment and Conservation (TDEC)
- William Clark Preserve – 460 acres
Owned and managed by the Tennessee Nature Conservancy

- John S. Porter Conservation Area – 255 acres
Owned and managed by TWRA
- Wolf River Conservancy Property – 170 acres
Owned by the Wolf River Conservancy
- Neely Preserve – 386 acres
Owned and managed by the Tennessee Nature Conservancy
- Herb Parsons Lake - 395 acres
Owned and managed by TWRA
- Ames Plantation – 15,174 acres
Owned and managed by the Hobart Ames Foundation

The land that has been acquired for protection and recreation is a part of a total ecosystem that is unique to this area. Its importance extends to providing habitat for endangered or threatened plants and mussels that exist in the area as well as havens for neo-tropical migratory birds. Other programs that help protect such land areas include those that acquire easements to enable landowners to continue to own and use the land where appropriate but prevent the land from being converted to other uses. The land trusts and non-profit organizations can be instrumental in accomplishing those ends.

Wetlands

Once known as swamps that needed to be drained, wetlands have come to be recognized as a vital part of the natural environment. Fayette County has a large amount of wetlands that are located in all parts of the county but are more generally associated with the floodplains and river bottoms. Wetlands provide the following benefits:

- Flood Storage – Wetlands act like sponges, absorbing runoff from heavy rains, holding it and releasing it slowly downstream.
- Erosion Control – The absorption of storm water and reduction of flooding acts to lessen the erosion of downstream areas.
- Water Quality – Wetlands have the ability to filter out sediments and pollutants, thus improving overall water quality.
- Wildlife Habitat – Wetlands provide food and shelter for hundreds of species of fish and wildlife and are essential stopover and rest areas for the migrations of waterfowl, shorebirds and songbirds.
- Groundwater Recharge - Wetlands are an important part of the groundwater or aquifer recharge system because they absorb water and allow it to slowly penetrate into the water holding strata.

Protection and preservation of wetlands, therefore, are critical elements in any land use or growth management program.

Wildlife

Fayette County has a rich and varied wildlife community. The extensive wetland and bottomland environments are areas of high biological diversity. There are healthy populations of mammals, reptiles and birds as well as invertebrates such as mussels. As noted above, the Wolf River drainage area is of particular importance and is a very important refuge for the mussel populations in Tennessee. There is one species of mussel, *Lampsilis Siliquoidea* (fatmucket), which is found only in the Wolf River in Tennessee. Osprey and eagles have also been observed along the Wolf River.

There are also a number of rare species found in Fayette County. These species have been compiled by the Division of Natural Heritage within TDEC and are listed below:

<u>Scientific Name</u>	<u>Common Name</u>
ALL PLANTS	
Bulbostylis Ciliatifolia	Capillary Hairsedge
Var Coarctata	
Festuca Paradoxa	Cluster Fescue
Iris Fulva	Copper Iris
Listera Australis	Southern Twayblade
Platanthera Flava Var	Southern Rein-Orchid
Flava	
INVERTEBRATES - MOLLUSC	
Lampsilis Siliquoidea	Fatmucket
Obovaria Jacksoniana	Southern Hickorynut
Villosa Vibex	Southern Rainbow
VERTEBRATES – Birds	
Aimophila Aestivalis	Bachman's Sparrow
VERTEBRATES – MAMMALS	
Sorex Longirostris	Southeastern Shrew
Synaptomys Cooperi	Southern Bog Lemming
Zapus Hudsonius	Meadow Jumping Mouse
VERTEBRATES – AMPHIBIANS	
Hyla Gratiiosa	Barking Treefrog
VERTEBRATES – FISH	

The protection of species and the habitat diversity they require is an important factor in countywide land use planning for growth. Such protection requires leaving large tracts of land in a natural environment and connecting them with one another.

AGRICULTURE

Agricultural activities are an important part of life in Fayette County, and they contribute not only to the character of the county but are also an important economic factor in the total economy. There was testimony in the hearings that suggested that agriculture in Fayette County was no longer a viable option. However, it is obvious from field surveys that agricultural activities are a major component of the land use of the county, and available statistics show that farm products sold provide income for the economy and employment for a number of people. A major emphasis in the adoption of PC 1101 was protection for agricultural land and farming activities; therefore, it is important here to examine the extent of agriculture in the county.

The major source of information about agriculture is the *Census of Agriculture* published by the U. S. Department of Agriculture. Unfortunately, the census is conducted only every five years, and the most recent publication was in 1997. Data for the 2002 census are being collected but will not be available until 2004. However, the data from 1997 are presented here to give an overview of the status of agriculture in Fayette County.

Total Land Area	450,560 acres
Land in Farms	270,666 acres
Number of Farms	716
Number of Full-Time Farms	280
Number of Farms by Size:	
Under 50 acres -	203
50 to 499 acres -	401
500 to 999 acres -	46
1,000 to 1,999 acres -	39
2,000 acres or more -	27
Average Size of Farms	378 acres
Total Cropland	180,332 acres
Harvested Cropland	124,627 acres
Pastureland	62,929 acres
Woodland	53,479 acres
Other Land	36,855 acres
Land in CRP/WRP	26,496 acres
Est. Mkt. Value of Land and Buildings	\$552,651 (Av. Per Farm)
Est. Mkt. Value of Equipment	\$62,475 (Av. Per Farm)

Market Value of:	
All Farm Products	\$51,388,000
All Crops	\$36,403,000 (71% of All Products)
All Livestock	\$14,985,000 (29% of All Products)
Nursery & Greenhouse	\$1,843,000 (Included in All Products)
Total Farm Production Expense	\$38,586,000 (Includes Labor and Property Tax)
Total Hired Farm Labor	\$4,677,000 (993 Workers)
Total Property Taxes Paid	\$1,167,000
Total Net Cash Return	\$13,501,000

Further information in the *1997 Census of Agriculture* gives a picture of the county's rank with other counties in Southwest Tennessee. Of the twelve counties considered to be in Southwest Tennessee, Fayette County ranked first in the amount of land in farms, first in the number of full-time farms, second in the market value of all farm products sold, fourth in the average size of farms, and fourth in the average market value of products sold per farm.

Some basic trends can be identified by comparison of 1997 data with 1992 data. For example, from 1992 to 1997 the total sales increased by 2.7 percent. While this amount of growth for five years was very small, the total farm production expense declined by 11 percent during the same period. Interestingly, the net cash return from sales increased by 106 percent. The total number of farms increased from 671 to 716, a change of seven percent. The total estimated value of land and buildings increased by 65 percent. The bottom line in all of these statistics is that farming is still viable in the county and represents an essential part of the local economy.

Soils

Fayette County is founded on a base of good soils, particularly for agriculture. Partly for that reason, the county has historically been an agricultural county. The USDA Natural Resources Service has identified prime farmland soils. The various soils that make up the prime category consist of 194,908 acres, which comprises about 43 percent of the county. The NRCS has also identified an additional 113,552 acres of soils that are important to the state. Together, these two categories of soils comprise about 68 percent of the county.

The agricultural heritage of the county and the soils on which it is based are threatened by the development pattern occurring in Fayette County. Since new subdivisions are generally low density and widely separated throughout the county, a great deal of sprawl will be spawned by the installation of septic tank systems and the ready availability of well water. The impact of suburban type sprawl development on the county has been, and will continue to be, the conversion of prime farmland into subdivisions, leading to the permanent loss of these valuable farmlands.

FORESTLAND

Another major natural resource identified in PC 1101 as worthy of attention and protection is forestland. Forests provide not only a resource in timber that can be managed and harvested, but they are also a major component in providing various types of wildlife habitat, improving water quality and reducing soil erosion.

Fayette County has a good base of quality forestlands including the very valuable bottomland hardwood forests. Non-industrial owners privately own most of the forests in numerous small parcels. While almost all of the tracts have been harvested over the last 100 years, regeneration by natural means has been allowed to occur, and the forestlands are generally in good condition.

As noted earlier, the Wolf River watershed has been included in the Tennessee Forest Legacy Program by the Tennessee Division of Forestry. This program (FLP) was established by the U. S. Congress in 1990 to protect environmentally important forest areas that are threatened by conversion to non-forest uses. The objectives of Tennessee's program include: the prevention of conversion of forestland to other uses, the preservation and protection of fish and wildlife habitats, the protection of riparian habitats, water quality, natural beauty, forest-based recreation activities, and the preservation of forestlands for current and future timber resources. The FLP authorizes grants to the state to implement the program and such grants can involve the acquisition of lands in fee or other interests in land with the development rights under a perpetual conservation easement. Several landowners have sought funding for conservation easements with FLP grants.

According to the U. S. Forest Service's forest statistics, Fayette County has 187,200 acres of forestland. Of that, 152,100 acres are owned by private, non-industrial landowners. The predominant species include oaks, hickories and yellow poplars in the uplands, and bottomland oaks, cypress and gums in the alluvial bottoms.

The major threats to the forestland resources of the county are urban and suburban development that includes conversion to residential, commercial and industrial uses, fragmentation by road construction, conversion to other types of agriculture, and pressures from population expansion.

EXISTING LAND USE

A critical area of information that is useful in planning for future growth is related to the uses that are made of the land in the county. Each entity as covered in Chapter II provided land use information, although there were some inconsistencies in the data as well as comparability problems. The land use

information presented below is designed to give a total county perspective to the various data as derived from a variety of sources.

As noted previously, Fayette County contains 450,560 acres or about 704 square miles. Most of the county consists of farmland, forestland or small tracts being used residentially and perhaps for "hobby" farming. Only 42,936 acres or about 9.5 percent of the total county land is inside of incorporated municipalities, and agricultural activities and small forested tracts also occur within the municipalities. The latest *U. S. Census of Agriculture* in 1997 estimated that 270,666 acres were being used as farmland. The Tennessee Division of Forestry estimates that there are 187,200 acres of forestland in the county. When these totals are combined, it is obvious that some double counting may have been done; however, the figures do indicate the scale of non-urban land use in the county.

Fayette County has also seen some conversion of farm and forestland to residential development. While a substantial amount of the development has occurred in the western part of the county, all areas have experienced some development. There has been no measurement of the extent of the conversion. However, as growth continues to affect the county, primarily as in-migration from Shelby County, much more of the sprawl-type scattered subdivision will occur absent some more definitive land use policies to counter the trend.

Table V shows the acreages of various land uses within the incorporated municipalities. These data were taken from the individual reports as submitted and are presented here to show a composite view of how land is used in the cities. The table illustrates one of the problems that has surfaced during the evaluation of the various plans and documents submitted during this process, and that is the comparability of data. Table III above showed the total acreage in the cities with a total of over 42,000 acres. Table V shows a figure of 44,162. The reason for the difference is that the tables were derived from two different sources that may have measured acreages in different ways. Be that as it may, the differences are relatively small, and some conclusions can still be made. The most significant figure shown in Table V is the number of acres of vacant, unconstrained land within the existing city limits. This is the amount of land that can be developed within the areas of the county that are already incorporated, where various municipal services are available, and where land conversion is expected. A total of 26,909 acres of vacant, unconstrained land is available within the existing incorporated municipalities. The question that this raises relates to the justification for urban growth boundaries outside of corporate limits as compared to available vacant land inside the corporate limits.

The county also included land use data in its growth plan submittal. These data could not be inserted into Table V due to factors that were not comparable; however, some similarities exist. The following land use categories and acreages were identified:

Residential	34,531
Commercial	261
Industrial	1,150
Public & Sem-Public	1,656
Transportation	4,873
Vacant (uncons)	136,018

The vacant category was identified as unconstrained and does not include the estimated vacant acreage that has been proposed in the urban growth boundaries of the municipalities nor the vacant unconstrained land within the municipalities.

TABLE V
LAND USE IN MUNICIPALITIES
BY CATEGORY (IN ACRES)

ENTITY	RES	COMM	IND	PUB	TOTAL DEVEL.	VACANT		TRANS	GRAND TOTAL
						Cons	Uncons		
Braden	-	-	-	-	-	-	1,154	-	2,307
Gallaway	160	28	30	35	253	400	1,457	140	2,250
HickoryW	3,040	30	0	50	3,120	3,100	12,118	300	18,638
LaGrange	324	7	6	23	580	0	580	160	1,107
Oakland	722	102	105	20	949	0	960	129	2,038
Moscow	563	19	87	3	672	58	120	60	910
Piperton	944	100	122	28	1,194	540	4,467	213	6,414
Rossville	175	12	52	37	276	440	464	60	1,240
Somerville	685	195	75	289	1,244	1,423	5,062	474	8,204
Williston	-	-	-	-	-	-	527	-	1,054
Total	6,613	493	477	485	8,288	5,961	26,909	1536	44,162

Source: Reports as submitted by the individual cities.

Braden and Williston did not submit any data for consideration. The figures for these two cities are based upon measurements made by Ollar Surveying Co. and estimates of vacant land made by others.

Another measurement that can be made to determine the need for and size of urban growth boundaries is the "build-out" population of each city or town. The build-out population is based upon the amount of developable land as related to the zoning of the land or the projected density and the number of dwelling units that the calculation yields times the average family size. The result is the amount of population that can be absorbed within the towns.

Table VI shows these calculations for those communities that submitted growth plan reports. The total population that can be accommodated in those communities is 32,388. This is a crude measure since the other land uses such as commercial or industrial are not included. However, it does provide a basis for comparison to the amount of population that is projected for the various areas.

While the calculations yield a build-out population of 32,388, this does not necessarily mean that these numbers will actually work out in that manner. However, it does mean that the communities can accommodate that population without any additional acreage using their existing prevailing densities. The projected population of the county and the municipalities will actually determine the number of acres needed for new development that will accommodate the additional growth.

TABLE VI
BUILD-OUT POPULATION, EXISTING MUNICIPALITIES

Entity	Vacant Acres*	Density**	Dwelling Units	Av. Fam Size	Population
Galloway	1,093	0.92	1,006	2.5	2,515
HickoryW	9,089	0.33	2,999	2.5	7,498
LaGrange	435	0.50	218	2.5	545
Moscow	90	0.30	27	2.5	68
Oakland	720	0.67	482	2.5	1,206
Piperton	3,350	0.66	2,211	2.5	5,528
Rossville	384	0.81	311	2.5	778
Somerville	3,800	1.50	5,700	2.5	14,250
	18,961				32,388

* Actual acres reduced by a 25% market factor as not available.

** Calculated from individual reports as submitted based on the actual number of residential acres as compared to the 2000 population.

Does not include Braden and Williston.

POPULATION

One of the more important factors in the growth planning process is the amount of population that will be in the area for the target planning year, in this case 2020. Population has been projected by the various entities by a variety of means as noted in Chapter II. In all cases, substantial increases are projected,

typically based on the amount of growth that has occurred over the last ten years in eastern Shelby County. However, there is no consistency in the projections from community to community, and there is no general agreement about the total county population. Also as noted in the summary of Chapter II, some kind of projection and a number have to be selected in order to provide a basis for land use projections.

The projection of population for Fayette County is particularly hazardous. The county has been only slowly growing, and some areas and municipalities have actually lost population between 1990 and 2000. Even so, the county is directly in the path of an eastward flow of population in Shelby County, and new incentives for growth are being put into place. An example of this is State Highway 385, the completion of which will provide a limited access circumferential route around the north and east sides of Shelby County with interchanges located either in Fayette County or immediately adjacent to the county line. This provides a basis for an assumption that considerable growth will occur, and the new highway may, in fact, provide the catalyst for change in the county, a change that is particularly difficult to project with a degree of accuracy.

For purposes of this section of this report, all of the communities' reports were considered, as well as other methods of making projections. One method, recommended by this writer involved hiring a professional demographer to analyze the situation and make the projections. However, in order to reduce costs as much as possible and to follow the panel's directive to use as much locally generated data as feasible, the procedure outlined below will be used.

The City of Piperton in its *Urban Growth Boundary Report* provided detailed population analyses from two sources. The first was a population analysis and projection for the city as well as the county prepared by the Regional Economic Development Center at the University of Memphis. The second was an analysis not only of population but also of the REDC data prepared by Land Development Solutions, LLC, a consulting firm hired by the City of Piperton. Together, these analyses provide the most thorough and rationally based population projections for a community and for Fayette County and will be used here for total county population. There may be some opinions that these approaches are biased in some way. Be that as it may, the two groups provide a rational, professional approach to the process. Therefore, the results will be factored into the population analysis.

The other communities' projections will also be accepted into this report. While the assumptions upon which those projections are based are subject to question, an alternative projection made herein would also be questioned. Oakland did not provide a projection that was feasible since the UT projections for 2020 were already exceeded by the actual 2000 census. Thus, the Land Trust Report

projections were included. For Braden and Williston, the UT projections are used.

Projections for the County of Fayette have also been widely divergent. One projection from the county planning office of 100,000 has been cited. No rationale or methodology was given. Another projection made by other county officials amounts to 44,831. Yet another projection of 34,410 was made by the University of Tennessee. Therefore, as noted above, the county projection of 65,000 provided in the Piperton population analysis will be utilized herein because of the rational approach taken in that report.

All of these various sources yield a total population projection by 2020 for the county of 65,000 and for incorporated municipalities of 47,991. This leaves a total of 17,009 for the unincorporated portion of the county. Table VI indicated that the build-out population for the communities listed was 32,388. With a projected population of 47,991 for the municipalities, a need is thus identified for additional land areas outside of the existing limits to meet the future growth demands of about 15,603 people. This translates into about 6,241 new households.

It should be acknowledged that the calculated density in each community was very low, in most cases less than one dwelling unit per acre. By using the prevailing densities, the number of people that could be accommodated was reduced. If densities are increased, less land will be required to accommodate the same number of people.

Recent Growth

All of the population analysis submitted herein was developed prior to or just after the 2000 *Census of Population*. The time that has passed during this process presents the opportunity to monitor the growth during the two years that have lapsed since the census by checking the number of building permits issued by the various governmental entities in the county. Therefore, this writer asked for supplemental information from those entities, information that included the number of building permits issued during 2001 and 2002. By examining these permits and their location some indication of the level of recent growth in the county can be determined and the areas in which the growth is occurring identified.

Table VII shows the number of residential and non-residential building permits issued by community and by civil district in the county. Only those entities that responded to the request for information are shown. Some did not respond.

The table also shows the amount of population that would be housed by the new homes based on the number of residential building permits. If these numbers were carried forward for 20 years, it would be shown that none of the entities

shown will reach their projected population for 2020. Oakland comes closest to meeting the amount of growth projected. Additional growth appears to be occurring in the county area around Oakland. Obviously, this is only a two-year trend that could change dramatically.

TABLE VII
BUILDING PERMITS BY ENTITY AND BY CIVIL DISTRICT
2001 – 2002

Entity	Residential	Population Housed	Non-residential
Galloway	4	10	0
LaGrange	0	0	0
Moscow	9	23	3
Oakland	282	705	10
Piperton	17	43	1
County-by Civil District			
1	39	98	0
2	29	73	0
3	30	75	0
4	20	50	2
5	31	78	0
6	31	78	0
7	63	158	0
8	108	270	1
9	70	175	0
10	17	43	0
11	45	113	0
12	60	150	0
13	19	48	0
14	47	118	0
15	37	93	0
County Total	646	1,620	3
Grand Total	958	2,401	17

The major trend identified by Table VII is the location of growth in the county. Based on the permits issued by the county by civil district and the Oakland total, it is apparent that the Highway 64 corridor is the fastest growing area of the county. The 8th Civil District experienced the most growth. This district includes the Oakland area and part of the Somerville area. The 7th and 12th Districts also experienced a large amount of growth, with the 7th including the Hickory Withe area while the 12th includes the Moscow area. The second highest amount of

growth occurred within the 9th District, which is located adjacent to the Shelby County line along Macon Road and includes part of the City of Piperton.

LEVELS OF PUBLIC SERVICES

As noted in Chapter II, all participating entities submitted information on public services. Some communities provide higher levels of service than others, but the services that each provides were analyzed. However, one factor that was not presented in depth was the "level of service" provided by each entity with a projection for a future level of service based on the future population and housing growth. Level of service may be described as a unit of capacity related to a unit of demand or a unit provided. For example, a municipality may provide a certain amount of water per person per day or may provide a certain number of firemen or policemen per 1,000 population. This approach in analyzing services allows the community to estimate how many policemen or how much water will be needed to serve the future projected population.

The type of measurement discussed here is somewhat difficult in the case of the municipalities in Fayette County. The towns are very small, and in some cases services provided are very limited. Due to small population size, calculations are skewed in that they may show a very high level of service as compared to population. For example, there may be a large number of volunteer firefighters serving a small population. When projected to serve the 2020 population, an excessively large number is generated. However, it is necessary to establish a future level of service in order to obtain a basic concept or a way to measure the services that will be needed to serve the future population.

It should be pointed out here that the adequacy of services provided as compared to accepted standards will not be measured. That type of analysis is beyond the scope of this report. For purposes herein an attempt will be made to provide a measurement of the existing services, and then based upon future growth, a level needed for 2020 will be enumerated. This does not mean that this is the recommended level of service. For example, statistics provided by the FBI for law enforcement personnel provide that 2.4 sworn officers per 1,000 people is an accepted standard. However, some communities provide a higher standard. The figures in charts below show the number of employees that would be required to maintain the existing level of service for an increased number of people.

It should be pointed out that some entities did not participate in the proceedings and some communities did not respond to requests for additional information. Therefore, these entities are not included in the results. Only those entities that responded are included below. It should also be noted that the basic assumption here is that there is a direct relationship between the service provided and the number of people served. Thus, the following information is to demonstrate that

in order to provide the **present** level of service for future populations, increases in personnel will be required.

**LEVELS OF SERVICE FOR SELECTED PUBLIC SERVICES,
BY EMPLOYEES, BY GOVERNMENT**

City of Gallaway

TYPE OF SERVICE	CURRENT MEASURE	EXISTING LEVEL OF SERVICE	NEEDED FOR 2020 POPULATION
FIRE Volunteer	14	21 per 1,000	53
POLICE Sworn Officers	7	10.6 per 1,000	27
Part-Time	2	3 per 1,000	8
Reserve	14	21 per 1,000	53
Other	1	1.5 per 1,000	4
PUBLIC WORKS	3	4.5 per 1,000	11
ADMINISTRATION	2	3 per 1,000	8

City of LaGrange

TYPE OF SERVICE	CURRENT MEASURE	EXISTING LEVEL OF SERVICE	NEEDED FOR 2020 POPULATION
FIRE Volunteer	6	43 per 1,000	9
POLICE Sworn Officers	2	14 per 1,000	3
PUBLIC WORKS	3	21 per 1,000	4
ADMINISTRATION	1	7.1 per 1,000	2

City of Moscow

TYPE OF SERVICE	CURRENT MEASURE	EXISTING LEVEL OF SERVICE	NEEDED FOR 2020 POPULATION
FIRE			
Full-Time	1	2.4 per 1,000	3
Volunteer	14	33 per 1,000	47
POLICE			
Sworn Officers	4	9.5 per 1,000	13
Other	3	7.1 per 1,000	10
PUBLIC WORKS			
Full-Time	1	2.4 per 1,000	3
Part-Time	2	4.8 per 1,000	7
ADMINISTRATION			
Full-Time	1	2.4 per 1,000	3
Part-Time	1	2.4 per 1,000	3

Town of Oakland

TYPE OF SERVICE	CURRENT MEASURE	EXISTING LEVEL OF SERVICE	NEEDED FOR 2020 POPULATION
FIRE			
Part-Time	1	0.8 per 1,000	10
Volunteer	22	17 per 1,000	207
POLICE			
Sworn Officers	12	9.2 per 1,000	113
Other		3 per 1,000	37
PUBLIC WORKS	5	4 per 1,000	49
ADMINISTRATION	3	2.3 per 1,000	28

City of Piperton

TYPE OF SERVICE	CURRENT MEASURE	EXISTING LEVEL OF SERVICE	NEEDED FOR 2020 POPULATION
FIRE			
Part-Time	1	1.7 per 1,000	18
Volunteer	28	47.5 per 1,000	498
POLICE			
Provided by County Sherriff			
PUBLIC WORKS	2	3.4 per 1,000	36
ADMINISTRATION	1	1.7 per 1,000	18

Town of Somerville

TYPE OF SERVICE	CURRENT MEASURE	EXISTING LEVEL OF SERVICE (per 1,000 population)	NEEDED FOR 2020 POPULATION
FIRE			
Full-Time	4	1.6 per 1,000	15
Part Time	2	0.8 per 1,000	8
Reserves	9	3.6 per 1.000	35
Total	25	10 per 1,000	96
POLICE			
Sworn Officers	12	4.8 per 1,000	46
Other	9	3.6 per 1,000	35
PUBLIC WORKS	8	3.2 per 1,000	31
ADMINISTRATION	10	4.0 per 1,000	38

County of Fayette

TYPE OF SERVICE	CURRENT MEASURE	EXISTING LEVEL OF SERVICE	NEEDED FOR 2020 POPULATION
FIRE			
Full-Time	1	0.05 per 1,000	1
Volunteer	84	4.3 per 1,000	73
POLICE			
Sworn Officers	25	1.1 per 1,000	26
Support Personnel	30	1.3 per 1,000	31
AMBULANCE SERVICE			
Full-Time	17	.59 per 1,000	38
Part-Time	15	.77 per 1,000	50

For planning purposes for water and sewerage services a figure of 150 gallons per person per day may be used. For example, to serve a population of 10,000 will require plant capacity of 1.5 million gallons per day. Each municipality will have to address this issue as growth continues to impact utility systems.

FUTURE LAND USE

Future Land Needs Related to Population

Table VIII shows the various community population projections and then projects the number of acres of land that will be needed to accommodate the total projected population based upon different density scenarios. The number of acres needed is based on the number of households or units multiplied by the number of dwelling units per acre (dupa).

One result of using the projections made by the municipalities as shown in Table VIII is that the population of the unincorporated areas of the county shows a decline. In order for this to occur municipalities will have to annex developed areas of the county, and new growth will need to take place within the municipalities. The converse of the total numbers for the municipalities is that those projections could be too high. It should, of course, be remembered that one of the goals of a growth plan is to direct growth into existing developed areas in order to reduce the incidence of sprawl.

TABLE VIII

ACRES NEEDED FOR PROJECTED POPULATION

2020

Area	2020 Pop.	Households*	Acres Needed		
			Base**	1 dupa	2 dupa
Braden	361	144	--	144	72
Gallaway	2,538	1,015	1,103	1,015	508
Hickory Withe	6,800	2,720	8,242	2,720	1,360
LaGrange	196	78	156	78	39
Moscow	1,422	569	1,897	569	285
Oakland	12,150	4,860	7,254	4,860	2,430
Piperton	10,500	4,200	6,364	4,200	2,100
Rossville	4,000	1,600	1,975	1,600	800
Somerville	9,590	3,836	2,557	3,836	1,918
Williston	434	174	--	174	87
Sub-total	47,991	19,196	29,408	19,196	9,598
Unincorporated	17,009	6,804	226,800	6,804	3,402
Total	65,000	26,000	256,800	26,000	13,000

* Based on holding 2.5 persons per household constant through the period.

** Base case was derived from the actual density of residential development reported by each entity. Braden and Williston did not file a report.

Note: dupa = dwelling units per acre.

It is immediately obvious how increasing the density of development can reduce the amount of land needed to accommodate the future population of the county and all of the municipalities. Even at a density of one dwelling unit per acre, a very low density of development, the number of acres required for the population is 26,000 acres while the number of unconstrained vacant acres of land available inside the existing municipalities amounts to 27,000. If the density of development is increased, the build-out population that can be accommodated on a given acreage will also increase, thus reducing the needed amount of land. This is one measure of need. The actual need for the population will be refined in a later section in order to take into account needs for commercial and industrial land, as well as incorporate a market factor into the equation.

The future density of development should increase as new growth is introduced into the county. Due to the cost of land and the cost of providing necessary services and basic infrastructure (water, sewer and streets) coupled with actual construction costs, new subdivision development is likely to have smaller lots than past development. Where one acre or larger lots may be prevalent in older development patterns, in the future only the more expensive houses will be able to support the large lot configuration. In order to compete in average market price housing, lot sizes will decrease, and the density will increase.

Cities and towns also find that providing services in very low density developments is not cost efficient. The cost to provide services such as water

and sewer, garbage collection, fire protection and others, not to mention street maintenance, is much greater per linear foot of street frontage in large lot developments than it is in small lot configurations.

These two factors, costs of providing services and costs of development, will very likely result in an increase in density. Therefore, the existing densities or the base case as shown in Table VIII in the various communities should not continue. It is also not likely that a density of one dwelling unit per acre can be supported in those communities that provide water and sewer service. In other areas where services are not as consistent, or in the unincorporated parts of the county, the lower densities should prevail. Thus, an assumed density for the future development will be applied here in order to project future land needs. The assumed average density is 1.5 dwelling units per acre. This is an overall gross number. Individual community land use and zoning policy can alter the number.

Recommended Land Use Policies

Among the requirements spelled out in PC 1101 is language that directly impacts land use decisions. One of the five bases for a growth policy of the state as stated in TCA 6-58-102 is to minimize urban sprawl. Additionally, TCA 6-58-107 includes in the goals and objectives specified for a growth plan the need: to provide for unified physical design, to encourage a pattern of compact and contiguous high density development to be guided into urban or planned growth areas, to protect properties from natural hazards, to take into account other matters logically related to a plan for the coordinated, efficient and orderly development of the community, and to provide for a variety of housing choices and assure affordable housing. In order to carry out these charges as noted, it is necessary to establish some basic policies for land use decisions that can be carried forward and made a basis for the growth boundaries to be proposed. The policies can also be used as a measure for determining if the consistency provision for land use decisions as spelled out in TCA 6-58-107 can be met.

A. General Goals for the Plan

The following goals are intended to guide the land use policies of the county and the design of the growth boundaries:

- To concentrate urban development within the planned urban areas and have it serviced by municipal utilities.
- To provide quality public services at the least cost.
- To encourage urban growth within the corporate boundaries of the cities and towns with a gradual connected expansion into the urban growth boundary.
- To maintain and protect significant natural resource, agriculture and environmentally sensitive areas of the cities and county.

- To maintain and protect rural areas, the agricultural heritage and natural resources outside of the urban growth and planned growth boundaries.
- To protect the ground water of the area.

B. Policies for Residential Areas

- All medium and high density residential development should be located within existing developed municipal boundaries where public sewers and other services are available.
- Low density residential development may occur anywhere in the county with a recommended definition of low density being one dwelling unit per acre or less.
- Within the areas of the county that lie in the recharge area of the Memphis Sands aquifer, minimum lot sizes larger than one acre should be considered with a target size of one dwelling unit per four acres.
- In areas where public sewers or other waste disposal technologies are available, conservation/agricultural design concepts should be employed in order to allow for some development while preserving open space and farmland.
- Residential development with sewage disposal provided by subsurface drain fields should be closely regulated to assure that the effluent will not contaminate the Memphis Sand aquifer or any ground water.

C. Policies for Agriculture

- Prime agricultural soils should be mapped in detail, and the soil's location and preservation should be a factor in the land development decision-making process.
- Preservation of agricultural areas should be pursued through various programs such as sales or gifts for tax purposes to non-profit organizations, sale or transfer of the development rights, and conservation/agricultural design when development is considered to be appropriate.

D. Policies for Commercial Development

- Only low density/intensity commercial development that serves local needs should be allowed to occur in the rural areas.
- Areas of high density/intensity commercial development should be located within the existing developed towns of the county
- An area for high density/intensity commercial development should be provided at the interchanges of I-40 in the county.

E. Policies for Industrial Development

- High density/intensity industrial should be located within the existing developed towns, in planned industrial parks that have all necessary utilities and access infrastructure or in conjunction with an I-40 interchange area that will be developed for that purpose.

F. Policies for Environmental Protection

- The Wolf River and associated state natural areas should be recognized as an important local and regional natural resource worthy of protection.
- Development within flood plain areas should be avoided or should be of such intensity that activities do not obstruct flood flows, and wetlands should not be drained.
- Natural drainage ways should not be altered, and land areas immediately adjacent to streams should be left in a natural state to control erosion and lessen sedimentation.
- Conservation design concepts should be incorporated into land development proposals.
- Sensitive natural areas should be preserved in much the same way that agricultural areas are, in order to protect landowner investments.

Growth Boundaries Based on Population, Services and Expected Development Areas

As noted several times in this report, the density of development throughout the county is very low. The Town of Somerville has the highest density, and some individual developments have been built at densities that are more reflective of current urban development patterns. Nevertheless, overall, the county and all communities have very low densities. The build-out figures in Table VI reflect the population that can be accommodated at those low densities. However, when considering future densities, it is not considered reasonable to project these very low densities. Land costs, costs of infrastructure and current construction practices generally work toward higher densities. Therefore, as noted previously, it will be assumed herein for purposes of designing growth boundaries that an average density for the cities and towns will be at 1.5 dwelling units per acre, still a low density since most urban development occurs at 3 to 5 dwelling units per acre. Development in the unincorporated parts of the county will be assumed to continue at lower densities or 1 dwelling unit per acre.

Commercial needs of the communities are also related to population. It should be remembered, however, that Fayette County's potential for commercial development is tempered by the extensive shopping facilities available just across the county line in Bartlett and Collierville as well as in Memphis. Even so, future commercial land projections herein will be based on the national average for small to medium sized cities of 12.4 acres per 1,000 population. This, of course, will vary depending upon the unique characteristics of each community,

but it will be used here as a general standard. Also, the needs for commercial service in the unincorporated parts of the county will most likely be met by commercial development in the municipalities rather than separate centers located out in the county. This is factored into the numbers.

Other land use categories, industrial and public, are based upon national average ratios of land uses to the total size of the municipality or urbanizing community. All of these are related to projected population. It should be noted that these are averages for small to medium sized communities. Individual communities may have different characteristics. The purpose here is to provide a basis for comparison and projection that is constant in its basis of measurement. In reality, one community may choose to promote industrial development and thus have more land devoted to that category than the average, while another may choose to have no industry and promote commercial development. Still others may choose to be residential communities.

Table IX below shows the total acreage by land use category required to accommodate the projected population. The most striking observation that can be made is that using the projected density of development of 1.5 dwelling units per acre and then factoring in the other categories of land use, a total of 37,974 acres of land is needed. Table III presented earlier in this report indicated that the amount of vacant land available for development, plus the proposed urban growth boundaries, was over 265,000 acres of land. It is also obvious that the total land area required for each entity is vastly different from the actual amount of land area currently available in each area as shown in Table V. This accounts for the number of acres of vacant land available in each community. The next step in this process is to work into the equation a market factor for lands not available and for market expansion, as well as any unique characteristics that affect the course of development in communities. Additionally, services and reasonable assumptions toward future development are also a part of the growth boundary process.

TABLE IX

TOTAL ACRES NEEDED IN 2020, BY LAND USE CATEGORY,
BASED ON PROJECTED POPULATION

Entity	2020 Popul	Hsehlds	Resdent*	Comm'l**	Indus***	Public***	Vacant	Total
Braden	361	144	96	7	2	57	23	185
Galloway	2,508	1,015	677	42	91	403	88	1,301
Hick. Wi.	6,800	2,720	1,813	114	244	1,081	235	3,487
LaGrange	196	78	52	4	7	31	6	100
Moscow	1,422	569	379	23	51	226	91	729
Oakland	12,150	4,860	3,240	204	436	1,931	419	6,230
Piperton	10,500	4,200	2,800	176	377	1,669	363	5,385
Rossville	4,000	1,600	1,067	67	144	636	137	2,051
Somerville	9,590	3,836	2,557	161	344	1,524	331	4,917
Williston	434	174	261	7	35	156	43	502
Subtotal	47,991	19,196	12,942	805	1,731	7,714	1,736	24,928
Unicorp.	17,009	6,804	6,804	0	916	4,057	1,310	13,087
Total	65,000	26,000	19,746	805	2,647	11,771	3,046	38,015

* Based on 1.5 dupa.

** Based on 12.4 acres per 1,000 population (reference: *Urban Land*, February 1989, Urban Land Institute).

*** Based on national average land use ratios (reference: *PAS Memo*, August 1992, Planning Advisory Service, American Planning Association).

Table X compares the total acres needed plus the market factor with the amount of vacant developable land in each entity. The last column shows which entities need additional land after considering the vacant category and which do not. Those that need additional land will have this figure added to the total existing land areas within the municipalities. The following section hereafter considers each entity to determine if unique circumstances or special situations exist that will justify further adjustments to the total needed acreage for the future.

TABLE X

DIFFERENCE IN TOTAL ACRES NEEDED AND
EXISTING VACANT LAND

Entity	Total Acreage	Plus Market Factor*	Existing Vac Land	Difference	Net Add'l Acres Needed
Braden	185	231	1,154	+923	0
Galloway	1,301	1,626	1,457	-169	169
Hick. Wi.	3,487	4,359	12,118	+7,759	0
LaGrange	100	125	580	+455	0
Moscow	729	911	120	-791	791
Oakland	6,230	7,788	1,192	-6,596	6,596
Piperton	5,385	6,721	4,467	-2,264	2,264
Rossville	2,051	2,564	464	-2,100	2,100
Somervle	4,917	6,146	2,757	-3,389	3,389
Williston	502	628	527	-101	0
Subtotal	24,928	31,109	24,836	-6,273	----
Unicorp.	13,087	16,359	136,018	+119,659	0
Total	38,015	47,468	160,854	+113,386	----

* Market factor refers to a percentage figure that inflates the total acreage to account for lands that may not be available for sale in the market or for uncontrolled fluctuations in the supply of land.

Other Adjustments

There are, in fact, some unique circumstances that affect the directions that some communities in the county take toward future development. These circumstances can and will have an impact on the amount of land needed in the area. Based on the evaluation of submitted documents and other information generated in this chapter, the unique circumstances or factors are discussed below. Additionally, the residential density and the required number of acres as projected will need to be refined. The density is computed as a "net" density or the actual amount of land to be used for residential purposes. An amount of land needs to be allocated for streets that service the residential development, so this will be figured into the total adjustments.

There are several types of adjustments that should be considered to obtain a more refined projection of needed acreage. These include detailed plans to protect natural resources, to protect historical resources, to recognize future prime development areas such as interstate interchanges, areas that are logical for development and areas where services can best be provided by a particular community. These are considered hereafter and adjustments made in Table XI as needed.

County Areas: There are two interchanges on I-40 located in Fayette County. Both are now relatively undeveloped, but the usual types of interchange uses found in rural areas are in existence. However, over the next 20 years, growth and development trends extending eastward from Shelby County will likely result in new development, particularly at the Longtown interchange. That interchange has also been identified by the state Department of Economic and Community Development as a prime location for major types of industrial complexes. Consequently, some area around each interchange should be identified as a planned growth area suitable for future high intensity development. One square mile (640 acres) is recommended around the Longtown interchange and one-half square mile (320 acres) is recommended around the other at State Highway 222. In the event that a major industrial complex identifies either area for a development that exceeds this area, the county can declare an extraordinary circumstance and expand the area with an amendment to the growth plan. Otherwise, the recommended area will be available for both industrial and commercial development that is oriented toward interchange type development.

In order for these two planned growth areas to support intense development, adequate utilities must be available. Currently, no public water or sewer is available. In the case of the Longtown interchange, Braden is the closest city that might extend utilities although the city's capacity to do so is unknown. There is no nearby city to serve the Highway 222 interchange. Here such utilities will have to be privately developed, and a mechanism for paying the cost of utilities will have to developed.

In addition to the interchange areas described above the area of the former town of Hickory Withe will be included as a county planned growth area. This is discussed further below under the heading of the Hickory Withe.

Rural areas are designated as all of the county area outside of the urban growth areas and the planned growth areas. One result of using the methodology employed in this chapter and based upon the analysis of soils, wetlands, floodplains, and agriculture coupled with the land use policies has been an increase in the amount of land area devoted to the rural area classification. Within this area, the highest priority should be the protection of the agricultural base and natural resources of the county and encouraging growth to locate in the urban areas.

Braden: Braden did not participate in the hearing process. As noted previously, no information or justifications for growth boundaries were presented by the town. It has been included in all of the calculations due to the fact that it is an incorporated entity and can accommodate some growth. However, due to the lack of information and participation and the lack of an identified need for expansion area, no urban growth boundary is recommended beyond the present

limits. In the event Braden extends water and sewer to serve the Longtown interchange, this should be reconsidered.

Gallaway: An additional 169 acres was identified here, and this can be easily included. Gallaway does have a locational situation that affects the town. There is an area north and west of Highway 70 extending to the county line that can only be served by Gallaway as well as some area to the south bounded by creeks and floodplains. These should be considered for an urban growth boundary.

Hickory Withe: Hickory Withe is another unique case. After the town was incorporated, the Town of Oakland challenged the legality of the incorporation. After some years in the court system, Oakland won the suit, and Hickory Withe has been disbanded by the courts. The decision in Oakland's favor has been appealed to the Tennessee Supreme Court. However, at this time Hickory Withe does not exist as an incorporated entity in Tennessee.

Hickory Withe did participate in all of the deliberations on the growth plan for the county, and the town prepared a plan with land use policies and an urban growth boundary. If the town had won the suit, it would have been the largest municipality in the county, but at this time it is an unincorporated suburban-type area. For purposes of this report and based upon the pending appeal to the Supreme Court, Hickory With will be considered as a planned growth area of the county.

The question of how large the area should be is also subject to question. As noted in Table III, the town consisted of 17,652 acres with an additional 9,999 acres proposed in its urban growth boundary. The actual need for land to accommodate the projected population identified in Table IX amounted to 3,487 acres. A big difference in the actual need compared to the acres desired by the town was that a very low density of one dwelling unit per three acres or .33 units per acre was projected in their land use plan to be enforced through municipal zoning. However, the town does not exist, so the plan and zoning controls are no longer enforceable. Therefore, the county's residential zoning standard of one dwelling unit per acre will be used here to develop future need. This results in an additional 907 acres being added to the needed acres, or a total of 4,456 acres. This figure is considerably less than the 12,118 acres shown in Table X as the amount of vacant land within what was the town. Due to the fact that a large amount of vacant land was located in the previous incorporated area, enough to accommodate its future growth, the planned growth area will be limited to the previous corporate boundaries plus some small additions that are logical to connect the area.

LaGrange: The Town of LaGrange is truly unique. Most of the town or about 70 percent of the total acreage is within the Lagrange Historic District, and it was entered on the National Registry of Historic Places in 1975. The District is known

to exhibit some of the finest examples of early 19th century southern architecture and village atmosphere and contains many well-preserved homes of antebellum and Greek Revival styles. The town is committed to preserving this atmosphere and the period of history represented through historic district zoning and a preservation plan. Therefore, the aforementioned density standard should not apply here. Even though all of the town's future growth can be accommodated within the existing corporate boundary of approximately 1,000 acres, such activity will be limited by the preservation of the large antebellum estates. In order to allow for the preservation of the estates on acreage tracts and permit new growth as required without affecting the historic district, an adjustment in the acreage needs is justified. A buffer around the town limits amounting to 3,092 acres is recommended.

Moscow: Table X indicated that Moscow needs an additional 791 acres to take care of future growth. Some additional area is also proposed in the urban growth boundary to recognize existing development that can logically be served by the town. The town is located between two forks of the Wolf River with the associated flood plains, and this factor creates a unique situation with barriers to development being located north and south of the town, as well as to the west where the two forks join. This natural barrier should be given some consideration in establishing the future limits of the town.

Oakland: If the projections hold true, Oakland will be the largest community in the county by 2020 or perhaps sooner. It appears that currently, it is the fastest growing area. Table X shows the need for an additional 6,596 acres in the future. However, Oakland also provides utility services to a large area outside of its incorporated boundary. This area includes a part of the area that was the Town of Hickory Withe. The question here is how much of the area should be considered as an urban growth boundary based on which entity can best provide utility services. The actual plan of Oakland for a growth boundary included over 20,000 acres, an area which is far in excess of what is actually needed for future development.

As noted above in the discussion on Hickory Withe, a planned growth area is identified for the future under the jurisdiction of the county. In the event that Oakland wins the lawsuit at the Supreme Court level, the town should have the option of amending the growth plan to include some additional area related to its utility services. However, for the present plan, the acreage figures noted above will apply.

Piperton: According to Table X, Piperton needs an additional 2,264 acres for future growth. Another factor in this case is that the city has annexed a large area during the interim since these proceedings began. This annexed area amounts to approximately 5,000 acres of land extending northward from the original town center along the Shelby County line to the Raleigh-LaGrange Road. Of these 5,000 acres, 1,700 acres are developable, while 3,300 acres are flood

plain and mostly undevelopable. However, the difference between the amount of land needed and the amount of developable land in the annexed area is 564 acres.

The city does have a plan in place to protect the Wolf River flood plain from development, thus rendering the total area identified as flood plain as undevelopable. The city's plan also contains policies to protect open space and farmland. Zoning restrictions support the city's land use plan. These policies demonstrate intent to carry out the general goal of PC 1101 to control sprawl and preserve open land and should be given additional consideration.

Rossville: Rossville's need for additional acres amounts to 2,100 acres. This is due to the town's current small size and the amount of population growth projected to occur. Additional adjustment should be considered along the Highway 57 corridor based on development potential.

Somerville: Somerville's identified need for additional land area is 3,389 acres. In addition to this is the recognition of two industrial park areas that should logically be within the urban growth boundary, and protection of the service area.

Williston: Williston requested no urban growth boundary and did not participate in any of the deliberations. Consequently, no urban growth boundary is recommended. Some tables included herein addressed the Town of Williston due to the fact that it is an incorporated municipality within the county.

Final Recommendations

After the adjustments to the acreage figures presented in Tables IX and X are made, a final acreage amount for each municipality and the county's planned growth areas can be calculated. Table XI below shows those numbers as the recommended size for each area. The remainder of the county will be recommended for rural area designation. The final results derived from the totals in Table XI are as follows:

Rural Area – 355,907 acres
Urban Growth Boundaries (including municipal limits) – 71,369 acres
Planned Growth Areas - 23,284 acres

TABLE XI

FINAL ACREAGE FOR URBAN GROWTH BOUNDARIES,
 PLANNED GROWTH AREAS AND RURAL AREAS

Entity	Existing Area	Additional Need	Adjustments**	Total Acreage
Braden	2,307	0	0	2,307
Gallaway	2,250	169	5,286	7,536
Hickory Withe	18,638	0	3,686	22324*
LaGrange	1,107	0	3,092	4,199
Moscow	910	791	3,980	4,890
Oakland	2,038	6,596	10,528	12,566
Piperton	6,414	2,264	10,031	16,545
Rossville	1,240	2,100	4,800	6,040
Somerville	8,204	3,389	8,028	16,232
Williston	1,054	0	0	1,054
Subtotal	44,162	15,309	48,714	71,369
Plnd Growth Ar	0	-----	960	23,284
Rural Area	0	-----	-----	355,907
Total Area	450,560	-----	-----	450,560

* Hickory Withe total included as a Planned Growth Area.

** Adjustments in acreages were made to account for unique geographical or other conditions as well as prudent development expectations.

The growth plan map reflects the acreage figures presented in the Table XI. The acreages were calculated on the map using the standard planimetric method with a planimeter. While not accurate by engineering standards, the method does provide a basic method for measurement of areas, and a margin of error was built in. The final result is a growth plan map, which, coupled with the accompanying text herein, provides the basis for a county-wide growth plan in Fayette County.

Impact on Vacant Land, Agriculture, Forests, Recreation and Wildlife

It is a general statement of fact that when open land of all kinds is converted to urban development, a permanent loss of the open land is the result. Therefore, if the goals of this plan as presented above are to be even partially realized, a concerted effort to implement the recommended land use policies must be pursued. As growth occurs within the county, agricultural land including the income that may be derived from row crops or livestock operations will be reduced. If wetlands are drained for land development, flooding will worsen, and valuable wildlife habitat and recreational areas will be lost. Aggressive programs for land preservation that also protect the landowner's investment should be

pursued in Fayette County. The alternative is the conversion of land to urban and suburban uses scattered across the county as described.

CHAPTER IV

FINAL CHANGES TO GROWTH PLAN

After review of the first three chapters of this report, the panel of judges released it for a comment period. Comments were received from various participants in Fayette County. After due consideration, the panel elected to make certain changes in the plan as previously presented. These changes are based upon the language in the Act that takes into account territory in which a municipality is better able to provide urban services and territory that a reasonable and prudent person would project as a likely site for high density commercial, industrial or residential growth over a twenty-year period. The changes are summarized below for the cities and planned growth areas affected and are reflected on the growth plan map.

LaGrange: A remnant of a dead-end road part of which is partially in the city and UGB but with a short section left out and associated land areas were added.

Rossville: Some land area was reapportioned or swapped for other land area that community officials believe is more likely to be the site for urban type development.

Somerville: The Somerville UGB was adjusted to include a small area south of U. S. Highway 64 directly across from the city limit boundary and to include the entirety of one of the industrial parks supported by the city. Other minor adjustments were made to avoid splitting properties.

Piperton – The Piperton UGB was adjusted to include a proposed interchange of State Road 385 and Macon Road, and this adjustment would also encompass an area for another interchange at Monterey Road. This area was identified as a more likely area for economic development. The acreage of this area was essentially swapped for other area on the city's northeastern boundary that was similar in size but not as likely to experience substantial economic growth.

Galloway – A corridor was extended from the southern boundary of the city along State Highway 196 to I-40 where, it is stated, a new interchange is planned within the next five to ten years.

Longtown Interchange on I-40 – The planned growth area at Exit 35 on I-40, also known as the Longtown interchange, was increased in size from the originally proposed 640 acres. A boundary was created that substantially followed identifiable roadways but included properties expected to develop.

Oakland/Hickory Withe – A change in the approach to the issue of corporate and growth boundaries was proposed here. Basically, two alternatives are created. Alternative A is the proposal to maintain the Hickory Withe area as a planned

growth area pending resolution of the lawsuit by the Tennessee Supreme Court. If the Supreme Court finds in favor of Hickory Withe, the corporate boundary will be re-established and the area shown as Alternative A will be the urban growth boundary. Alternative B will involve a "trigger" if the suit is won by the City of Oakland. In this alternative the Oakland UGB will expand to encompass a larger area to the west toward the Shelby County line and along Highway 64. Two planned growth areas on the south and north on either side of the expanded UGB are established as planned growth areas.

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74 PGS : AL - MISCELLANEOUS	
ED BATCH: 1897	
08/28/2003 - 05:00 PM	
VALUE	0.00
MORTGAGE TAX	0.00
TRANSFER TAX	0.00
RECORDING FEE	0.00
DP FEE	0.00
REGISTER'S FEE	0.00
TOTAL AMOUNT	0.00

STATE OF TENNESSEE, FAYETTE COUNTY

EDWARD PATIAT
REGISTER OF DEEDS

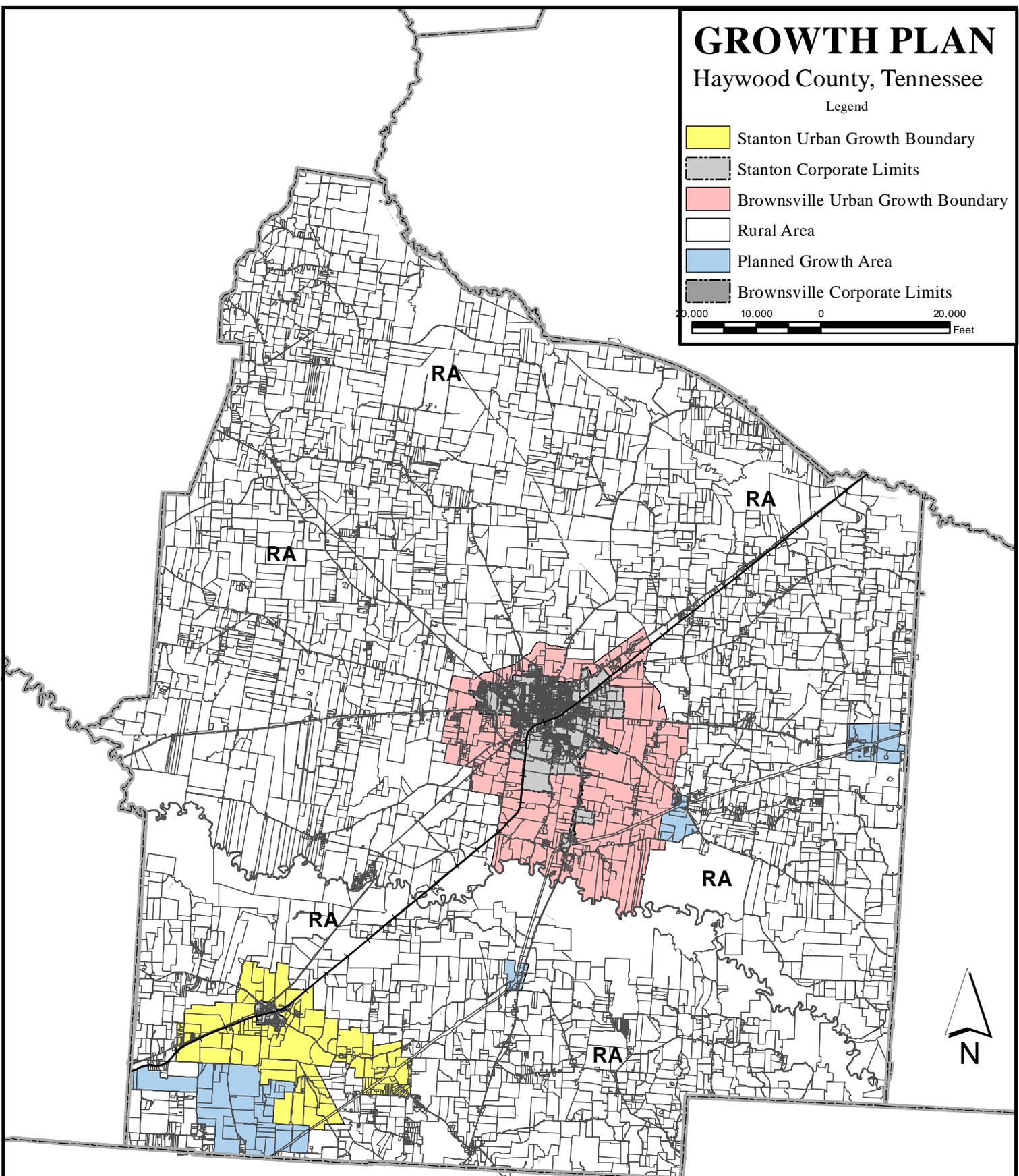
GROWTH PLAN

Haywood County, Tennessee

Legend

-  Stanton Urban Growth Boundary
-  Stanton Corporate Limits
-  Brownsville Urban Growth Boundary
-  Rural Area
-  Planned Growth Area
-  Brownsville Corporate Limits

0 10,000 20,000
Feet



Map prepared by:
Tennessee Department of Economic and Community Development
Local Planning Assistance Office
Jackson, Tennessee
Geographic Information Systems

Map Printed: 5/3/11
This map is not to be used for engineering purposes.

