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Sprawl Minimization and Tennessee's State Growth Management Policy: An Assessment of Local Implementation and Impacts in Tullahoma, Tennessee

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Sprawl Minimization and Tennessee’s State Growth Management Policy: An Assessment of Local Implementation and Impacts in Tullahoma, Tennessee

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ABSTRACT

In 1998, the state of Tennessee passed the Growth Policy Act seeking to minimize urban sprawl. The legislation required municipalities to delineate urban growth boundaries as part of mandated countywide growth policy plans, yet provides a wide degree of discretion to local governments. This research provides an assessment of the state's growth management policy and its local implementation in the small city of Tullahoma, Tennessee. Through analysis of the state's regulatory, institutional, and consistency provisions, weaknesses in the Growth Policy Act are identified that compromise its ability to effectively manage growth. An audit of Tullahoma's planning documents and an analysis of local development patterns reveal practices incongruous with the state's intent to minimize urban sprawl. The research identifies concerns that must be addressed to strengthen state and local growth management in Tennessee, and details a process by which municipalities can evaluate local planning practices for alignment with growth management principles.
ACKNOWLEDGEMENTS

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CHAPTER 1: PROBLEM STATEMENT

Introduction

In 1998 the State of Tennessee passed Public Chapter 1101, commonly referred to as the Growth Policy Act, with the intentions of conserving rural lands, resolving conflicts between long term planning and annexation issues, and promoting local planning that “minimizes urban sprawl” (Tennessee 1998, Section 3). Implicit within the Act is the encouraged adoption of “smart growth” policies and practices (Weitz 1999b, 271); however, the law is very vague in its dictates for local policy. This high degree of local discretion may present problems for small cities that possess limited planning resources. Without appropriate local policy and implementation little promise is held for the realization of these goals in small Tennessee towns.

This research hypothesizes that local planning and development in small towns is often incongruous to the intent of Tennessee’s Growth Policy Act. Focusing on the small city of Tullahoma, Tennessee, this research explores the implementation of Tennessee’s Growth Policy Act to date with regards to its objective of curtailing sprawl. The substantive content and institutional structure dictated by the Growth Policy Act are examined to see if it supports its stated objectives. An audit of Tullahoma’s local planning documents is conducted to identify incongruities between local planning regulations and the stated intent of the growth management legislation. Urban form analysis is used to supplement the policy analysis, seeking to identify shifts in local development patterns that may have resulted from the legislation’s implementation and the provisions of the local regulations. Following this assessment, and with an understanding of the factors shaping local implementation, recommendations are made that foster alignment between local planning and state growth management objectives. The study reveals changes that must be addressed in order to strengthen state and local growth management in Tennessee and to enable state growth management to become more than merely a legislative mandate with limited impact in the small city of Tullahoma.

Statement of the Problem

Without a strong connection between the Growth Policy Act, its intentions of growth management and sprawl containment, and local policy and planning, an opportunity is lost for the legislation to fully achieve its objectives. If unaddressed there is little hope of the Growth Policy Act’s intention of curtailing sprawl impacting the city’s physical form. Small towns may well be the least equipped to realize paradigmatic shifts in development practices due to limited planning resources. Unless growth management is a local priority, Tennessee’s growth management legislation will have limited effectiveness in meeting its objectives. The Growth Policy Act rhetorically serves as a legislative testament to Tennessee’s commitment to growth management, however this research hypothesizes that the mere enactment of a state mandate is only one component in promoting a shift in development trends. Without critical evaluation of the substantive content of the legislation, the details of local policy and practices, and the impacts of
its implementation on the ground, realization of the Growth Policy Act’s full potential will be impeded.

**Significance**

While the focus of this research centers on a single city, the study has relevance to other cities in the state. Throughout Tennessee finite rural land resources have been threatened by unsustainable low-density development practices under pressures resulting from population increases (Appleyard and Pollard 2001). In the fifteen years prior to the passage of the legislation, Tennessee land was converted to urban uses at a rate of nearly four times that of the state's population growth (Carruthers 2002b, 1965). Small towns in particular face unique challenges regarding the conservation of rural lands and the desire to maintain their identity, yet they typically have few planning resources at their disposal and comprise a realm that is often neglected by smart growth and urban design research (McCaffrey 2000).

While most counties and municipalities have met the mandates of the Growth Policy Act (TACIR 2007), the effective translation of the legislation’s objectives to local planning and policy remains an issue that has not been thoroughly evaluated (TACIR 2002, 36). Associated with that concern, the Tennessee Advisory Commission on Intergovernmental Relations has also questioned the consistency of land use decisions in municipalities with their county growth plans (2002, 18), and the lack of a requirement that local governments even have planning and zoning regulations (2002, 19). A review of planning literature regarding growth management programs and their implementation has identified that local land use controls play an integral role in the control or promotion of sprawl (Pendall 1999), and that weak or poorly-designed growth management programs may in fact contribute to sprawl, subverting the purported intent of the initiatives (Carruthers 2002b). These findings substantiate a critical need for a detailed evaluation of the content and implementation of growth management programs to which this research will respond.

**Figure 1-1: Concerns Identified with Tennessee’s Growth Policy Act**

<table>
<thead>
<tr>
<th>Concerns with TN’s Growth Policy Act</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The Growth Policy Act may not have been effectively translated to local planning and policy to local planning</td>
</tr>
<tr>
<td>• Municipal land use decisions may be inconsistent with growth plans</td>
</tr>
<tr>
<td>• The state lacks requirements for local planning and zoning regulations</td>
</tr>
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</table>

Source: TACIR 2002

**Delimitations and Limitations**

This study will focus on the implementation details of the Growth Policy Act in the town of Tullahoma, Tennessee. While local variation of implementation details limits the ability to generalize the specific findings of this research to other municipalities, it is hoped that the study will reveal areas of concern with potential relevance to other small towns, that can guide and inform other local inquiries. Additionally, it is recognized that future further investigation of the economic, environmental, and social bearing exerted by the Growth Policy Act and local regulations is merited but is beyond the scope of this study and its focus on urban form impacts.
Overview

Growth management plans and policies are increasingly being created and adopted. It is important to look at the details of their implementation to determine if they are successful beyond their rhetoric. The chapters that follow provide a comprehensive analysis of Tennessee's state growth management program and its local implementation in Tullahoma, Tennessee. Chapter 2 provides a Literature Review on an array of subjects relevant to this inquiry, while Chapter 3 outlines the methods of analysis employed. Chapter 4 analyzes Tennessee's Growth Policy Act exploring the legislation's regulatory, institutional, and consistency requirements. Local implementation of the Growth Policy Act in Tullahoma, Tennessee is conducted in Chapters 5 and 6, looking first at the town's local planning documents (Chapter 5) and then at local development patterns through urban form analysis (Chapter 6). The concluding seventh chapter summarizes the findings of the previous chapters and identifies changes that must be addressed in order to strengthen state and local growth management in Tennessee.

The study reveals that Tennessee's Growth Policy Act in its current form lacks the substance to effectively achieve its objectives at the local level. While it would be imprudent to derive broad generalizations from this study as representative of implementation across the state, the research reveals areas of concern regarding local implementation of the state growth management program with potential applicability to all cities in Tennessee regardless of their size, but with particular relevance for the small town planning context. The issues identified through the study can serve as a point of departure for further investigation within other individual localities implementing state growth management mandates. An evaluation tool has been created to look at the implementation of state growth management at the local level and identify problems with state and local coordination, and the study demonstrates a process by which Tennessee municipalities can evaluate their local planning documents to identify how practices can be modified to reinforce the intentions of the Growth Policy Act.
CHAPTER 2: LITERATURE REVIEW

Introduction

The following literature review is divided into several sections intended to address subject matter pertinent to exploration of Tennessee’s Growth Policy Act, the legislation’s goal of sprawl minimization, and its local implementation in Tullahoma, Tennessee. The first section discusses state growth management including an overview of the subject, the evolution of state growth management programs, their relationship to the smart growth movement, and a discussion of various approaches to state growth management with an overarching purpose of defining where Tennessee's program fits in this context. The second section transitions to a discussion of state growth management at the local level exploring local implementation of state objectives, local growth management mechanisms, and practices of sprawl containment. The subject matter then shifts to the topic of growth management evaluation, summarizing previous studies assessing the effectiveness of growth management at both the state and local level, and discerning what is applicable to exploring Tennessee’s program and its local implementation.

While the first three sections outlined above establish a broad literary foundation on the subject of growth management and its evaluation, the concluding sections pertain to the specific context of this inquiry. An historical overview of planning in Tennessee establishes the underlying structure of planning activities in the state and serves as an introduction to the topic of growth management in Tennessee. The literature review concludes with a discussion of small towns, applicable planning considerations, and a specific discussion of Tullahoma’s planning context.

State Growth Management Overview

As a term, growth management has been imbued with positive and negative connotations by different groups leading to inconsistencies in its definition (Nelson and Peterman 2000, 278). Growth management is a contentious subject to many, viewed with suspicion by those who feel it interferes with property rights and the self-regulation of market forces (Krieger 1999, 53). Skeptics have claimed that growth management proponents are opposed to growth. Others have developed a less-constricting definition characterizing growth management as: “a conscious government program to influence the rate, amount, type, location, and/or cost of development” (Godshalk and Brower 1989; Godschalk, Brower et al. 1979; Brower et al. 1984; and Ruane and Gray 1987). Carruthers articulates a distinction between growth controls, which may only seek to regulate the quantity and timing of development locally, and growth management which has aspirations of impacting the characteristics and quality of development as a means to minimize negative impacts (2002a, 394). This is the viewpoint embodied by the stated objectives of Tennessee’s growth management legislation.

Evolution of State Growth Management Programs

Early growth management programs emerged primarily at the local level as a response
to rapid land development in the 1960s and 1970s (Carruthers 2002a, 392). The recognition of uncontrolled growth’s relationship to social, economic and environmental problems with extra-local impacts soon provided the impetus for the initiation of state growth management efforts (Bollens 1992, 3). With the realization that growth concerns extend beyond local boundaries and jurisdictions, state growth management has gained prominence (Bollens 1992, 3). Growth management at the state level holds great potential because of its ability to coordinate regional need, create a uniform development playing field across the state, and avert the friction and spillover effects that can arise between neighboring municipalities with different regulatory climates (Anthony 2004, 378).

Researchers have identified several distinct phases in the evolution of state growth management programs. Although some state programs may be strongly representative of a single distinct program generation, others are representative of the evolution of state growth management and their current programs have developed through a series of iterations reflecting the emphasis of each era (Weitz 1999a). Florida is one such state demonstrating a shift in program focus and structure through succeeding generational iterations (Ben-Zadok 2005). An understanding of the shifts that have occurred in the intent, focus, and tactics of state growth management efforts provides a useful background for the examination of Tennessee’s program and its location in this continuum.

The first of four phases in the evolution of state growth management programs began with the inauguration of Hawaii’s program in 1961 (Weitz 1999b, 267). State programs emerging during this first wave of growth management, termed the “quiet revolution” by Bosselman and Callies (1971) had an environmental and regionalism focus (Carruthers, 2002a, 392; Weitz 1999a, 59), but made few strides in mandating and implementing local planning requirements (Weitz 1999a, 61).

After a subsidence in state growth management efforts beginning in 1976, a renewed interest emerged in the mid-1980s (Weitz 1999b, 268). This second wave of state growth management featured programs with concurrency requirements and infrastructure provisions emerging as concerns (Weitz 1999a, 85). The overhaul of Florida’s program in 1985 is seen as the first significant action of this period, with programs in Delaware, Rhode Island, Vermont and Maine following suit (Weitz 1999b, 268).

The third generation of state growth management programs, beginning in the late 1980s and early 1990s increasingly became concerned with the minimization of urban sprawl (Weitz 1999a, 125). Programs were adopted in Georgia, Washington, and Maryland during this time period (Weitz 1999b, 268). Weitz also identifies a fourth generation of programs, although the transition between this era and the previous phase is not conspicuous or acknowledged as distinct by all researchers (DeGrove 2005). Weitz has termed this fourth era the “smart growth” phase, and establishes 1998 as the year of transition between the third and fourth generation programs (Weitz 1999b, 268).

Tennessee’s Growth Policy Act and legislation
passed in Arizona have been identified as part of the smart growth movement (Weitz 1999b, 271). The fourth generation programs have been strongly influenced by the preceding generation. The focus on sprawl minimization is still present, but program goals have broadened in an attempt to coordinate diverse regional and local concerns with an array of tactics. Krieger identifies three smart growth initiatives relative to land use and urban form: sprawl control, rural and open space conservation, and reinvestment in existing urbanized areas (1999). These three elements are addressed in Tennessee’s Growth Policy Act (Tennessee 1998a) and can be seen as representative considerations of the fourth generation of state growth management programs identified by Weitz (1999b).

**Growth Management and Smart Growth**

Concurrent with the rise of the smart growth movement, programs of the most recent wave of growth management have significantly broadened their focus to include an expanse of quality-of-life issues and sprawl containment (Carruthers 2002a, 392; Carruthers 2002b, 1962). Contemporary adaptations of growth management are often promoted under the designation of smart growth as the term is currently enjoying favor in planning and popular discourse (Landis 2006). Though it may have commonality with the goals of growth management, the term smart growth may be more palatable to those who perceive the former to be a form of heavy-handed regulation; they may find smart growth to be a more positive term embracing their various concerns (Krieger 1999).

A large body of literature deals with the subject of smart growth, addressing the social, fiscal, and environmental problems associated with the dispersed and haphazard development of urban sprawl (among others Benfield, Raimi, and Chen 1999; Barnett 2007). Since its inception the movement has broadened to address an array of quality-of-life issues (Holton 2001). Its proponents vary both in their interests and the specific principles they promote, and the definition of smart growth to which they adhere. Organizations as varied as the American Planning Association (APA), the Urban Land Institute, the Sierra Club, the National Association of Realtors, the National Association of Home Builders, and the Environmental Protection Agency have all articulated stances on the movement.

The American Planning Association’s definition of smart growth views the movement as a means to promote the long-term, comprehensive well-being of communities and regions (2002). The APA definition encompasses foster-

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**Figure 2-1: Evolution of State Growth Management Programs**

<table>
<thead>
<tr>
<th>Generation</th>
<th>Emergence</th>
<th>Focus</th>
<th>States</th>
</tr>
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<tbody>
<tr>
<td>1st Generation</td>
<td>1960s</td>
<td>Environmentalism and regionalism</td>
<td>HI, OR</td>
</tr>
<tr>
<td>2nd Generation</td>
<td>Mid-1980s</td>
<td>Concurrency</td>
<td>DE, FL, ME, RI, VT</td>
</tr>
<tr>
<td>3rd Generation</td>
<td>Late-1980s</td>
<td>Sprawl Minimization</td>
<td>GA, MD, WA</td>
</tr>
<tr>
<td>4th Generation</td>
<td>Late-1990s</td>
<td>Smart Growth</td>
<td>AZ, TN</td>
</tr>
</tbody>
</table>

Source: Carruthers 2002a; Weitz 1999a and 1999b
ing a unique sense of place and community; the preservation of natural and cultural resources; fiscally responsible and equitable distribution of development costs and benefits; the expansion of transportation, employment, and housing choices; a concern with long-term actions rather than short-term piecemeal steps made independently from regional considerations, and the promotion of healthy communities (APA 2002). In translation to the physical form of cities, smart growth development typically promotes the reuse of existing sites and infrastructure, and mixed-use compact development that is pedestrian-friendly and accessible to transit (APA 2002).

The lack of a clear and consistent definition for smart growth has made it difficult to build consensus around a common objective. Downs cites this lack of identified commonality between various groups as a hindrance for the advancement of the movement (Downs 2001, 20). Seeking common ground, smart growth can be identified as a movement emerging as a reaction to the consequences of urban sprawl; it is a normative movement focused on the quality of development, advocating practices that ensure that growth is appropriate and balanced. From this perspective the rise of the smart growth movement and its considerations bears a strong connection to the transition from third generation growth management programs focusing on urban sprawl, to current fourth generation state programs including Tennessee’s.

**Approaches to State Growth Management**

The preceding research on the evolution of state growth management programs begins to establish the high degree of variation that exists in program structure, intensity, and content. Purported growth management programs vary in terms of the kinds of development their regulations apply to, the mechanisms used, the stringency of regulations, the structure between levels of government, and other variables (Bollen 1992, 2). Various typological classifications have been utilized by researchers to categorize growth management approaches.

Just as there are multiple approaches to growth management, there is also debate surrounding the qualification of states as practitioners of growth management. Capturing the fundamental ideals of the state growth management movement, Anthony describes state growth management planning as “comprehensive, concurrent, consistent, and conservation-oriented” (2004, 379). Weitz provides a comprehensive summation of research on the subject and the growth management states listed by each study, noting that many researchers omit the defining criteria by which they exclude states from inclusion (1999b, 275). He concludes with a listing of the ten states with the broadest consensus regarding their classification as growth management practitioners as of the date of his research: Florida, Georgia, Hawaii, Maine, Maryland, New Jersey, Oregon, Rhode Island, Vermont, and Washington (276). More recent research now also recognizes Arizona, Tennessee, Colorado, and Wisconsin as growth management states that have enacted programs since the mid-1990s (Yin and Sun 2007, 160).

Some works on the subject articulate more
precise definitions and criteria for the classification of growth management states, and variation exists among the states that are identified and included in their studies. Gale defines state growth management programs as programs that have been established by state legislation that mandate or encourage local comprehensive plans; mandate or encourage the submittal of plans for review, comment, or approval; mandate or encourage limits on plan amendments; and mandate and encourage periodic plan updating (Gale 1992). Nelson and Dawkins outline two criteria for identifying growth management states specifying that these entities have enacted legislation with the goal of “promoting compact development patterns” and rely on vertical, horizontal, or internal consistency requirements to implement these objectives (2003, 385). Howell-Moroney derives defining features from Weitz’s research that include “a state mandate, or strong inducement by the state for comprehensive planning,” “provision for state or regional review of local comprehensive plans,” and a third possible component consisting of “other measures to control and manage growth” (Howell-Moroney 2007 from Weitz 1999b).

Bollens identifies three types of state growth management programs classifying them based on their approach and program content: preemptive/regulatory, conjoint/planning, and cooperative/planning (1992). In the preemptive/regulatory model the state must approve certain projects having extra-local impact as typified by the Florida program of 1972, and Vermont’s 1970 program (Bollens 1992, 4). The conjoint/planning model mandates or encourages consistency between local comprehensive plans and state objectives as demonstrated by the 1973 Oregon program and the 1985 Florida program (Bollens 1992, 4-5). The cooperative/planning model differs from the conjoint/planning model in that it does not require local comprehensive plans but instead uses incentives to promote participation, as in the 1985 New Jersey program and the 1988 Vermont program (Bollens 1992, 5).

Bollens hypothesizes that an adaptive shift from regulatory to cooperative planning and a focus on balanced growth has resulted from perceived shortcomings of previous program iterations as well as a broadening of the goals embraced by the programs (1992, 6 and 10). New objectives initiated by economic recessions in the 1970s and 1980s that highlighted the need to accommodate growth’s positive benefits while still limiting its negative outcomes led to the development of new program types (Bollens 1992, 6). The paradigmatic changes in growth management models from regulatory to cooperative approaches, and from goals of limited scope to broad considerations parallel the state growth management generations and their evolution outlined by Weitz (1999b).

Gale identifies four state growth management program types: state-dominant, regional-local cooperative, state-local negotiated, and fusion (1992). These four classifications represent variations in the critical elements of state growth management programs identified by his research: the jurisdictional level of plan preparation, whether or not plans are mandated, the levels of government involved in plan review, the stringency and presence of requirements for
review or approval, consistency requirements, and the strength of sanctions for non-compliance (Gale 1992). Oregon, Florida, Rhode Island, and Maine are identified as state-dominant programs; Georgia and Vermont, as regional-local cooperative; New Jersey, as state-local negotiated; and Washington, as fusion. The fusion model contains elements similar to the features of state-dominated programs including mandates for local planning; however in Washington these are only applied to certain high-growth communities. Similar to the regional-local cooperative model, plan review in Washington’s “fusion” program is distributed down from the state level to other authorities. Borrowing from the state-local negotiated approach, Washington’s program delegates the responsibility of resolving planning discrepancies between municipalities and the counties which encompass them to the county governments (Gale 1992).

Nelson et al identify three state growth management styles: state-imposed, mandatory planning with a strong state role, and mandatory planning with a weak state role (1995). Within the three styles consistency requirements for the coordination of local plans, regulations, and decision-making are identified as significant determinants of program quality (Nelson et al 1995, 28-29). The authors also identify efficient administration as the foundation of successful growth management programs, evidenced by provisions for streamlined permitting, review, assistance, coordination, and education (1995, 135-136).

Hawaii’s highly centralized program is the only one identified by Nelson et al as falling into the state-imposed classification (1995, 20). Oregon, Florida, Maine, New Jersey, Rhode Island, and Washington are identified as states with mandatory planning and a strong state role. In Oregon and Florida final compliance authority for planning decisions rests with state agencies (1995, 22-24). State review of local plans is required in Maine, and failure to adopt a plan can result in invalidation of the local zoning ordinance; additionally cities that do not go through a plan certification process are subject to funding limitations and restricted from imposing impact fees (1995, 24). New Jersey focuses on planning at the state level through a process that includes local representation, and leverages state funding to promote compact growth in defined areas (1995, 25). In Rhode Island, state grant funding is contingent on approval of local plans that are compatible with the objectives of the state and neighboring communities, and requires state approval of plans and amendments (1995, 25). Planning in Washington is subject to state review and comment, but not approval, and is only required in counties demonstrating high growth rates; the state has the authority to limit funding to jurisdictions that do not comply (1995, 26).

Nelson et al identify California, Vermont, and Georgia as having programs that outline a weak state role. In California, state requirements regarding the policy content of plans is limited, and recommendations focus more on the procedural and organizational aspects of planning (1995, 26-27). In essence the state’s communities are required to plan but are not told how to plan, and there is not a state agency responsible for enforcement (1995, 27). State goals in Vermont lack specificity, and local participation is op-
tional, but compliant communities are allowed to impose impact fees and can require state agencies to act in coordination with their plans (1995, 28). In Georgia’s program planning is required to maintain funding eligibility or exact impact fees, but planning goals are primarily left to be determined by local discretion (1995, 28).

Tennessee, perhaps indicative of a larger trend in new state growth management program iterations, is difficult to categorize based on the paradigms outlined above. In 1992, Gale noted a shift away from state-dominant planning toward the three other classifications he identified: regional-local cooperative, state-local negotiated, and fusion. Tennessee’s program embodies certain aspects of all three of these models yet neither is fully representative. Neither does Tennessee fit clearly into one of the three classifications provided by Bollens: preemptive/regulatory, conjoint/planning, or cooperative/planning. The state’s program does however follow Bollens’ 1992 prediction that a shift would occur from regulatory to cooperative planning with a focus on broader goals; although the preparation of a countywide growth policy plan is mandatory in the state of Tennessee, local comprehensive planning is voluntary. Tennessee’s growth management efforts most closely resembles Nelson et al’s characterization of mandatory planning with a weak state role, although this classification is descriptive only in a general sense.

None of the established classifications account for the nuances and unique attributes of individual programs. The extensive use of typological classification by researchers may oversimplify the analysis of growth management programs by minimizing the variations that exist between them. A universal system of classification has not been accepted and programs that have been identified as falling under the same classification by some researchers have yielded dissimilar results when viewed individually (Howell-Moroney 2007). This makes a strong case that these typologies may not tell the whole story or adequately describe programs, and indicates that it may be more instructive to examine the

<table>
<thead>
<tr>
<th>Researcher</th>
<th>Classifications</th>
<th>Characterization of Tennessee</th>
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<tbody>
<tr>
<td>Bollens</td>
<td>• preemptive/regulatory &lt;br&gt; • conjoint/planning &lt;br&gt; • cooperative/planning</td>
<td>Participation is mandatory, but does not align with the preemptive/regulatory classification because comprehensive planning is not required</td>
</tr>
<tr>
<td>Gale</td>
<td>• state-dominant &lt;br&gt; • regional-local cooperative &lt;br&gt; • state-local negotiated &lt;br&gt; • fusion</td>
<td>Does not align because all four classifications assume that local planning and plan review is required</td>
</tr>
<tr>
<td>Nelson et al</td>
<td>• state-imposed &lt;br&gt; • mandatory planning with strong state role &lt;br&gt; • mandatory planning with weak state role</td>
<td>Somewhat fits the classification of mandatory planning with a weak state role, but does not fully align because the classification assumes that local comprehensive planning is required</td>
</tr>
</tbody>
</table>

individual elements of state growth management programs and their implementation, particularly as new programs have emerged in Tennessee and other states.

**State Growth Management at the Local Level**

**Local Implementation of State Objectives**

While many growth management programs now originate at the state level, consideration of the local level is paramount to program success because it is the level of government where most land use regulation is inevitably carried out (Carruthers 2002a, 393). Potentially to the detriment of their success, many states still allow localities to retain their full powers of local land use and planning authority with wide discretion (Freilich 1999, 240). Local land use controls and planning regulations significantly impact the urban development of communities (Pendall 1999). This justifies examination of local planning within the context of state growth management, as land use issues are typically handled at this lower tier of government (Norton 2005, 55). Growth management's effectiveness is essentially predicated on local governments' abilities to produce and implement quality plans and regulations that are in alignment with larger state objectives. Early reports monitoring the implementation of Tennessee's Growth Policy Act have expressed concern with this issue, specifically with regards to the minimization of urban sprawl (TACIR 2002, 19).

**Local Growth Management Mechanisms**

Within the various approaches previously outlined, a range of techniques are employed locally in diverse combinations to achieve state growth management objectives. To supplement general planning Nelson et al identify the following growth management devices and methods: urban containment mechanisms such as urban growth boundaries; impact fees or other financing techniques; concurrency or adequate public facilities requirements; land preservation regulations; minimum density standards; infill and redevelopment policies; transfer of development rights; rural land reassembly; special-area protection; streamlined permitting; nondiscretionary standards; and expedited development review (1995, 147-148). Research by Howell-Moroney suggests that the use of auxiliary mechanisms such as these can enhance the effectiveness of state growth management initiatives (2007). Each instrument is accompanied by its own associated issues that must be considered. Variation also exists within the use of these mechanisms, with different techniques being promoted by individual state programs and deemed appropriate for achieving particular growth management objectives. Tennessee's sprawl minimization efforts rely primarily upon the use of urban growth boundaries and requirements that annexation and expansion be coordinated with a local plan of services (Tennessee 1998a).

**Urban Growth Boundaries and Sprawl Containment**

In the context of growth management urban sprawl is a key and critical consideration because of its implications for other associated goals of growth management (Anthony 2004, 380). Since its emergence in planning discourse in the 1960s (Nelson and Peterman 2000, 277), urban
sprawl has become ubiquitous as a term and a phenomenon. Nelson et al provide a widely accepted definition of sprawl describing it as “unplanned, uncontrolled, and uncoordinated single-use development that does not provide for an attractive and functional mix of uses and/or is not functionally related to surrounding land uses and which variously appears as low density, ribbon or strip, scattered, leapfrog, or isolated development” (1995, 1). Alluding to the roles that regulatory and institutional structures play in the support of sprawl’s proliferation, Carruthers further describes sprawl as “the combination of a physical pattern of development and the lifestyle choices and political institutions that reinforce it (2002b, 1961).

Sprawl containment tactics are often the central features of growth management efforts. Urban growth boundaries, the most prominent feature of Tennessee’s growth management efforts, are frequently employed as a containment technique to control sprawl. Nelson and Dawkins define urban containment as:

“an explicit policy to prevent the extension of key public facilities, especially water and sewer lines and urban development, without plan amendments. They are also known as urban growth boundaries, urban limit lines, urban service limits, urban service areas, and so forth” (Nelson and Dawkins 2003 in Wasmier 2006, 27).

Urban containment policies are based on two primary principles, “to promote compact and contiguous development patterns that can be efficiently served by public services, and to preserve open space, agricultural land, and environmentally sensitive areas that are not currently suitable for development” (Nelson et al 1995, 73).

Simply defined, urban growth boundaries seek to limit urban expansion and sprawl by delineating a boundary separating urban development from rural areas (Avin and Bayer 2003, 22).

Research has shown that although urban growth boundaries are potentially effective, the success of growth management efforts is not dependent upon their mere presence or absence (Landis 2006, 428). The primary utility of urban growth boundaries lies as a complement rather than a substitute for local planning, and what is of critical concern is their structure, administration, and appropriate demarcation (Landis 2006, 428). Urban growth boundaries require careful delineation to avert the creation of artificial land shortages that can shift growth to less restrictive jurisdictions and areas (Porter 1996, 23). Fundamental policy decisions must also be made regarding the jurisdictions that will be required to employ containment instruments. It must be determined whether any development outside the boundary will be prohibited, or if some development will be permitted if services are provided by the developer (Porter 1996, 23).

Consideration must also be given to the nature of internal and external development in terms of land use, zoning, lot sizes, and density; typically large minimum lot sizes of 10-20 acres outside the boundary are advisable to preserve rural lands while lots of five acres or less may not discourage development (23).

Urban containment delineation should be based upon development needs substantiated by population and growth projections consistent with growth management goals and policies; housing, employment, and quality-of-life needs;
efficient provisions for public services and facilities; land use efficiency; environmental, social, economic, and energy considerations; preservation of natural resources, farmland, and forests; and the compatibility of urban land uses with their surrounding resources (Nelson et al 1995, 74). Research by Nelson and Dawkins (2003) has revealed that while goals of sprawl minimization and the encouragement of compact development are fairly consistent, the institutional and regulatory aspects of containment programs have a high degree of variation particularly with regards to the strength of programs and their accommodation of future development (Wassmer 2006, 26-27). In his research, Wassmer found urban growth boundaries with a more restrictive approach to the accommodation of future development to be the most effective (2006, 56).

State growth management programs ultimately rely upon successful local implementation. At the core of these efforts should be comprehensive planning, supplemented by the use of auxiliary local growth management mechanisms such as urban containment strategies. Research has shown that these mechanisms can increase the likelihood of growth management’s effectiveness in terms of impacting development and urban form outcomes, but they are not a stand-alone means to an end (Landis 2006, 428). The prudence of Tennessee’s use of urban growth boundaries is questionable, given the absence of a requirement for local comprehensive planning and the lack of a substantive foundation and guidance on which to base delineation. As the primary growth management mechanism required by the state, local discretion with delineation and implementation of the urban growth boundary may severely inhibit Tennessee’s effectiveness at impacting development and minimizing urban sprawl.

**Growth Management Evaluation**

The diversity of state growth management programs and the variation in their objectives, content, and structure complicate comparison and evaluation (Ewing 2006, 57). Creating additional evaluation challenges, programs within individual states often undergo shifts in emphasis and structure following their enactment resulting from amendments, changes in political administrations and agendas, or any number of factors (Ben-Zadok 2005). The temporal delay between the creation of growth management programs, their implementation, and the disclosure of their effects on-the-ground has made it difficult for evaluation to keep pace with the development and implementation of programs. The time lapse between implementation and spatial outcomes coupled with the shifts in programs makes it difficult to establish relationships of causality between individual program attributes and their impacts. Weitz asserts that concrete criteria to determine the success or failure of growth management are virtually non-existent (1999a, 289). An infinite number of program permutations are possible and it must be noted that the success of growth management programs is not only contingent upon the presence of key critical components as part of the program, but also the intensity and manner in which these are implemented and achieved (Weitz 1999b, 269).
Overview of State Growth Management Assessment Studies

A 2002 study by Carruthers developed an analytical framework for the evaluation of state growth management programs (2002a), and his subsequent study further refined the analysis model and applied it to the study of several state growth management programs (2002b). Assessing regulatory growth management programs by exploring their implementation, processes, and outcomes, Carruthers’ study revealed a high degree of variation in effectiveness among growth management states, underscoring the substantive differences among the programs (2002b, 1971). In summary, Carruthers concluded that the most successful growth management programs mandate consistency on multiple levels, rather than merely encouraging it or only addressing singular aspects of it (2002b, 1962); have stringent requirements that may be more complex to enforce yet are more likely to contain sprawl (2002a, 395); and employ strong enforcement mechanisms (2002b, 1979).

In California, a state in which cities and counties are required to plan but consistency is not mandated, Carruthers found that densities decreased despite growth management efforts (2002b, 1975). Florida, a state with seemingly stringent requirements for planning at the city, county, and regional levels and consistency requirements, had an increase in urbanized land which could be attributed to inconsistent local compliance and a lack of state support to assist with concurrency requirements (Carruthers 2002b, 1976). Georgia was found to be largely ineffectual at growth management, perhaps because the state only encourages rather than mandates planning in line with regional objectives and has no concrete consistency requirements (Carruthers 2002b, 1976). Oregon was found to be one of the most successful states in the study, utilizing urban growth boundaries (UGBs) and requiring vertical and internal consistency (2002b, 1976). Although Washington similarly employs the use of UGBs and has strong consistency requirements few results in the study demonstrate its effectiveness; however it was acknowledged that this could be attributed to the fact that Oregon’s program has been in place significantly longer (2002b, 1977).

Through an analysis of changes in urban density and urbanized land in forty-nine states, another study provides insight into the contributions made by individual aspects of growth management programs to their overall effectiveness at sprawl control (Anthony 2004). Attesting to the influence of program variations, the study revealed that although growth management states demonstrated lesser density decreases than their counterparts when viewed aggregatedly, they fared inconsistently when reviewed individually. In a comparison of four states with state plan review and approval authority, declines in density were found to be more substantial in states

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**Figure 2-3: Challenges in Growth Management Evaluation**

<table>
<thead>
<tr>
<th>Growth Management Evaluation Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Diversity of programs and approaches</td>
</tr>
<tr>
<td>• Variations in program objectives</td>
</tr>
<tr>
<td>• Program modifications</td>
</tr>
<tr>
<td>• Temporal Delay</td>
</tr>
<tr>
<td>• Variation in intensity and implementation</td>
</tr>
</tbody>
</table>

Source: Ewing 2006; Ben-Zadok 2005; Weitz 1999a & b
that had less stringent provisions for the amendment of plans (Anthony 2004, 387). Anthony also found little to substantiate the success of growth management programs in New Jersey, Vermont, and Georgia at mitigating sprawl, attributing this possibly to their negotiated consensus approaches (2004, 387).

Based on his research, Anthony identifies state oversight of local planning and amendment processes as positive impacting factors on the success of growth management programs (2004, 388), and weak or non-existent local implementation as a detriment (2004, 390). He identifies five elements whose presence can contribute to program success including mandates for local planning, requirements that agencies work in a manner consistent with local plans to encourage actual implementation, financial incentives for local growth management, limitations on local plan amendments, and the integration of strong agricultural land preservation components (Anthony 2004, 392).

Howell-Moroney’s research investigating the impact of the intensity of growth management programs on the mitigation of sprawl identifies a spectrum of program intensities ranging from weak to strong (2007). States identified as typifying the respective categories include Georgia, New Jersey, and Vermont (weak); Rhode Island, Maryland, and Maine (moderate); and Florida, Washington, and Oregon (strong). In weak programs local comprehensive planning is encouraged rather than mandated and the state does not possess absolute authority regarding plan approval (Howell-Moroney 2007, 2165). Moderate programs mandate local comprehensive planning and consistency with state goals, and require state review and/or approval of plans (2007, 2166). Strong programs go one step farther by utilizing additional growth control mechanisms such as urban growth boundaries or concurrency requirements (2007, 2167). When viewed aggregately by typology the study found inconsistency among the weak and moderate programs, and concluded that strong programs appear to have the greatest impacts, attributing this to the use of auxiliary growth management mechanisms such as urban growth boundaries (Howell-Moroney 2007, 2175-2176).

A singular growth management model that will work best for all fifty states remains elusive despite refinements and adaptations to programs (Salkin 2007, 790). Growth management must address diverse contexts impacted by dynamic bearing forces (Porter 1996). While stringent and comprehensive mandates may result in more substantial impacts, the ability of localities to implement requirements must be kept in mind to avert overburdening local capabilities and subsequently provoking opposition and noncompliance (Porter 1996, 19). Individual programs have succeeded in some aspects yet proven ineffectual in others, and extensive case studies have revealed that a clear ideal growth management solution is yet to be found. However, patterns have emerged in the literature detailing growth management approaches and their evaluation that can be used to inform new strategies and the refinement of existing programs. The following interrelated strategies summarized in Figure 2-4 have been identified recurrently as components among effective growth management programs.
The coordinated presence of these five elements, if each appropriately applied, likely can promote implementation and development realities that align with growth management objectives. An evaluation of Tennessee’s Growth Policy Act for the presence of these requirements and provisions will provide insight regarding the strengths and weaknesses of the state’s growth management legislation and reveal potential areas of concern for local implementation to be explored further.

State Program Evaluation Framework

The preceding information reveals that an extensive amount of literature has been produced detailing the content of state growth management programs in an effort to facilitate comparative analysis. State growth management program researchers have variously classified programs on the basis of program focus (Weitz 1999a and 1999b); program approach and content (Bollens 1992); state role (Nelson et al 1995); or some combination of these factors (Gale 1992). Prompted by the maturation of programs, this area of research has recently expanded to explore the impacts of programs on-the-ground, their effectiveness at meeting objectives, and the bearing of specific aspects of the programs (Carruthers 2002a and 2002b; Anthony 2004; Salkin 2007; Howell-Moroney 2007). Most research has focused on the details of the state-level programs and their outcomes in a broad sense, rather than the quality of plans resulting from them and their local implementation (Norton 2005, 56).

A comparative overview of growth management literature has revealed a significant level of consistency among the conclusions of researchers, revealing program elements recurrently identified as positive and negative attributes.

<table>
<thead>
<tr>
<th>Program Component</th>
<th>Researchers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mandates requiring local comprehensive planning</td>
<td>Weitz 1999a; Anthony 2004; Landis 2006; Wassmer 2006; Howell-Moroney 2007</td>
</tr>
<tr>
<td>Strong growth management mechanisms such as UGBs or concurrency requirements with appropriate administration and application</td>
<td>Carruthers 2002b; Landis 2006; Wassmer 2006; Howell-Moroney 2007</td>
</tr>
<tr>
<td>Stringent requirements for planning and amendment processes with state oversight and approval</td>
<td>Weitz 1999a; Anthony 2004; Howell-Moroney 2007</td>
</tr>
<tr>
<td>Concrete mandates for consistency on multiple levels</td>
<td>Carruthers 2002b; Nelson et al 1995; Weitz 1999a</td>
</tr>
<tr>
<td>Provisions to promote administrative efficiency</td>
<td>Nelson et al 1995; Weitz 1999a</td>
</tr>
</tbody>
</table>

Source: Nelson et al 1995; Weitz 1999a; Carruthers 2002b; Anthony 2004; Landis 2006; Wassmer 2006; and Howell-Moroney 2007
This corroboration of research as outlined in the previous section, coupled with the findings of more recent work exploring the impacts and effectiveness of programs on the ground, makes it possible to establish a foundation of reference for the assessment of other state programs. It is important to note however, that the absence of any singular program element recognized as a positive contributing feature does not necessarily preclude the success of a state’s growth management efforts, but should be seen as indicative of a gap or weakness that must somehow be compensated for by other aspects and attributes of the program design.

Literature on the evaluation of state growth management programs has revealed a significant degree of variation in program content and outcomes, and that in some cases weak or poorly-designed programs may in fact contribute to sprawl, subverting the purported intent of the initiatives (Carruthers 2002b). This substantiates a critical need for a detailed evaluation of the content and implementation of growth management programs. Issuing a call for further study, Carruthers indicates that “…future research should be directed at evaluating the effectiveness of other frameworks, including those of Maine, Maryland, New Jersey, Rhode Island, Tennessee, and Vermont,” (2002b, 1979).

This study is primarily concerned with the minimization of urban sprawl and the assessment of the substantive aspects of Tennessee’s growth management program pertinent to that objective. Accordingly, evaluation in this context will rely upon the findings of previous studies with similar foci as a foundation for comparison.

The comprehensive literature that exists for the growth management states of Florida (1985), Oregon (1973), Georgia (1989), and Washington (1990-91), identifies positive and negative elements contributing to the programs’ overall effectiveness, thoroughly details the design of the programs, documents the urban form impacts of the programs’ implementation to date, and provides a strong basis for program comparison. Representing a range of program types and geographical regions, Florida, Oregon, and Washington are consistently recognized as strong practitioners of growth management albeit through the utilization of different approaches, while Georgia is consistently recognized as a weak practitioner (Gale 1992, Nelson et al 1995, Weitz 1999b, Howell-Moroney 2007). The following tables summarize the critical features of the four programs that will be used as a foundation for comparative analysis in this study. Details regarding research methods and procedures will be provided in a later chapter discussing the project methodology.

State Growth Management Program Assessment at the Local Level

Exploration of the local implementation of state growth management efforts in Tennessee will consist of two research phases. The first phase will be an assessment of local planning documents to reveal incongruities that may exist between local planning regulations and the intent of Tennessee’s growth management legislation to minimize urban sprawl. The urban form analysis that comprises the second phase will seek to reveal how the growth management
legislation has impacted local development patterns to date. The details of these two phases including research intent, data, and methods of analysis are discussed in greater detail in the chapter on project methodology; summaries of the pertinent literature informing these aspects of the research are included below.

**Analysis of Local Planning Documents**

Research has identified that local land use controls play an integral role in the control or promotion of sprawl as a component of growth management efforts (Pendall 1999), substantiating that an exploration of local planning regulations viewed from the perspective of the objectives of growth management is necessary to evaluate a program's local implementation and success. Literature on the study of local growth management mechanisms' effectiveness is sparse, with the major exception being exploration of Portland's urban growth boundary (Landis 2006, 412). Summarizing the existing literature on the evaluation of local planning embedded within state growth management efforts, Norton identifies several factors thought to impact local planning outcomes including state mandates for planning and their structure; state

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**Figure 2-5: Regulatory Requirements of Selected State Growth Management Programs**

<table>
<thead>
<tr>
<th>Regulatory Requirements of Program</th>
<th>FL</th>
<th>OR</th>
<th>WA</th>
<th>GA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auxiliary Policy Instruments Required (see below)</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Urban Growth Boundary Mandated</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Concurrency Mandated</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Local Comprehensive Planning Required</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Substantive Requirements for Local Plans</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>Y</td>
</tr>
</tbody>
</table>


**Figure 2-6: Institutional Requirements of Selected State Growth Management Programs**

<table>
<thead>
<tr>
<th>Institutional Requirements of Program</th>
<th>FL</th>
<th>OR</th>
<th>WA</th>
<th>GA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conjoint implementation</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Cooperative implementation</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Sanctions for Non-compliance</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>State Review/Comment on Plans</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>State Approval Required for Plans</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>State Approval Required for Amendments</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
</tbody>
</table>


**Figure 2-7: Consistency Requirements of Selected State Growth Management Programs**

<table>
<thead>
<tr>
<th>Consistency Requirements of Program</th>
<th>FL</th>
<th>OR</th>
<th>WA</th>
<th>GA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vertical Consistency</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Horizontal Consistency</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Internal Consistency</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Implementation Consistency</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
</tr>
</tbody>
</table>

administration of the mandates; local financial and administrative capacity for planning; and local commitment to state growth management objectives (2005, 59). Provisions to make growth pay for itself, regulations that discourage low-density development, and limitations on the number of residential permits issued annually have been identified by Pendall as elements that should be utilized by communities seeking to manage growth locally (1999, 555).

Smart growth audits have been identified as an approach to conducting structured evaluations of local planning documents to determine whether they advance or impede growth management intentions (Avin and Holden 2000; Weitz and Waldner 2002). The audits are translatable to growth management analysis applications because of the parallels that exist between the sprawl management intentions of both the smart growth movement and state growth management program goals.

**Urban Form Analysis**

Exploration of local urban form outcomes can be utilized to further illuminate whether or not Tennessee’s Growth Policy Act has impacted development patterns and planning, and if gaps exist between the intention of the legislation and local realities. Carruthers’ analytical framework, used as a basis for evaluating Tennessee’s state growth management program in this research, identifies increases in urban density and decreases in rates of conversion of land to urbanized uses as indicative of growth management effectiveness (2002a, 400). At the local level however these calculations can often prove difficult, as agricultural land use change statistics are typically aggregated at the county level or a greater resolution (Clark and Howell 2006). Variations in the attributes of local planning documents have been found to have an impact on the size of urbanized areas, and it has been noted that development realities can be indicative of growth management effectiveness (Wassmer 2006). Comparisons of the change in population relative to change in urbanized acreage over time can inform assessments of growth management efforts (Pendall 1999, 558).

As relevant to the exploration of growth management and sprawl minimization efforts in Tullahoma, Tennessee, other tactics of spatial analysis outlined by the following research have potential applicability for the exploration of the local impacts of the Growth Policy Act’s implementation. A 2001 study by Galster et al identified measures for eight dimensions of urban sprawl: density, continuity, concentration, clustering, centrality, nuclearity, mixed uses, and proximity (685). Although this previous study focused on significantly larger urbanized areas and utilized larger units of analysis, it was proposed that these indices could also be used to evaluate change in a smaller area over time in order to evaluate the impacts of growth management policies and practices on urban form (Galster et al 2001, 709).

Effective growth management should also result in demonstrable changes in neighborhood development traits over time. A study by Song and Knaap (2007) in which they developed neighborhood classifications based on urban form characteristics could be used to derive a method by which to examine changes in de-
velopment characteristics as a result of growth management. Calculations in their study included single-family parcel lot size, floor space, and the density of single-family dwelling units (Song and Knaap 2007, 9). These measures have also previously been used in other urban form studies by Song (2005), and Song and Knaap (2004).

**Planning in Tennessee**

**History and Structure of Planning in Tennessee**

Zoning enabling legislation for Tennessee municipalities was passed in 1921, and in 1933 the Tennessee State Planning Board was created (Tennessee Department of Economic and Community Development and Local Planning Assistance Office 2003, 2). In 1935, the Tennessee State Planning Commission was formed as part of a requirement to receive federal financial assistance for planning (TDECB and LPAO 2003, 3). By the 1940s Tennessee remained one of the few states with a strong state level planning program (3). Alfred Bettman, the noted planner, served as an instrumental consultant in the creation of Tennessee’s legislation outlining the structure for county and municipal zoning authority, municipal subdivision regulation, and municipal planning (3). The Tennessee State Planning Commission was charged with creating an advisory state comprehensive plan and with the power to create regional planning commissions with the power to adopt plans (4). The State Planning Commission was largely involved with assisting communities impacted by the work of the Tennessee Valley Authority and state level physical planning (5-6).

Following World War II, the State Planning Commission was subdivided into State Planning, Research, and Local Planning divisions (TDECB and LPAO 2003, 7). In 1959 the State Planning Commission became part of the Department of Finance and Administration, but was later abolished in 1972 (7). The staff was reallocated to form the Tennessee State Planning Office within the Executive Department; the Local Government Planning Advisory Committee (LGPAC) was formed to fulfill advisory needs previously filled by the State Commission (7). In addition to its role as an advisory body to the governor regarding local planning issues and administration, the LGPAC was given authority over the creation and control of regional planning commissions, a power it retains today (7). In 1983 further restructuring occurred and the Local Planning Division and the LGPAC were relocated to the Department of Economic and Community Development, while the State Planning and Research divisions remained in the Executive Department (7). In addition to the LGPAC, the state also established nine development districts in the 1960s to coordinate regional needs and economic development and to address federal funding requirements (10). Although the development districts were given the authority to receive and spend funds their broad plans were only intended to be advisory, and their power does not supersede the planning authority of local governments (10).

The State Planning division was eliminated in 1995; at the same time all statutes authorizing state level planning were repealed, and state enabling legislation reduced planning to a regional or local level activity (TDECB and LPAO 2003, 8). Tennessee Code differentiates between...
municipal planning commissions and regional planning commissions. Regional planning commissions are created by designation (granted from the LGPAC) and can be formed by a county, community, or municipal planning commission (19). The authority of regional planning commissions is similar to that of municipalities, but they also have the power to apply their ordinances and regulations beyond the city limits within the designated planning region. While planning and land use controls are not mandatory for Tennessee municipalities, they do have the authority to adopt plans as well as zoning and subdivision regulations (TDECB and LPAO 2003, 14). Additionally the planning commissions are empowered to review and advise any public or private agency or organization’s work that may be relevant to their planning (14). It is within the scope of the regional planning commission’s power to address not only police power concerns of health, safety, and welfare, but also the efficiency and economy of development (TDECB and LPAO 2003, 20). Municipal and regional governments are authorized to seek professional assistance from one of the six branches of the Local Planning Assistance Office throughout the state (8-9). These services are optional and provided by contract, with 217 cities and counties receiving assistance in 2000 (9).

**Growth Management in Tennessee**

Growing concern regarding the lack of coordination between annexation and long-range planning across the state and the rapid conversion of land to urbanized uses led to state growth management efforts in Tennessee (Tennessee Advisory Committee on Intergovernmental Relations 1999). In 1998, Tennessee passed Public Chapter 1101, commonly known as the Growth Policy Act, mandating that each county with non-metropolitan governance and its contained municipalities coordinate to create a twenty-year countywide growth policy plan to promote rural conservation and growth management (Tennessee Advisory Committee on Intergovernmental Relations 2000). Included among the requirements of the landmark legislation were the establishment of urban growth boundaries for each municipality, as well as projected growth areas and rural areas to be conserved within the county. Additionally, the law requires municipalities to provide a plan of services henceforth for any territory they wish to annex (TACIR 1999, 18). The objectives of the Growth Policy Act include the following (Tennessee §6-58-102):

1. Eliminate annexation or incorporation out of fear (of being annexed by a neighbor-
ing municipality against the wishes of local officials and citizens;
2. Establish incentives to annex or incorporate where appropriate;
3. More closely match the timing of development and the provision of public services
4. Stabilize each county’s education funding base and establishes an incentive for each county legislative body to be more interested in education matters; and
5. Minimize urban sprawl.

The legislation passed in Tennessee has been recognized by researchers as a state growth management program (Weitz 1999b, 275; Carruthers 2002b, 1959; Anthony 2004, 378; Yin and Sun 2007, 160). Weitz acknowledges the significance of Tennessee’s Growth Policy Act and its efforts at local growth management, yet is dubious regarding the success of the state’s role in the case of Tennessee’s legislation (1999b, 275). Public Chapter 1101 is vague in outlining the requirements for the delineation of the urban growth boundaries, and regarding the internal policies of the individual municipalities. By design, the Act was imbued with an “intentional lack of structure”, leaving many decisions to the discretion of the municipality (TACIR 1999, 15 and 55). In evaluations monitoring the Growth Policy Act as it has been implemented concerns have been raised about the legislation’s effectiveness at the local level with regards to its lack of requirements for local planning and zoning regulations (TACIR 2002, 19), the capabilities of the growth plans to address the goal of sprawl minimization (TACIR 2001a, 14), and the inconsistency of land use decisions in municipalities with their countywide growth policy plans (TACIR 2002, 18).

Initial evaluation of Tennessee’s Growth Policy Act is difficult to assess conclusively: the state has incorporated elements that are characteristic of many well-regarded growth management programs, but has failed to require some of the most fundamental measures needed to significantly impact development. Although participation in Tennessee’s program is mandatory, its lack of requirements for local comprehensive planning alone may dissuade some researchers from recognizing the state as a growth management practitioner. The state’s requirement that all municipalities enact urban growth boundaries could potentially be a powerful mandate, yet the wide degree of discretion provided to local governments in determining the UGB’s parameters in essence negates the force of the mandate. Consistency requirements as well seem to be lacking; these only appear to be addressed at the county level and even then only internally between the county government and its contained municipalities through the use of coordinating committees in the preparation of the recommended growth policy plan. As the literature has established, exploration of the nuances of the legislation and the combination of tactics utilized will best reveal the prospects of the effectiveness of Tennessee’s growth management efforts.

Figure 2-10: Summary of TN’s GPA

<table>
<thead>
<tr>
<th>Summary of Growth Policy Act Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-year Growth Policy Plan</td>
</tr>
<tr>
<td>• Urban growth boundaries for each municipality</td>
</tr>
<tr>
<td>• Projected Growth Areas for future growth</td>
</tr>
<tr>
<td>• Rural Areas to be conserved</td>
</tr>
<tr>
<td>Plan of Services for future annexation</td>
</tr>
</tbody>
</table>

Source: TACIR 2000
Small Towns
Planning Considerations

In addition to responding to the needs for evaluation of the effectiveness of growth management programs, this research will also explore the subject in a small town context. Compared to larger urban areas, small towns often differ in terms of attitudes, economic base, appearance, and aspirations (Daniels, Keller, and Lapping 1995, x) resulting in dissimilar local planning objectives, practices, and outcomes. Small towns may have small budgets, resource limitations, minimal planning staffs with limited professional expertise, and may be unfamiliar with the mechanisms and strategies of growth management (Marano 2005, 7; Daniels, Keller, and Lapping 1995, xv). It is imperative for small towns to accommodate growth, but to do so while maintaining assets such as local character (Segedy and Daniels 2007, 36); yet this planning context may pose an even greater challenge given the aforementioned disadvantages from a planning perspective. In this context, growth management efforts may tend to be more reactive than proactive (Marano 2005, 7).

A study conducted by Edwards and Haines exploring how smart growth principles were being embraced and integrated into local policy following the passage of Wisconsin’s state smart growth legislation revealed smaller towns in general to be less successful at integrating the principles into planning practices and policies (2007). This divergence is possibly attributable to many differences including local preferences, attitudes, values, economic base, size, and others, and may point to a need for revised planning approaches to deal with small town issues effectively and appropriately (Daniels, Keller, and Lapping 1995). This calls into question the viability and appropriateness of applying the same planning mandates to cities of varying size, as well as the suitability of imposing principles widely claimed as tenets of good urban planning by those in the profession upon a locality that may possess different values and conceptions of good urbanism.

Even if smart growth tenets and growth management are embraced in principle, the challenge still exists to secure acceptance of change in small towns (Mayer, Danis, and Greenberg 2002, 351), where local officials and residents often feel that powers of land-use regulation are an inalienable right of local jurisdiction rather than a power conferred upon them by the state government (Carruthers 2002b, 1962-1963). Now more than ever appropriate and coordinated planning efforts are needed as small towns are forced to become increasingly self-reliant due to declines in federal funding and a need to attract and support local economic activity (Daniels, Keller, and Lapping 1995, xv).

Tullahoma, Tennessee

Tullahoma is a small city in Middle Tennessee, centered geographically between Nashville and Chattanooga approximately eighty miles from either metropolis. The vast majority of Tullahoma is located in Coffee County, with the exception of a small portion of the southern part of the city that lies in Franklin County. A large Air Force base, the Arnold Engineering Development Center (AEDC), occupies a 39,000-acre site that bounds the city to the east (Merryman 1998, 28). Two TVA Res-
ervoirs, Normandy Lake and Tims Ford Lake, are located to the north and south of the city respectively.

Tullahoma’s population in 2006 was estimated to be 18,913 (U.S. Census Bureau 2006). With the exception of a sharp population increase from 1940 to 1960 (269%) resulting from the establishment of AEDC in 1949 (Martinez 1969, 193), population growth within the city has been moderate but unwavering, and a dramatic change in these trends is not anticipated (U.S. Census Bureau; Tennessee Advisory Commission on Intergovernmental Relations and the University of Tennessee Center for Business and Economic Research, 2003.).

The City of Tullahoma’s Planning Commission has been designated as a municipal regional planning authority by the state’s LGPAC. This designation entitles the municipality to exercise extra-local planning authority. Tullahoma does not have a contract with the state’s Local Planning Assistance Office, and the LPAO did not assist the city in fulfilling the requirements of the Growth Policy Act. The local Planning and Codes Department consists of a planning director, a building inspector, a codes enforcement officer, and an administrative assistant. Current documents in use by the local planning agency include the following: the City of Tullahoma Comprehensive Development Plan (1986); the Zoning Ordinance for the City of Tullahoma, Tennessee (1988); the Countywide Growth Policy Plan for Coffee County, Tennessee (1999); the Countywide Growth Policy Plan for Franklin County, Tennessee (1999); the Comprehensive Transportation Plan (1996); and the City of Tullahoma Subdivision Regulations (2007).

At the time the local urban growth boundary (UGB) was established in 1999 the city limits contained 16,640 acres (Tullahoma, TN 1999, 6); the

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1930</td>
<td>4,025</td>
<td></td>
</tr>
<tr>
<td>1940</td>
<td>4,549</td>
<td>13.02%</td>
</tr>
<tr>
<td>1950</td>
<td>7,562</td>
<td>66.23%</td>
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<tr>
<td>1960</td>
<td>12,242</td>
<td>61.89%</td>
</tr>
<tr>
<td>1970</td>
<td>15,311</td>
<td>25.07%</td>
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<tr>
<td>1980</td>
<td>15,800</td>
<td>3.19%</td>
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<tr>
<td>1990</td>
<td>16,761</td>
<td>6.08%</td>
</tr>
<tr>
<td>2000</td>
<td>17,994</td>
<td>7.36%</td>
</tr>
</tbody>
</table>

Source: U.S. Census
UGB was drawn to include an additional 12,160 acres (Tullahoma, TN 1999, 13). In the concluding comments of the Urban Growth Boundary Report, the committee responsible for delineating the UGB noted the following (Tullahoma, TN 1999, 17):

“The Urban Growth Boundary developed is somewhat larger than would be expected initially. This is primarily due to the type of growth that has occurred and expected to continue; the growth being primarily along specific arteries that are somewhat restricted due to topographical considerations.”

“The inherent uncertainty of growth patterns dictates that the UGB area be somewhat larger than may be expected to assure the planning mechanism and process is in place to cover the actual growth that will occur in the future.”

Projections utilized by the Committee responsible for delineating the UGB indicated the city’s inhabitants would number 18,853 by 2000 and 23,711 by 2020 (Tullahoma, TN 1999, 11). The area delineated by the twenty-year UGB was 1.7 times larger than the current city limits (Figure 2.13), yet was based on a projected population increase of only 25.7%. While growth has occurred, population increases to date have fallen short of projections with the documented population in 2000 being only 17,994 (US Census 2000). This cursory evaluation alone of the disproportionate land increase demarcated by the UGB in comparison to the population projections calls into question the effectiveness of local implementation of Tennessee’s Growth Policy Act in the City of Tullahoma, and justifies the need for exploration of local implementation and translation of the state growth management legislation to planning practice.

Conclusions

State Growth Management Conclusions

State growth management programs have evolved since their emergence in the 1960s. While early programs had a strong environmentalism focus, more recent programs have broadened to encompass a range of goals. The current fourth generation programs, with which Tennessee has been identified, have been associated with the smart growth movement and its desire to minimize urban sprawl, counteract its negative impacts, and promote balanced growth. States have adopted varied approaches to achieve their growth management aims and researchers have developed many classification systems to categorize approaches. Tennessee’s program however, fails to fit neatly into any of the established classifications and the literature has shown that these typologies may not adequately account for program nuances that ultimately impact growth management effectiveness. This establishes a strong case for this study, which will provide an in-depth analysis of Tennessee’s growth management program and its local implementation.

State Growth Management at the Local Level

Conclusions

The literature has also demonstrated that the details of local level implementation are critical to the success of state growth management programs. This encompasses the translation of state growth management goals to planning practices, regulatory features, policies, oversight, and enforcement procedures. Local governments
seeking to manage growth employ a range of mechanisms to achieve these specialized aims, such as the urban growth boundaries required by Tennessee’s legislation. Existing research however has demonstrated that these supplemental strategies should not preclude the use of local comprehensive planning as a fundamental first step in local growth management efforts. This calls into question Tennessee’s use of urban growth boundaries in the absence of a mandate for local comprehensive planning.

**Growth Management Evaluation Conclusions**

Growth management has proven to be a difficult subject to evaluate for several reasons including the complexity of programs, their frequent modification, the time delay between implementation and the materialization of impacts, and the range of context- and program-specific factors that ultimately impact effectiveness. While early researchers focused on the description and classification of programs, the maturation of growth management has enabled recent researchers to study the impacts of growth management in terms of spatial outcomes, and associate these findings with program designs. While a guaranteed formula for growth management success remains elusive, several strategies are frequently identified as components of effective growth management programs. These include mandates for local comprehensive planning, the use of strong supplemental mechanisms, stringent state oversight of planning and amendment processes, multi-level consistency mandates, and provisions to promote administrative efficiency. A foundation for the comparative analysis of programs has been generated through review of the extensive body of literature on the subject. In particular the comprehensive coverage of the growth management programs of Florida, Georgia, Oregon, and Washington, will be utilized in this study as a foundation to explore Tennessee’s growth management efforts, while keeping in mind that the absence of one singular program element may not preclude overall growth management success.

At the local level, the assessment of state growth management programs must explore the translation of goals articulated by the state to local planning documents and policies, and whether or not the desired impacts materialize in terms of local urban form outcomes as a result of the program’s implementation. Smart growth audits provide a means to evaluate local planning documents for consistency with program objectives because the sprawl management intentions of smart growth closely align with that of state growth management programs. Several methods of analysis have also been identified with which to evaluate the physical development realities of growth management efforts.

**Planning in Tennessee Conclusions**

Since the dissolution of the state planning division in 1995, planning in Tennessee has been primarily a local level activity. The requirements for municipalities regarding planning are extremely limited; local comprehensive planning and the adoption of land use controls are not required. In a surprising move given the state’s minimal planning requirements, Tennessee adopted a growth management policy in 1998. The
legislation was passed in response to mounting concern over uncoordinated annexation and the rapid conversion of land to urbanized uses. Questions however have quickly emerged regarding the strength of the legislation’s provisions and the prospects of its effectiveness. In the face of these valid questions, exploration of the details of Tennessee’s Growth Policy Act and its implementation is merited.

Small Town Planning Conclusions

Planning for a small town, such as Tullahoma, presents a unique set of challenges. A complex dichotomy of intent often exists in small town planning goals, generated by simultaneous desires to retain local character and promote economic growth and development. This situation is complicated by the limited planning resources typically available in small towns, and the inherent complexities of growth management planning. As local governments are forced to become increasingly self-sufficient, resistance may arise to any mandate that can be construed as imposing limitations on a town’s ability to generate growth.

Preliminary evaluation of Tullahoma and the urban growth boundary delineated for the city in response to the Growth Policy Act indicates that Tennessee’s growth management intentions may have been lost in the translation to local practice. Analysis will seek to confirm this misalignment and determine whether it has resulted from flaws in the state legislation, local regulatory or institutional limitations or weaknesses, or a combination of factors. The foundation provided by this literature review will support exploration of the origins
CHAPTER 3: METHODOLOGY AND DATA

Introduction

The following methodology outlines the research procedures for this study. The study focus specifically defines the concentration of the research and is followed by a presentation of the research questions. Seeking to address all aspects of the research problem, three supporting inquiries have been identified as embedded within the primary research question. These three inquiries are used to organize the methodology into three distinct research phases. For each of the research phases the research intent, data, approach, and analysis procedures are outlined.

Study Focus

This study focuses on Tennessee’s Growth Policy Act, its local implementation in Tullahoma, Tennessee, and its resulting impacts on planning and development. From multiple angles, this study assesses efforts pertinent to Tennessee’s growth management intentions. The structure and substantive content of the state legislation, the local policies guiding planning and development, and the impacts manifested in urban form outcomes are all examined, focusing on the study area of Tullahoma, Tennessee. Although it is recognized that the Growth Policy Act’s ramifications and objectives are broad and have social, environmental, and economic bearing on the study area, this particular inquiry only addresses the legislation’s stated objective to promote planning that “minimizes urban sprawl” (Tennessee 1999, Section 3). By focusing on a single town it is possible to illuminate the urban form impacts of planning policy and practice at the local level.

Research Questions

Has Tennessee’s Growth Policy Act made an impact to date in Tullahoma, Tennessee toward its goal of promoting local planning that “minimizes urban sprawl”, and is this objective supported by the details of the state legislation and local plans, policies, and regulations influencing its implementation?

This question serves as the primary focus of the study. To generate an answer to the primary research question and address all aspects informing the investigation, the following questions are explored in this analysis. The organization of the research phases corresponds to these three inquiries.

Phase 1: Analysis of Tennessee’s Growth Policy Act
Does the institutional structure and substantive content of the Growth Policy Act support the intent of the legislation?

Phase 2: Analysis of Local Planning Documents
What incongruities exist between the intent of the Growth Policy Act to minimize urban sprawl and the local planning documents and regulations?

Phase 3: Analysis of Local Development Patterns
How have Tennessee’s growth management policy and Tullahoma’s local planning documents impacted local development patterns?

Research Phases

Phase 1: Analysis of Tennessee’s Growth Policy Act
Does the institutional structure and substantive content of the Growth Policy Act support the intent of the legislation?
**Intent**

The goal of the first research phase is to identify whether or not the structure and substantive content of Tennessee’s Growth Policy Act supports the intent of the legislation to minimize urban sprawl. Literature on the evaluation of state growth management programs has revealed a significant degree of variation in program content and outcomes, and that in some cases weak or poorly-designed programs may in fact contribute to sprawl, subverting the purported intent of the initiatives (Carruthers 2002b). The content and language of the legislation therefore is analyzed to reveal any weaknesses that may undermine its objectives.

**Approach**

Previous work by Carruthers provides an approach for the critical evaluation of state growth management programs (2002a and 2002b). As part of his analytical framework, Carruthers identifies two dimensions of growth management programs: the regulatory and institutional framework (2002a, 393). Institutional framework considerations center on the degree of consistency and coordination that exists between different levels of government, with political fragmentation viewed as a hindrance to program success (2002a, 393). The regulatory aspect of the framework is concerned with the mechanisms used to achieve the growth management objectives in practice (2002a, 393). Together the regulatory mechanisms and the institutional setting inform program outcomes; both must be evaluated to determine the effectiveness of a growth management program (2002a, 393).

Carruthers’ framework operates under the premise that program implementation is jointly informed by both the growth management program design in terms of its policies and techniques, and by the institutional setting. Consistency requirements (vertical, horizontal, and internal) within the mandates impact how the regulatory and institutional inputs influence the demand factors and supply constraints of regional land markets. The regional land market effects result in measurable outcomes in the spatial structure of urban areas in terms of urban density and land area, as well as in property values and public services (Carruthers 2002a, 400).

Carruthers’ framework accommodates consideration of the strategies previously identified in the literature review as critical components in effective growth management programs. Evaluation of the growth management program design explores its consistency requirements, and regulatory aspects including the specific growth management mechanism or containment policy used and the enforcement mechanisms (Carruthers 2002b, 1964). Analysis of the institutional framework explores the characteristics of and
the relationships between state, regional, and local entities (Carruthers 2002a, 400). The spatial structure outcomes are evaluated through urban form analysis (refer to Phase 3: Analysis of Local Development Patterns).

In order to explore whether or not the institutional structure and substantive content of Tennessee’s Growth Policy Act supports the intent of the legislation to minimize urban sprawl, the following questions have been derived from Carruthers’ framework (2002a and 2002b) supplemented by a review of additional literature pertinent to the subject of state growth management and its regulatory and institutional evaluation (Pendall 1999; Weitz 1999a). In regards to the evaluation of program consistency, this study explores the four types identified by Weitz (vertical, horizontal, implementation, and internal) (1999a), as they potentially provide a more comprehensive analysis than the three identified by Carruthers.

**Regulatory Requirements and Analysis**
Is local comprehensive planning required?

Are there substantive requirements for local planning?

What specific policy instruments are prescribed, and what are their substantive requirements?

**Institutional Requirements and Analysis**
What are the requirements for compliance and participation: Is the institutional framework of implementation conjoint (mandatory participation with severe penalties for noncompliance) or cooperative (voluntary compliance and participation with incentives for compliance)?

What are the sanctions for non-compliance or the incentives for voluntary compliance?

Does the state address the fiscal arrangements of the municipalities, encouraging a shift away from the property tax as the primary revenue source?

Is state approval of plans required, or is their authority limited to review and comment?

What is the procedure for the amendment of plans and policies and who has that authority?

**Consistency Requirements and Analysis**
How does the program address vertical consistency between local planning and state objectives?

How does the program address horizontal consistency and the coordination of local planning practices among neighboring communities?

How does the program address internal consistency between elements of the comprehensive plan and ensure that all components are based on the same underlying assumptions?

How does the program address implementation consistency and ensure that local development regulations are consistent with local plans?

**Data**
The Tennessee Code Annotated, current through the 2007 session of the 105th General Assembly provides the answers to the inquiries outlined above. This document includes all adopted amendments to the growth management legislation to date. Title 6, Chapter 58 establishes the state’s comprehensive growth policy and is the primary source for information. Where relevant, additional information on amendments indicated in the Tennessee Code Annotated has been obtained from the Tennessee Department of State’s Division of Publications website. This
was done in an effort to ensure that modifications to the Growth Policy Act indicative of a trend towards strengthening or weakening the legislation were not overlooked by this research. All of the data is publically available from online resources.

**Analysis**

While Carruthers’ work has provided a framework to generate the appropriate inquiries, the analysis of Tennessee’s Growth Policy Act is patterned after the methodology used by Weitz (1999a) in which he augmented a thorough reading of several states’ laws establishing their growth management programs by searching computer-readable text for key words indicative of the degree of authority, program support, and program evolution (1999a, 340). By similarly structuring the inquiry it has been possible to draw comparisons to the programs included in Weitz’s comprehensive assessment of the growth management programs of Oregon, Washington, Florida, and Georgia (1999a). These findings (included in the preceding literature review) are used as a foundation to facilitate a general comparative understanding of Tennessee’s legislation with existing research on the subject of growth management.

As noted by Weitz, care must be taken to avoid false generalizations and misinterpretation of data (1999a, 339). In addition to the background provided by a review of pertinent growth management literature, a series of public reports generated by the Tennessee Advisory Commission on Intergovernmental Relations (the state agency charged with monitoring the implementation of Public Chapter 1101), bulletins issued by the state’s Municipal Technical Advisory Service, and the Tennessee Planning Commissioner Handbook have been used to clarify, supplement, and verify the findings of this analysis. In some instances qualitative analysis has been necessary to elucidate the nuances of the legislation and the force of its provisions. Additionally, the remaining research phases subsequently outlined and their outcomes have further revealed the nature of the provisions’ strengths and weaknesses, as well as other bearing factors beyond the mere presence of elements, such as the effects of tactics being employed in specific combinations or the stringency of individual elements and mandates.

**Phase 2: Analysis of Local Planning Documents**

What incongruities exist between local planning documents and regulations and the intent of the Growth Policy Act to minimize urban sprawl?

**Intent**

Research has identified that local land use controls influence sprawl (Pendall 1999), substantiating that an exploration of local planning regulations viewed from the perspective of the Growth Policy Act’s objectives is necessary to evaluate the legislation’s local implementation. An audit is conducted of the documents primarily responsible for dictating local development standards in Tullahoma, Tennessee. This assessment of local planning documents seeks to identify the incongruities between local planning regulations and practice, and the Growth Policy Act’s objective to minimize urban sprawl.

**Data**

The data set for this research phase is comprised of the City of Tullahoma Comprehensive...
Development Plan (1986); the Zoning Ordinance for the City of Tullahoma, Tennessee (1988); the County-wide Growth Policy Plan for Coffee County, Tennessee (1999); and the City of Tullahoma Subdivision Regulations (2007). These four documents have been provided by the City of Tullahoma’s Planning and Codes Department.

**Approach**

The analytical approach for this research phase is modeled after methods used to conduct smart growth audits. The method was selected because the objectives of smart growth regarding land use and urban form development are consistent with the Tennessee Growth Policy Act’s stated intent to minimize urban sprawl. Smart growth audits are structured evaluations used to determine the degree of correlation between smart growth principles and plans, policies, or programs shaping development (Avin and Holden 2000, 27; Weitz and Waldner 2002, 4).

This study conducts a targeted audit looking at local development standards influencing urban form. The evaluation criteria of smart growth audits are guided by the premise that efficient land consumption, inward growth, higher densities, compact and contiguous development, and mixed land uses contribute to an urban form and land use that aligns with smart growth goals of minimizing urban sprawl (Weitz and Waldner 2002, 3).

By applying specific inquiries to plans and policies, the process is used to reveal divergence or coordination with principles and practices relevant to the minimization of sprawl. The following questions have been derived from a review of literature pertinent to the subject of state growth management and its local implementation. Questions applicable to this particular inquiry have been derived from a smart growth audit template created by Weitz and Waldner (2002), audit recommendations included in Oregon’s Infill and Redevelopment Code Handbook (OTAK, Inc. 1999), and Pendall’s research regarding the influence of local land use controls on sprawl (1999). Similar to the first research phase, the inquiries are organized into three categories based on the type of concerns they address: regulatory, institutional, or consistency issues.

The evaluation includes the following inquiries, organized thematically. Affirmative answers to the questions, with the exception of those noted with an asterisk, are indicative of policies that discourage sprawl.

**Regulatory Requirements**

**General Local Regulatory Context**

Is there a local comprehensive plan?

Have the local planning documents been updated or revised since the passage of the growth management legislation?

Are other growth management strategies in place in addition to the urban growth boundary such as the use of building permit caps, adequate public facilities ordinances, or concurrency requirements?

**Direction of Growth**

Is an inward direction of growth articulated as a guiding vision by the Comprehensive Development Plan and Growth Policy Plan?

Is there an analysis of redevelopment potential and is it encouraged?

Is the potential build-out for residential development quantitatively identified?
Do infill and redevelopment projects require more variances than open land projects?

Are there zoning districts that specifically accommodate infill and redevelopment?

*Land Use*

Is fringe land zoned as exclusively agricultural, or does the zoning ordinance include a substantial minimum lot size (10 acres minimum, preferably 25-40 acres) that discourages single-family tract housing and preserves large sites for viable farm use?

Is development permitted outside the UGB only if services are provided by the developer?

Are mixed land uses promoted by the comprehensive plan?

Does the local zoning ordinance provide at least one or more zoning districts that allow mixes of residential and commercial uses?

Are residential uses allowed in the central business zoning district?

Is the land use plan efficient in terms of the amount of undeveloped land devoted to residential uses when compared with the projections of residential land needed?

Are these projections based on a housing needs assessment?

Are the projected acreage needs exceeded by no more than 15%?

Is the local urban growth boundary based on a realistic assessment of land use needs?

Are goals, policies, and implementation measures established to set aside a certain percentage of total land area in the community as open space or green space?

*Development Patterns*

Do land use regulations establish minimum densities to promote efficient use of lands designated for higher densities?

*Are there discretionary provisions that result in housing being built at lower densities?

Do minimum lot sizes allow for urban size lots (5,000-6,000 square feet)?

Is at least some of the residential land in the community planned or zoned for densities between eight and fifteen dwelling units per acre, with even higher densities provided for in urban centers?

Does the local zoning ordinance provide for traditional neighborhood development?

Do local land use regulations provide for “conservation subdivisions” or “cluster subdivisions” as a matter of right (versus requiring a conditional use permit)?

Do all or most zoning districts require a minimum open space ratio (i.e. percentage of land area for each development that must be open space)?

*Institutional Requirements*

Are local governments empowered to charge infrastructure costs for new development to the developers or are the services provided through property taxes?

Did Tullahoma secure the authority to exact impact fees prior to state legislative changes prohibiting the city from doing so?

Are provisions in place to promote administrative efficiency such as stream-lined permitting processed and clear, objective standards that can ensure the approval of projects consistent with growth management goals?

*Consistency Requirements*

*Vertical Consistency*

Does the local comprehensive plan demonstrate consistency with the state’s objective to minimize urban sprawl?
Implementation Consistency
Are local planning regulations consistent with the comprehensive plan and/or the state’s intent to minimize urban sprawl?

Have any local planning documents been updated and/or superseded since the passage of Tennessee’s growth management legislation to align with the state’s goal of minimizing urban sprawl?

Horizontal Consistency
Are the growth management efforts of Tullahoma coordinated with surrounding jurisdictions?

Do different entities (county- and local-level government) share regulatory authority over the UGB territory and are these consistent?

Internal Consistency
Do the local planning documents demonstrate internal consistency by reinforcing each other and through common basis on the same underlying assumptions?

Analysis
The preceding questions serve as the structure for an analysis of local documents guiding planning and development in Tullahoma, Tennessee. In addition to providing information about the status of local growth management efforts, the findings of the smart growth audit further supplement the exploration of consistency provisions, revealing whether or not the provisions outlined by the legislation at the state level are being achieved in implementation. Analysis in this research phase is conducted in a manner similar to that outlined for the first research phase. The findings of the analysis areThematically structured rather than organized by document in order to reveal inconsistencies and contradictions that may exist between the individual documents in addition to their discrepancies with the Growth Policy Act’s objective of sprawl minimization.

Phase 3: Analysis of Local Development Patterns
How has the Tennessee Growth Policy Act impacted local development patterns and planning?

Intent
Urban form analysis is used to explore development trends within Tullahoma and its urban growth boundary. Exploration of local urban form outcomes is utilized to further reveal whether or not Tennessee’s Growth Policy Act has impacted development patterns and planning, and if gaps exist between the intention of the legislation and local realities. Findings from the urban form analysis are supplemental to the policy analysis, given that less than ten years have elapsed since the passage of the legislation—a short amount of time in which to expect evidence of significant change. Although it is acknowledged that the establishment of direct causality between any changes that are identified and the enactment of the Growth Policy Act is tenuous, when viewed in conjunction with the policy analysis the urban form analysis illuminates more aspects of the Act’s implementation.

Data
GIS data provided by the City of Tullahoma is used for the study. This information has been cross-referenced with real estate assessment data from the State of Tennessee Comptroller of the Treasury’s office. The data, publically available from the Comptroller’s website, is used to identify the chronology of residential and commercial development in the city.
Approach

Variations in the attributes of local planning documents have been found to have an impact on the size of urbanized areas, and it has been noted that development realities can be indicative of growth management effectiveness (Wassmer 2006). Existing literature suggests several development indices that point to growth management success. Carruthers’ analytical framework, used as a basis for evaluating Tennessee’s state growth management program in this research, identifies increases in urban density and decreases in rates of conversion to urbanized land uses as indicative of growth management effectiveness (2002a, 400). Comparisons of the change in population relative to change in urbanized acreage over time can inform assessments of growth management efforts (Pendall 1999, 558). This however can be difficult to gauge at the local level, as agricultural land use change statistics are typically aggregated at the county level or a greater resolution (Clark and Howell 2006).

Other tactics of spatial analysis outlined by the following research have potential applicability for the exploration of the local impacts of the Growth Policy Act’s implementation in Tullahoma, Tennessee. A 2001 study by Galster et al identified measures for eight dimensions of urban sprawl: density, continuity, concentration, clustering, centrality, nuclearity, mixed uses, and proximity (685). Although this previous study focused on significantly larger urbanized areas and utilized larger units of analysis, it was proposed that these indices could also be used to evaluate change in a smaller area over time in order to evaluate the impacts of growth management policies and practices on urban form (Galster et al 2001, 709). While the complex quantitative measures employed by Galster are beyond the scope of this study, a qualitative description of local development patterns in the city, particularly with regards to density, continuity, centrality, and the mixture of land uses would be informative.

Analysis

Analysis focuses on identifying if changes have occurred regarding the location and dispersal of new development, and if there is evidence demonstrating a shift to a more compact urban form. This requires identification of shifts in local development patterns resulting from shifts in local planning practice. For the purposes of this study three time periods have been identified that correspond to the adoption of the major planning documents analyzed in the second phase of this research. The first time period includes all development occurring prior to the adoption of the 1986 Comprehensive Development Plan. The second includes all development occurring during the interim period between the adoption of the Comprehensive Development Plan and the passage of the Coffee County County-wide Growth Policy Plan (1986-1998). The final phase consists of all development occurring from 1999 to the present.

The goal of this analysis is to establish a general understanding of development trends in Tullahoma as associated with local planning practices. Particularly with regards to the study of residential development, analysis focuses on the identification of subdivisions and their
location as opposed to incremental single-family development throughout the study area. The age of developments is identified using state real estate assessment data publicly available from Tennessee’s Comptroller of the Treasury office and an earlier neighborhood analysis study conducted by the city (Tullahoma, TN 1969).

**Figure 3-2: Summary of Research Phases and Methodology**

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<tr>
<th>Phase 1</th>
<th><strong>Analysis of Tennessee’s Growth Policy Act</strong></th>
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<tbody>
<tr>
<td><strong>Intent</strong></td>
<td>Identify whether or not the structure and substantive content of the Growth Policy Act supports the intent of the legislation to minimize urban sprawl</td>
</tr>
<tr>
<td><strong>Approach</strong></td>
<td>Carruthers’ analytical framework</td>
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<td><strong>Data</strong></td>
<td>Tennessee Code Annotated</td>
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<td><strong>Analysis</strong></td>
<td>Structured analysis based on methods used by Weitz (1999a)</td>
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<th><strong>Analysis of Tullahoma’s Local Planning Documents</strong></th>
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<td>Identify incongruities between local planning documents and regulations and the intent of the Growth Policy Act to minimize urban sprawl</td>
</tr>
<tr>
<td><strong>Approach</strong></td>
<td>Smart growth audit (Avin and Holden 2000; Weitz and Waldner 2002)</td>
</tr>
<tr>
<td><strong>Analysis</strong></td>
<td>Structured analysis based on methods used by Weitz (1999a)</td>
</tr>
</tbody>
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<tr>
<th>Phase 3</th>
<th><strong>Analysis of Tullahoma’s Local Development Patterns</strong></th>
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<tbody>
<tr>
<td><strong>Intent</strong></td>
<td>Identify if the Growth Policy Act has impacted development patterns and planning, and if gaps exist between the intention of the legislation and local realities</td>
</tr>
<tr>
<td><strong>Approach</strong></td>
<td>Establish chronology of major development</td>
</tr>
<tr>
<td><strong>Data</strong></td>
<td>Tullahoma GIS, State of TN Comptroller of the Treasury Real Estate Assessment Data</td>
</tr>
<tr>
<td><strong>Analysis</strong></td>
<td>Qualitative assessment based on various aspects of sprawl (Galster et al 2001)</td>
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CHAPTER 4: ANALYSIS OF TENNESSEE’S GROWTH POLICY ACT

Does the institutional structure and substantive content of the Growth Policy Act support the intent of the legislation?

Introduction

This initial research phase seeks to identify whether or not the structure and substantive content of Tennessee’s growth management program supports the intent of the legislation for local governments to engage in planning that “minimizes urban sprawl” (Tennessee §6-58-102). Through conducting a content analysis of Tennessee’s Growth Policy Act as established by the passage of Public Chapter 1101 and codified in the Tennessee Code Annotated, this chapter outlines the regulatory, institutional, and consistency requirements of the state’s growth management program. For each of the three types of provisions, analysis is provided of the requirements and their potential implications for the state’s growth management efforts. Where applicable, comparisons are drawn to the programs of Florida, Georgia, Oregon, and Washington in order to identify the strengths and weaknesses of Tennessee’s program and facilitate a general comparative understanding in the larger context of growth management efforts.

Regulatory Requirements and Analysis

Investigation of the regulatory requirements of Tennessee’s growth management program answers the following inquiries:

- Is local comprehensive planning required?
- Are there substantive requirements for local planning?
- What specific policy instruments are prescribed, and what are their substantive requirements?

Local Comprehensive Planning and Substantive Requirements

Local Planning Provisions

Local comprehensive planning is not required in the state of Tennessee. While the legislation does state that “It is the intent of the General Assembly that local governments engage in long-term planning…” (Tennessee §6-58-114(a)), no requirements exist in Tennessee for local governments to create comprehensive plans (TACIR 2002, 19). Planning requirements in the state legislation are limited to the preparation of county growth policy plans (Tennessee §6-58-104(a)2). While local governments are authorized to include additional components in their growth policy plans that are typically addressed in comprehensive plans (economic development, transportation, housing, public infrastructure, and land use), inclusion of these elements is not mandatory (Tennessee §6-58-107).

Local Planning Analysis

The lack of a requirement for local comprehensive planning severely diminishes the prospects of Tennessee’s growth management efforts curbing sprawl locally. Tennessee’s program opts for the use of containment mechanisms as a primary planning tool rather than mandating local comprehensive planning. Growth management literature suggests that auxiliary growth management mechanisms such as containment strategies are primarily useful as a supplement.
to—rather than a replacement of—local comprehensive planning (Landis 2006, 428; Howell-Moroney 2007, 2175-2176). Florida and Oregon require all local governments to prepare comprehensive plans (Weitz 1999a, 164) while Washington only requires those with certain population and growth thresholds to do so (165). Bearing the most similarity to Tennessee is Georgia, a state widely regarded as a weak practitioner of growth management (Nelson et al 1995; Caruthers 2002b; Anthony 2004; Howell-Moroney 2007). As in Tennessee, local comprehensive planning is not mandated in Georgia although municipalities do have the authority to plan (Weitz 1999a, 165). The state however does more to encourage comprehensive planning than Tennessee by limiting the grant money available to localities that do not plan (165).

Local governments have the discretion to elaborate on the limited requirements of the Growth policy plans and create comprehensive plans. The allowances made for this flexibility may be an attempt by the state to avoid overburdening small jurisdictions, and an acknowledgement that many local governments may lack the planning resources to prepare comprehensive plans; however, as applied in Tennessee the unstructured nature of the state’s attempt to do this may weaken the legislation. The need to provide flexibility and avoid “one-size-fits-all” approaches for planning and growth management has been acknowledged in the literature (Porter 1997; Weitz 1999a). Other states have also attempted to provide flexibility and accommodate both the ability and needs of the communities with variations in their compliance requirements, yet with a more structured and rational approach.

In the case of Washington, the determination of whether or not a county and its contained cities are required to create and adopt comprehensive plans is based on clear standards (population and growth thresholds) intended to target planning efforts in areas where growth management is of urgent concern (Weitz 1999a, 165).

**Policy Instruments Prescribed**

*Policy Instrument Provisions*

To guide development within the state’s municipalities and counties, Tennessee’s growth management program relies upon the use of two policy instruments: the county-wide growth policy plan along with the containment strategies it outlines (Tennessee, §6-58-104), and the plan of services for territory to be annexed (§6-51-102). The following text outlines the substantive requirements of the two instruments.

*Growth Policy Plan Provisions*

Each county in the state is required to prepare and adopt a growth policy plan in coordination with their contained municipalities. The growth policy plan at a minimum must define the boundaries of all municipalities in the county and delineate urban growth boundaries (UGBs), projected growth areas (PGAs) if present, and rural areas (RAs) to be conserved (Tennessee, §6-58-107). While the inclusion of other content addressing “land-use, transportation, public infrastructure, housing, and economic development” is permitted, it is not required (§6-58-107). Although the growth policy plan is not required to address these additional elements of planning and development, many of these concerns...
are included in the goals and objectives for the growth policy plan articulated by the legislation. These intentions include the following (§6-58-107):

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
8. Provide for a variety of housing choices and assure affordable housing for future population growth

Urban growth boundaries are intended to be the means by which municipalities fulfill these objectives. The legislation states that urban growth boundaries are to be “reasonably compact yet sufficiently large to accommodate residential and nonresidential growth projected to occur during the next twenty (20) years” (Tennessee, §6-58-106, (a)1A). Delineation of the urban growth boundary area is to be based on “historical experience, economic trends, population growth patterns, and topographical characteristics” and include land that a “reasonable and prudent” person would expect to be utilized for development over the next twenty years (Tennessee §6-58-106, (a)1C). Municipalities are required to investigate and report on population projections (in conjunction with the University of Tennessee); the cost of extending infrastructure, services, and facilities into the proposed UGB; an evaluation of their future land needs for various land uses that takes into consideration land within the current city that is underutilized or could be redeveloped; and the potential impacts of urban expansion on “agricultural lands, forests, recreational areas, and wildlife management areas” (§6-58-106, (a)2).

Additional requirements include that the area encompassed by the UGB must be contiguous to the existing municipality and encompass an area in which urban services would most efficiently be provided by that municipality (Tennessee §6-58-106). The legislation indicates that the urban growth boundary should demonstrate the municipality’s “duty to facilitate full development of the resources within the current boundaries of the municipality and to manage and control urban expansion outside of such current boundaries (§6-58-106). Planning services and studies may be used in determining the urban growth boundary if available, but are not required (§6-58-106).

Plan of Services Provisions

The Plan of Services is intended to curb infrastructure inefficiencies associated with uncoordinated annexation. Prior to the annexation of any territory a municipality must prepare and adopt a “reasonable” Plan of Services and imple-
mentation schedule that establishes the scope of the services to be provided and their timing (Tennessee, §6-51-102, (b)1-3). At a minimum, this must include services provided by the local government for “police protection, fire protection, water service, electrical service, sanitary sewer service, solid waste collection, road and street construction and repair, recreational facilities and programs, street lighting, and zoning services,” and address the impacts of the proposed expansion on the local school system (§6-51-102, (b)2).

The Plan of Services is subject to review by the public and the local planning commission (Tennessee, §6-51-102, (b)4). Municipalities are barred from annexing new territory if they have not fulfilled the obligations of a prior Plan of Services (§6-51-102, (b)5). Property owners in annexed territory can seek legal recourse and file a suit of mandamus if services are not provided according to the adopted plan (§6-51-108, (b&d)).

Policy Instrument Analysis

In light of the absence of comprehensive planning requirements, the policy instruments prescribed by Tennessee’s growth management legislation are forced to take on a primary rather than supplementary role in managing growth. In addition to this critical concern, other aspects of the individual mechanisms prescribed are detailed in the following analyses of the provisions and requirements of the growth policy plan and plan of services.


The eight goals outlined for the growth policy plans are very broad, and it is difficult to discern how the specific use of containment strategies correlates to all of the outlined objectives. It is unclear how the various boundary delineations, which are the only instruments required by the growth policy plans, are intended to achieve these ends. Containment strategies seek to limit urban expansion and promote compact development (Nelson et al 1995, 73; Avin and Bayer 2003, 22). If applied appropriately, the mechanisms mandated by Tennessee could have some bearing in achieving the growth policy plan goals of providing for “unified physical design”, promoting “compact and contiguous high-density development,” and planning “for the coordinated, efficient, and orderly development of the local community” (Tennessee, §6-58-107). Yet the lack of operational definitions for terms such as “high-density”, leave the legislation open to subjective interpretation that may potentially be inconsistent with the intent of the growth management efforts (TACIR 2002, 20).

Other states have forged stronger connections between the goals they articulate and the specific planning elements they mandate. In Oregon, many of the state’s growth management policy goals directly correlate to mandatory elements for local plans, and all local governments are required to demonstrate consistency with these goals (Weitz 1999a, 171). Directly addressing the issue of curtailing urban sprawl, Florida has made diligent efforts to eradicate any ambiguities regarding its definition and the identification of planning practices that work towards curtailing sprawl. These include evaluation criteria and indicators for land use and planning features that discourage sprawl (Florida Administrative Code 9J-5-006(3&5) in Weitz 1999a, 231-233).
Concerns with the delineation of urban growth boundaries extend from the problems associated with the weak growth policy plan provisions. No guidance is provided regarding how to translate the abstract findings of the required population projections, service cost studies, and need evaluations into the concrete policy mechanism of an urban growth boundary. While the University of Tennessee assisted with the preparation of population projections (Tennessee, §6-58-106), the involvement of the state was not required for assistance with assessments of other considerations that were to inform the boundaries’ delineation. While the plans are required to investigate the impacts of development expansion on environmentally-sensitive areas and natural assets, and base the delineation of urban growth boundaries on specified considerations, the legislation does not dictate how the growth policy plan should respond to the circumstances observed and documented. Despite their familiarity with the local planning context, the coordinating committees that essentially determine the local UGBs may be ill-equipped to translate these findings to the use of growth management mechanisms. The use of planning services is not required and the Committee is merely encouraged “to utilize planning resources that are available within the county” and “to utilize the services of the local planning office of the Department of Economic and Community Development, the County Technical Assistance Service, and the Municipal Advisory Service (§6-58-104, (a)2).

All four states utilized in this study for comparative analysis exceed Tennessee in terms of the data they provide to local governments for planning assistance, with clear mandates for the state provision of data for local planning existing in Florida and Georgia (Weitz 1999a, 179). All four states also provide some technical assistance for local planning, and strong directives to do so exist in Florida, Georgia, and Washington (Weitz 1999a, 180-183). Florida is required to provide local governments with model regulations and codes (181), and agencies in Georgia and Washington must provide model plans (183).

Analysis of Plan of Services Provisions

Requiring municipalities to provide a Plan of Services seeks to manage growth by requiring consideration of the expenditures associated with extending infrastructure and services beyond current boundaries (Tennessee §6-51-102). This requirement could potentially aid in the state’s efforts of sprawl minimization, based on the premise that forced consideration of the scope and timing of service provisions may perhaps discourage inefficient expansion. The suspension of the municipality’s ability to annex new territory while in default on a prior Plan of Services (§6-51-102, (b)5), and the ability of property owners in annexed territory to seek legal recourse if the obligations of the Plan are not fulfilled (§6-51-102, (b&d)) should serve to discourage the creation of Plans of Service that are not realistically achievable. Similar to the other requirements laid out by the legislation however, the standards by which the practicality of the Plan of Services are judged are vague, as the requirement that the Plan be “reasonable” with regards to scope and timing is not elaborated upon (§6-51-102).

The Plan of Services is only required for
territory to be annexed, and is not required to address areas already contained within municipal limits. All review and enforcement is handled at the lowest governmental tiers; there are no sanctions or compliance measures emanating from the state level. Other state growth management programs have adopted more aggressive measures to coordinate the provision of services and development. Florida is well-known for its strong concurrency requirements. Oregon requires the development of public facilities plans for all areas where the population exceeds 2,500 (Weitz 1999a, 76 & 85). Georgia requires a “service delivery strategy” for all counties and cities, and the state monitors the creation and execution of these strategies (104-105). Although they do not possess approval authority, they can enforce sanctions for noncompliance and require that local land use plans are coordinated with the services strategy (105).

Institutional Requirements

Analysis of the institutional requirements of Tennessee’s growth management program answers the following inquiries:

What are the requirements for compliance and participation: Is the institutional framework of implementation conjoint (mandatory participation with severe penalties for noncompliance) or cooperative (voluntary compliance and participation with incentives for compliance)?

What are the sanctions for non-compliance or the incentives for voluntary compliance?

Does the state address the fiscal arrangements of the municipalities, encouraging a shift away from the property tax as the primary revenue source?

Is state approval of plans required, or is their authority limited to review and comment?

What is the procedure for the amendment of plans and policies and who has that authority?

Compliance and Participation

**Compliance and Participation Provisions**

Participation in Tennessee’s growth management program is mandatory for all counties, with the exception of those operating under consolidated city-county metropolitan governance (Tennessee §6-58-103). Incentives were created to encourage rapid compliance and local implementation by July 1, 2001 (§6-58-109), but following that date strong sanctions for noncompliance went into effect (§6-58-110).

**Analysis of Compliance and Participation Provisions**

The ability to compel participation appears to be a strength of Tennessee’s growth manage-

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**Figure 4-1: Comparative Assessment of Tennessee’s Regulatory Provisions**

<table>
<thead>
<tr>
<th>Regulatory Requirements of Program</th>
<th>FL</th>
<th>OR</th>
<th>WA</th>
<th>GA</th>
<th>TN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auxiliary Policy Instruments Required (see below)</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Urban Growth Boundary Mandated</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Concurrency Mandated</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Local Comprehensive Planning Required</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Substantive Requirements for Local Plans</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>N</td>
</tr>
</tbody>
</table>

ment program. The program has achieved participation by all non-metropolitan counties, and the state relies upon sanctions to ensure compliance. Early growth management programs such as those enacted in Florida and Oregon also relied more upon coercion than collaboration for participation (Weitz 1999a, 302). By the time programs were instituted in Georgia and Washington this model had given way to more collaborative approaches (302). In Georgia, participation rates have been high despite the absence of a mandate to plan (302). This however would most likely not be the case if the state did not provide strong incentives for participation. It is difficult in this instance to draw parallels with other states however, because participation in other states typically requires localities to produce comprehensive plans rather than the growth policy plans mandated in Tennessee.

Incentives and Sanctions

Incentives and Sanctions Provisions

Several incentives were provided to encourage rapid compliance with the growth management program’s provisions. Compliant jurisdictions were eligible to receive bonus points used in the formulas to determine grant and bond funding for the Tennessee Industrial Infrastructure Program, the Industrial Training Service Program, Community Development Block Grants, Department of Environment and Conservation water and sewer grants, HOME and HOUSE grants from the Tennessee Housing Authority, and low-income tax credits or private activity bond authority (Tennessee §6-58-109).

Strong sanctions went into effect for jurisdictions who had not complied with the requirements of the growth management legislation by July 1, 2001 (Tennessee §6-58-110). These primarily impacted the financial resources available to local governments and included the loss of eligibility for Tennessee Housing Development Agency grant programs, Community Development Block Grants, Tennessee Industrial Infrastructure program grants, Industrial training service grants, Intermodal Surface Transportation Efficiency Act funds, any future federal transportation funds, and Tourism Development Grants (§6-58-110).

Analysis of Incentives and Sanctions Provisions

With the exception of the exemption that exists for counties with consolidated city-county metropolitan governance (Tennessee §6-58-103), Tennessee has ensured statewide participation in its growth management efforts through the use of incentives (§6-58-109) and sanctions following July 1, 2001 (§6-58-110). These sanctions, that severely restricted the funding sources available to local governments, have been strong enough to compel compliance; all counties required to produce a growth policy plan have complied (TACIR 2004).

Oregon, Washington, Florida, and Georgia also rely upon the use of fiscal incentives and sanctions to promote compliance (Weitz 1999a, 207-209); however some states have broader latitude to leverage their sanctions. State sanctions can be enforced in Florida not only for failure to create plans but for failure to implement them, and to do this on schedule (207). Both Florida and Oregon have the authority to employ sanctions and exercise their authority to force compli-
ance of local land use regulations implementing plans as well (207). The state planning entity of Oregon may also assess charges to local governments for work they must undertake to bring them into compliance (208).

**Local Fiscal Structure**

**Local Fiscal Structure Provisions**

No direct reference is made to promoting a shift away from the property tax as the primary revenue source for municipalities in conjunction with the legislation establishing the state’s growth management program. When the growth management legislation was initially established, Tennessee did not have general enabling legislation for the exaction of adequate public facilities taxes or impact fees, however counties or municipalities wishing to make such an assessment could seek authorization to do so via a private act (TACIR 2006, 5). The County Powers Relief Act of 2006 modified the procedure of levying fees on development in the state. The legislation’s passage authorized counties that met specific requirements designating them as high-growth counties to exact fees on residential development to be used to fund school facilities (Tennessee, §67-4-2902). The Act also made changes to the state’s previous stance on exactions by prohibiting the establishment of impact fees or local real estate transfer fees by any county by private or public act following June 20, 2006 (§67-4-2913).

**Analysis of Local Fiscal Structure Provisions**

Policies that promote a shift away from reliance on the property tax as the primary revenue source for municipalities can help promote the effectiveness of growth management efforts (Pendall 1999). Typically this takes the form of enabling legislation that allows local governments to exact impact fees on new development, thereby creating a disincentive for inefficient expansion and shifting the fiscal burden to its source. In Washington and Georgia, this authorization applies to cities and counties that have adopted comprehensive plans and is used as an incentive to encourage them to do so (Weitz 1999a, 123). This is not addressed by Tennessee’s growth management program but has emerged as an issue since the passage of the initial legislation.

As of January 1, 2006 twelve Tennessee cities had enacted adequate facilities taxes or impact fees through the passage of private acts; Tullahoma was not among them (TACIR 2006, 44). The County Powers Relief Act passed in 2006 however prevents any additional counties or municipalities from establishing exactions on development unless they are to be used for school facilities and only if the county meets specific requirements classifying it as a high-growth jurisdiction (Tennessee §67-4-2902). In contrast to the legislation that was ultimately enacted, the Tennessee Advisory Commission on Intergovernmental Relations (TACIR) had recommended that the state pass general enabling legislation so that local governments could assess impact fees, adequate public facilities taxes, and local real estate transfer taxes (2006, 21-22). The new legislation has limited the ability of local governments to require new development to bear responsibility for the fiscal burden it creates.
Plan Review and Approval

Plan Review and Approval Provisions


Each county and its contained municipalities are responsible for ratifying their county-wide growth policy plan, and failure to formally reject the Plan within 120 days is construed as equivalent to ratification (§6-58-104, (a)4). If the recommended growth policy plan is rejected by either the county or one of its municipalities, the coordinating committee can recommend revisions and again attempt to gain ratification by the county and the local governments. If ratification still fails, an impasse can be declared by the county or its municipalities who may then request the Secretary of State to appoint an impartial dispute resolution panel (§6-58-104, (b)1). If mediation is unsuccessful the dispute resolution panel can propose a non-binding resolution, and the county and municipalities are given another opportunity to approve and adopt the recommendations. If an agreement is still not reached another dispute resolution panel is convened, with the authority to create and adopt a growth policy plan (§6-58-104, (b)3). In cases in which a decision cannot be reached within the county, decisions pertaining to the growth policy plan may be rendered by a panel of administrative law judges (§6-58-104, (b)2), who “may consult with experts in urban planning, growth and development, and may commission or contract for additional studies and reports on population growth and projections, land utilization and needs, environmental impacts, and the development and production of maps adequate for the use of the panel in mediating a dispute or in adopting a growth plan,” though this is not required (§6-58-104, (b)4).

Once a growth policy plan has been ratified by the county and its municipalities or adopted through the dispute resolution panel process it must be submitted to the Local Government Planning Advisory Committee (LGPAC), the state entity responsible for the review and approval of the plans (Tennessee §6-58-104, (c&d)). The LGPAC is a panel comprised of seven local government officials that have been appointed by the Governor. In addition to having review authority over the county growth policy plans, the members make recommendations regarding the administration of planning assistance by the state’s Local Planning Assistance Offices to the Commissioner of the Department of Economic and Community Development, and have the responsibility of designating regional planning jurisdictions (§4-3-727). The legislation indicates that as long as the county growth policy plan has been ratified by the county and its municipalities, and has fulfilled the requirement of delineating urban growth boundaries, projected growth areas, and rural areas to be conserved, then the LGPAC shall approve the plan (Tennessee §6-58-104, (c)1). Only in instances in which these two requirements are not met is the LGPAC authorized to thoroughly review the growth policy plan for compliance with the criteria of §6-58-106 (the section which details the basis for the appropriate delineation of UGBs, PGA, and RAs) and make modifications to the Plan to bring it into compliance (§6-58-104, (c)1).

Plan of Services Review and Approval Provisions

Municipalities are responsible for the ap-
approval of Plans of Services (Tennessee §6-51-102 (b)1). The only criteria specified is that the Plan of Services must be “reasonable with respect to the scope of services to be provided and the timing of the services” (§6-51-102 (b)1). Prior to their adoption of the Plan, the municipality is required to submit it to the local Planning Commission (if one exists) for study, and hold a public hearing (§6-51-102, (b)4). The reasonableness of the Plan can be contested by the county, if the county adopts a resolution to do so after receiving a petition from property owners in the proposed area to be annexed (§6-51-102 (a)2).

**Plan Review and Approval Analysis**

**Analysis of Growth Policy Plan Review and Approval Provisions**

Although technically the LGPAC is responsible for the review and approval of growth policy plans, the state entity has limited authority particularly in cases in which agreement is reached between a county and its municipalities regarding the areas delineated by the plan (TACIR 2002, 19). As the legislation is written, the growth policy plan may circumvent substantive review by the state entirely if the minimum standards for UGB, PGA, and RA delineation are met and locally agreed upon (19). This particularly poses a problem because research has shown that growth containment mechanisms typically must be appropriately restrictive in order to achieve their aims (Wassmer 2006, 56), and are often as a result contentious. An indirect incentive has been created to demarcate boundaries that avoid controversy for local governments who find it advantageous to quickly secure approval of their growth policy plan.

In reality, if the growth policy plan has been approved at the municipal and county level, state review and approval of plans in Tennessee by the LGPAC is only perfunctory. In the rare circumstances under which the LGPAC is given more discretion, the legislation only requires that the plan is reviewed for compliance with §6-58-106, although it is §6-58-107 that lists the goals and objectives for the growth policy plans. In contrast to the process of plan review and approval in Tennessee, other states have adopted much more rigorous procedures. The review procedures of all four states used as a basis for comparison in this study are much more comprehensive in nature, and empower state review entities to examine all local plans for consistency with state goals (Weitz 1999a, 188-192). While the scope of Georgia and Washington’s authority is limited to making recommendations based on plan reviews (190 & 194), Florida and Oregon also possess the power to deny the approval of plans (Weitz 1999a, 188 & 192). In Florida, plan reviewers must specifically determine if a plan or amendment discourages the proliferation of sprawl using detailed criteria (Weitz 1999a, 231).

**Analysis of Plan of Services Review and Approval Provisions**

External review of the Plan of Services outside the municipality is not required, and the role of the Planning Commission is only advisory. It should also be noted that if a municipality does not have a Planning Commission an alternative body to conduct the study is not identified. Criteria determining the reasonableness of the Plan of Services are deficient and address only the capability of municipalities to extend services,
rather than the appropriateness or efficiency of doing so.

**Amendment Procedures**

**Amendment Provisions**

**Growth Policy Plan Amendment Procedures**

Growth policy plans may be amended after they have been in effect for three years “absent a showing of extraordinary circumstances” (Tennessee §6-58-104(d)1). Amendments can be proposed by either the county or a municipality and must be filed with the county mayor and the mayors of all municipalities in the county. The proposed changes are reviewed by reconvening or reestablishing the coordinating committee (§6-58-104(d)1), and the burden of proof is upon the party proposing the amendment to demonstrate its reasonableness (§6-58-104(d)1). Approval procedures are the same as for the original growth policy plan and must be approved by the county and municipalities and then by the LGPAC (§6-58-104(d)1). The legislation does not establish a minimum time period that a modified plan must remain in effect prior to subsequent amendment.

**Plan of Services Amendment Procedures**

Following a public hearing, a municipality’s Plan of Services can be amended when necessary due to natural disaster, war, terrorism, or reasonably unforeseen circumstances or if the modification does not substantially decrease or delay the service provisions (Tennessee §6-51-108, (c)1-2). If it does change the type or level of services and is not necessitated by the aforementioned extreme circumstances, then it can only be amended if it has been approved by the majority of property owners in the proposed territory to be annexed (§6-51-108, (c)). The municipality has the power to approve the amendment by resolution following a public hearing (§6-51-108, (c)).

**Analysis**

**Analysis of Growth Policy Plan Amendment Procedures**

A definition for “extraordinary circumstances” is not provided and an entity to determine whether or not a situation qualifies is not identified (TACIR 2006, 19). The state’s Attorney General has opined that an amended growth policy plan is not subject to a minimum duration it

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**Figure 4-2: Comparative Assessment of Tennessee’s Institutional Provisions**

<table>
<thead>
<tr>
<th>Institutional Requirements of Program</th>
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<th>OR</th>
<th>WA</th>
<th>GA</th>
<th>TN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conjoint implementation</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Cooperative implementation</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>N</td>
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<tr>
<td>Sanctions for Non-compliance</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>State Review/Comment on Plans</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y*</td>
</tr>
<tr>
<td>State Approval Required for Plans</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>Y*</td>
</tr>
<tr>
<td>State Approval Required for Amendments</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>Y*</td>
</tr>
</tbody>
</table>

*State review and approval is required but substantive review is circumvented if the county and its municipalities agree upon the delineation of UGBs, PGAs, and RAs

must be held in place unmodified and that it may be re-amended at any time (State of TN Office of the Attorney General 2003). With procedures of review and approval mirroring that of the original growth policy plans, the same aforementioned weaknesses with the process—primarily that the plan amendment in many cases may circumvent substantive review by the LGPAC—apply to the amendment of plans as well. Florida, Georgia, Oregon, and Washington all mandate the state review of local level plan amendments (Weitz 1999a, 189).

Analysis of Plan of Services Amendment Procedures

Problems with the amendment procedures for a Plan of Services parallel the problems identified with the review and approval process of the initial Plan of Services. These include the lack of external review outside the municipality and a limited focus only on the capability of the municipality to provide the services.

The process of amendment however is even less stringent, because the referral of proposed changes to the local Planning Commission for study is not required.

Consistency Requirements

Investigation of the consistency requirements of Tennessee’s growth management program answers the following inquiries:

How does the program address vertical consistency between local planning and state objectives?

How does the program address horizontal consistency and the coordination of local planning practices among neighboring communities?

How does the program address internal consistency between elements of the comprehensive plan and ensure that all components are based on the same underlying assumptions?

How does the program address implementation consistency and ensure that local development regulations are consistent with local plans?

Vertical Consistency

Vertical Consistency Provisions

Vertical consistency addresses the provisions that require coordination between state objectives and planning at the local level. In alignment with the state’s objective of sprawl minimization reference is made to the “duty” of municipalities to “manage and control urban expansion” (Tennessee §6-58-106, (a)E), however Tennessee’s growth management legislation has no concrete requirements for vertical consistency between local planning and the state’s intent to establish a growth policy that “minimizes urban sprawl” (§6-58-102, 5). Some provisions were included in the legislation for monitoring implementation of the Growth Policy Act locally. The Tennessee Advisory Commission on Intergovernmental Relations (TACIR) was charged with this responsibility, and all state agencies and local and county level governments, organizations, and officials were required to facilitate this effort (§6-58-113). Although the agency was originally authorized to serve this role only through 2002, an amendment authorized continuation of TACIR’s monitoring efforts indefinitely (Tennessee 2002, ch. 594, §1).

Analysis of Vertical Consistency Provisions

Tennessee’s growth management efforts encourage vertical consistency rather than mandating it. Local support of the state’s objective of
minimizing urban sprawl is referred to as a “duty” (§6 -58-106, (a)E), and adherence and support of that goal is reliant upon the good faith actions of local jurisdictions. In contrast to Tennessee, other states have included concrete requirements for vertical consistency. Florida, Georgia, Washington, and Oregon all address vertical consistency to some degree although the intensity of their requirements varies (Weitz 1999a, 203). Exemplifying strong vertical consistency requirements, Florida explicitly defines criteria for determining whether or not plans fulfill their vertical consistency obligation and specifically requires the compatibility of local plans with state and regional policies and plans and that the local plans further the goals expressed at the state level (Florida Statutes §163.3177 in Weitz 1999a, 2002). The strong role of the state in the review of plans further strengthens Florida’s vertical consistency provisions.

State review is a process that plays a significant role in the enforcement of vertical consistency and Florida, Washington, Oregon, and Georgia all require the submittal of local plans for state review (Weitz 1999a, 189). As outlined in the discussion of institutional requirements, state review in Tennessee is merely cursory unless counties and municipalities are unable to reach a consensus about the delineation of their UGBs, PGAs, and RAs. While TACIR does have the ability to monitor implementation of the growth management program and localities are required to facilitate their efforts, their authority is limited to oversight and not intervention, therefore rendering the entity incapable of ensuring vertical consistency.

Horizontal Consistency Provisions

Horizontal consistency refers to the coordination of local planning practices among neighboring communities. As the primary policy instrument of Tennessee’s growth management efforts, the county-wide growth policy plan is intended to address these considerations, but only among communities that lie within the same county. To further coordinate decisions, each county is also required to establish a Joint Economic and Community Development Board (JECDB) with representation from the county and all its included cities (Tennessee §6-58-114). In the legislation outlining the role of the JECDB, reference is made to broader coordination among local governments stating:

“It is the intent of the General Assembly that local governments engage in long-term planning, and that such planning be accomplished through regular communication and cooperation among local governments, the agencies attached to them, and the agencies that serve them. It is also the intent of the General Assembly that the growth plans required by this bill result from communication and cooperation among local governments” (§6-58-114, (a)).

Analysis of Horizontal Consistency Provisions

Horizontal consistency requirements are aimed at achieving coordination across multiple jurisdictions of the same governmental tier, be it the municipal or county level (Weitz 1999a, 200). The horizontal consistency requirements in Tennessee are articulated only for municipalities located within the same county; they are promoted through the Coordinating Committee.
used in creating the county-wide growth policy plan and through each county’s Joint Economic Community Development Board. Although there is stated legislative intent that planning should be accomplished through “regular communication and cooperation among local governments…” (§6-58-114, (a)), the legislation lacks any formal requirements for the coordination of planning efforts between neighboring communities that lie in different county jurisdictions, or for coordination between adjacent county governments and each county is treated as a discrete and contained unit (TACIR 2002, 18). This is particularly problematic given the growth management mechanisms the state has opted to employ. Horizontal consistency is a critical consideration in ensuring the uniform application of containment strategies of growth management, so that development is not merely shifted to less restrictive jurisdictions.

Oregon and Washington similarly rely on counties to effectively serve as the regional planning entity, whereas Georgia and Florida articulate multicounty planning approaches (Weitz 1999a, 163). In Florida, horizontal consistency is further ensured by requiring local governments to create an “intergovernmental coordination element” that articulates the relationships and principles used in coordinating their plans with those of adjacent towns, the county, adjacent counties, the region, and the state and requires a policy statement relating their development proposals to the plans of surrounding jurisdictions and higher tier plans (Florida Statutes 163.3177 in Weitz 1999a, 200).

Internal Consistency

Internal Consistency Provisions

Internal consistency requirements typically refer to mandates that the various elements of a comprehensive plan are coordinated and based on the same underlying assumptions (Weitz 1999a, 199). Therefore internal consistency is concerned with the substantive foundation on which planning is based. In the case of Tennessee, exploration of internal consistency addresses requirements for coordination and common basis to guide the development of growth policy plans and the various urban growth areas, projected growth areas, and rural areas they outline.

Tennessee’s legislation states that delineation is required to be based upon “historical experience, economic trends, population growth patterns and topographical characteristics” (§6-58-106 (a)), and requires each municipality to compile data prior to proposing their urban growth boundaries and projected growth areas. Presumably to be used in assessing the projected growth needs for the city, this includes information regarding current and projected population; infrastructure, services and facilities needs; land use and suitability; and forest, agricultural, recreational and wildlife areas (§6-58-106).

Analysis of Internal Consistency Provisions

Given the structure of Tennessee’s growth management program, enforcement of internal consistency provisions is critical at the county level. The county however has little control over the data that informs the creation of growth policy plans, nor is data provided by an overarching state agency. By contrast state agencies provide data through planning technical assistance.
programs in Georgia and Florida (Weitz 1999a, 292). The urban growth boundaries of Tennessee’s growth policy plans are developed at the local and county level, based on each city’s data that they have developed independently based upon their own interpretation of information and with their own interests and priorities in mind, with the exception of population projections developed in conjunction with the University of Tennessee. The ability of the Coordinating Committee to generate a growth policy plan based on a common substantive foundation is usurped by this oversight, and the problem may further be reinforced by a provision that states that the county Coordinating Committee “shall give due consideration” to the urban growth boundary proposed by the municipality (§6-58-104(a)2).

It is preferable and hoped that the projections developed in conjunction with the University of Tennessee are state- and county-constrained, so that the sum of all individual estimates are consistent with composite projections (Weitz 1999a, 310). In both Oregon and Washington, two states that also employ the use of urban growth boundaries, the county is required to coordinate population projections and approve urban growth boundaries (Weitz 1999a, 279). Regional planning authorities are responsible for reviewing plans for internal consistency in Georgia, and formal requirements for internal consistency are also articulated in Washington’s growth management act (Weitz 1999a, 200).

Implementation Consistency

Implementation Consistency Provisions

Implementation consistency refers to requirements that local development regulations are consistent with the guiding document for local planning, typically in reference to the local comprehensive plan (Weitz 1999a). Implementation consistency provisions in Tennessee should address requirements that local planning regulations be consistent with the county-wide growth policy plan and the local comprehensive plan, if one exists. The legislation states that following plan approval, “...all land use decisions made by the legislative body and the municipality’s or county’s planning commission shall be consistent with the growth plan” (Tennessee §6-58-107).

Another aspect of the structure of planning in Tennessee further impacts implementation consistency. The LGPAC designates some local planning commissions as regional planning commissions (TDECB and LPAO 2003, 19). These entities have extraterritorial authority which enables them to regulate the subdivision of land beyond their corporate limits throughout the territory of their urban growth boundary, and in cases in which the county does not have zoning regulations, they may also exercise zoning power throughout their UGB with the county’s permission (TACIR 2003, 18).

Analysis of Implementation Consistency Provisions

Implementation consistency provisions are necessary to ensure that regulations reinforce the intent of the growth management policy as it has been translated to the growth policy plan. Florida and Oregon both articulate an unequivocal stance requiring implementation consistency, and Washington’s law does so as well, although less stringently (Weitz 1999a, 204). Although
Georgia’s legislation lacks such a requirement, local jurisdictions can have their “qualified local government” status (necessary to remain eligible for certain types of funding) revoked for failure to successfully demonstrate implementation consistency (Weitz 1999a, 204).

In Tennessee, the requirement that land use decisions be consistent with the growth policy plan at best circuitously implies that local land use regulations should reflect similar intentions and guide decision-making in a manner consistent with the plan. No concrete requirements however are included in the legislation mandating that local planning regulations be created or updated to coordinate with growth management goals and objectives or the areas delineated by the growth policy plan, and no requirements even exist for local governments to create and adopt zoning or other regulations.

Issues relevant to implementation consistency in Tennessee are further complicated by the provisions in the legislation regarding extraterritorial planning authority. In areas that are contained by urban growth boundaries but located outside corporate limits, the county may have zoning authority while the municipality may exercise control over subdivision regulations (TACIR 2002, 18). There is no mechanism in place to ensure that inconsistencies do not exist between the regulations of the county and the municipality in instances where their authority overlaps.

**Conclusions**

The preceding analysis has identified several critical problems with the regulatory, institutional, and consistency provisions of Tennessee’s growth management legislation. The following section summarizes these concerns.

**Problems Identified with Regulatory, Institutional, and Consistency Provisions**

**High Degree of Local Discretion Compromises Regulatory Provisions**

By neglecting to mandate local comprehensive planning, the prospects of Tennessee’s growth management program effectively curbing sprawl locally are diminished. This is reinforced by the failure to provide incentives or sanctions that may promote comprehensive planning on a voluntary basis. In lieu of comprehensive planning the state has mandated the use of growth policy plans, which utilize containment strategies that typically see more success in an auxiliary role than as a primary regulatory feature. The choice of policy instruments prescribed does not support or address all of the goals that
have been articulated by the state for the growth policy plans to achieve, but could potentially address the state's objective to minimize urban sprawl. This however would be much more likely if there were mechanisms in place to ensure that the containment strategies were employed appropriately and if they were supplementary to comprehensive planning.

The legislation goes too far in providing flexibility to local governments. Too much discretion is given to local jurisdictions with regards to deciphering the language of the growth management policy, and in generating and interpreting data used to delineate local urban growth boundaries. The state's failure to require professional planning assistance and provide data to local governments leaves the determination of urban growth boundaries to local and county committees who may not have the relevant professional experience to appropriately convert assessments of local conditions to growth management practice. This approach demonstrates a seemingly naïve and wishful overconfidence in the capabilities of municipalities and counties to translate and synthesize the findings and assessments of local conditions into concrete policy instruments.

**Mandatory Participation is Insufficient Given Other Institutional Deficiencies**

Mandatory participation is a positive feature of the program, but not enough to ensure the success of Tennessee's growth management efforts. The cursory review of growth policy plans and amendments that meet very minimal requirements thus exempting them from substantive review is a severe institutional deficiency. Unless there is local initiative to minimize urban sprawl, a growth policy plan may be little more than the fulfillment of a requisite to ensure the continuance of state funding, rather than an attempt to create a plan to manage growth in alignment with state objectives. Additionally the decision to diverge from the advice of TACIR and fail to create general enabling legislation for local governments to enact impact fees further weakens institutional support for the mitigation of urban sprawl. By maintaining the status quo fiscal structure and making it improbable that a shift away from the property tax as a primary revenue source will occur, development will most likely continue to follow similar patterns, and local governments rather than developers will continue to bear the brunt of the financial burden of the infrastructure needs for new development and other associated costs.

**Weak and Vague Consistency Provisions**

In general, Tennessee's consistency provisions are weak and lack a process of enforcement. The insubstantial state review process plays a significant role in compromising the vertical consistency provisions. Although TACIR has been designated with the responsibility of monitoring local implementation, the group is not vested with the power to force alignment with state objectives through the imposition of sanctions. Horizontal consistency, important in a program that utilizes growth boundaries so that development is not merely shifted to less restrictive areas, suffers by treating counties as discrete entities. With each municipality individually responsible for gathering information, interpreting it, and making development assumptions,
internal consistency is hampered by the absence of an entity vested with the responsibility to ensure uniformity in the quality and interpretation of data and its translation to planning practice and growth management tools. If the aforementioned problems yield growth policy plans and boundaries that are not appropriately restrictive to begin with, then implementation provisions with regards to the urban growth boundaries may be a moot point. However, many other development regulations also shape the urban form of cities and without requirements that zoning and subdivision regulations also be created or modified to support the goal of minimizing urban sprawl, these intentions cannot be expected to materialize in terms of development outcomes.

Final Conclusions

If a community has the resources to secure professional planning assistance and exercises their prerogative to plan, then they may have some success at controlling sprawl locally, but this is contingent upon local commitment and initiative. Even with a strong local desire to manage growth, communities that attempt to do so may face challenges when their efforts are not synchronized with the actions of adjacent cities, including the loss of economic development opportunities to communities that are less restrictive.

The weaknesses of the legislation lie primarily in the limitations of its mandates and the lack of substantive oversight. In effect the state creates a program, but takes little responsibility for ensuring it is appropriately implemented. The regulatory, institutional, and consistency provisions of the legislation are not independent variables. The regulatory and institutional weaknesses compromise the consistency provisions in terms of the high degree of local discretion and the lack of adequate review and enforcement procedures. The good-faith reliance on local jurisdictions fulfilling their “duty” to manage growth is imprudent; the dependence upon local intent, priorities, and capabilities compromises the outcomes that can realistically be expected to result from Tennessee’s growth management legislation. This conclusion underscores the importance of the following phases of this study which will explore local implementation of Tennessee’s growth management program in the city of Tullahoma, Tennessee.
CHAPTER 5: ANALYSIS OF TULLAHOMA’S LOCAL PLANNING DOCUMENTS

What incongruities exist between the intent of the Growth Policy Act to minimize urban sprawl and the local planning documents and regulations?

Introduction

Phase 1 of this research analyzed the regulatory, institutional, and consistency requirements of Tennessee’s growth management legislation and revealed several concerns critical to the success of the policies. These considerations guide the inquiries for the second research phase, exploring local implementation and planning practice in Tullahoma, Tennessee. Similar to Phase 1, the organizational framework consists of analysis of the regulatory, institutional and consistency requirements articulated by the local planning regulations. Documents included in the analysis are the City of Tullahoma Comprehensive Development Plan (1986); the Zoning Ordinance for the City of Tullahoma, Tennessee (1988); the Countywide Growth Policy Plan for Coffee County, Tennessee (1999); the City of Tullahoma Subdivision Regulations (2007).

Analysis of these four documents should demonstrate a shift in Tullahoma’s planning practices if indeed Tennessee’s growth management legislation has exacted the desired influence over local paradigms. The Comprehensive Development Plan and Zoning Ordinance were written in the late 1980s. Although some state programs had begun to emerge at this point, only a peripheral awareness of growth management existed outside planning circles. Programs addressing the minimization of sprawl were just beginning to emerge as an outgrowth of programs of the mid-1980s that had exhibited a strong emphasis on infrastructure efficiency. In contrast to the Comprehensive Development Plan and Zoning Ordinance, the Coffee County Growth Policy Plan should reflect local understanding of the state’s legislative intent to minimize urban sprawl. The most recent regulations adopted, the 2007 Subdivision Regulations, offer a chance to examine whether or not the goals articulated by the state in 1998 have prevailed throughout the decade following enactment of the Growth Policy Act to influence local regulations governing development. If the Act has endured and local understanding of growth management has matured, the 2007 document should most clearly demonstrate intent to manage growth and minimize urban sprawl.

Regulatory Requirements and Analysis

The analysis of regulatory requirements embedded within Tennessee’s state growth management legislation in the first research phase revealed several concerns; special attention is given to these aspects of Tullahoma’s regulatory planning features. First, the study revealed that the program is weakened by both the failure to mandate local comprehensive planning and by reliance upon an auxiliary growth management mechanism (the urban growth boundary) as a primary strategy. Second, local jurisdictions were revealed to be given too much flexibility in delineating their urban growth boundaries and regulating local planning. Additionally local governments were relied upon too heavily to gather...
and assess data independently and translate this to growth management efforts and planning practice.

The research concluded that the use of urban growth boundaries may have the potential to curb sprawl if based on an appropriate substantive foundation and implemented properly at the local level as a supplementary tool. This however is contingent upon other appropriate planning practices being in place as the primary means of managing growth, meriting investigation of local implementation and planning practice. Investigation of the regulatory requirements outlined by Tullahoma, Tennessee’s local planning documents seeks to answer inquiries in four thematic areas: general local regulatory context, direction of growth, land use, and development patterns. Inquiries and findings are thematically structured, rather than by document, to reveal contradictions between policies if present.

**Regulatory Requirements: General Local Regulatory Context**

A general overview of the regulatory context in Tullahoma, Tennessee is necessary as a basis for further study of local planning practice. Answers to the following inquiries provide that foundation.

**Is there a local comprehensive plan?**

The City of Tullahoma Comprehensive Development Plan was created in 1986. In addition to information establishing the existing conditions of the city at the time of the Plan’s authorship it consists of a Concept Plan that articulates a vision for Tullahoma’s development, and the General Development Policy that contains goals, objectives and policies (Tullahoma 1986, 1).

**Have the local planning documents been updated or revised since the passage of the growth management legislation?**

Tennessee’s growth management legislation was passed in 1998. Since that time only the Subdivision Regulations have been replaced, and there have been no significant modifications to other local documents. The Comprehensive Development Plan was intended to guide the city’s planning efforts through 2000, but has yet to be superseded (Tullahoma 1986, 1). The local Zoning Ordinance was adopted in 1988, two years after the creation of the Comprehensive Development Plan. The current Subdivision Regulations were adopted in late 2007, replacing the previous regulations which had been in place since 1988.

**Are other growth management strategies in place in addition to the urban growth boundary such as the use of building permit caps, adequate public facilities ordinances, or concurrency requirements?**

With the exception of the urban growth boundary and plans of services for annexation required by the state legislation, Tullahoma employs no other growth management mechanisms. No limitations exist in the city regarding the number of building permits issued annually or concurrency requirements.

**Regulatory Analysis: General Local Regulatory Context Conclusions**

A strong state growth management program should in result in a local regulatory framework for growth management that includes a cur-
endent comprehensive plan articulating a vision for balanced and efficient development, and supporting zoning and subdivision regulations to ensure implementation of these goals. These basic practices can then be augmented by more advanced growth management regulatory tactics. In Tullahoma, the limitations of the regulatory mandates at the state level have resulted in a weak local framework. The Comprehensive Development Plan is no longer current. Absent a requirement to do so, local regulations have not been updated to reflect growth management goals articulated by the state. The lack of the use of other growth management regulatory tactics beyond the mandated urban growth boundary reveals weak local initiative to curb urban sprawl.

**Regulatory Requirements: Direction of Growth**

Local planning documents that support growth management objectives should promote an inward direction of growth, encouraging growth in existing developed areas over new development on the fringe of the urbanized area. The promotion of infill development and redevelopment through the use of planning regulations is critical to directing development towards existing areas and the efficient utilization of land and infrastructure. The direction of growth should be articulated by the Comprehensive Development Plan and Countywide Growth Policy Plan and supported by the documents dictating development standards: the Zoning Ordinance and Subdivision Regulations. The following inquiries explore local planning documents to reveal the direction of growth promoted in Tullahoma, Tennessee.

*Is an inward direction of growth articulated as a guiding vision by the Comprehensive Development Plan and Growth Policy Plan?*

As noted earlier, the Comprehensive Development Plan predates the Tennessee’s Growth Policy Act and was created at a time prior to the contemporary heightened awareness of growth management concerns that has resulted from the smart growth movement. However, the Comprehensive Development Plan in some instances expresses a desire to limit expansion of the existing urban area. The Concept Plan component states that “While a modest expansion of the urban area is expected, primary efforts should be placed on more effective use of the existing urban area” through the use of redevelopment and revitalization strategies (Tullahoma 1986, 11). The Concept Plan also expresses the desire to promote the creation of clustered Development Centers rather than new development corridors and linear development which would lead to further outward expansion (1986, 12).

Within the individual policy areas, some sections of the Comprehensive Development Plan also make reference to promoting an inward direction of growth. The Economic Development section discourages industrial development outside of the urban area, alternatively encouraging the reuse of existing facilities and recommending that incentives be provided and zoning modified to do so (Tullahoma 1986, 18). Education recommendations include that schools be built in the existing urban portions of the city (1986, 21). The infill of existing residential areas is encouraged prior to the expansion of the urban area in the Housing and Community Development land use policies (1986, 30).
Although the Comprehensive Development Plan contains some phrasing indicative of promoting an inward direction of growth, other assumptions and recommendations contradict this and demonstrate a town envisioning little change in their development patterns. Assumptions are made that annexation of rural areas around the city will persist (Tullahoma 1986, 9) and that advancing technology will enable continued urban expansion despite resource depletion although potentially a shift may occur to denser development patterns (1986, 8). The General Development Policy recommends that land outside of the City be identified for future commercial and industrial development annexation (Tullahoma 1986, 24). Although the Housing and Community Development recommendations encourage infill prior to expansion, also among the recommendations is a proposal to allow low-density residential development in rural areas without services (1986, 29); in the Utilities component it is recommended that density be limited to one dwelling unit per acre in these areas (1986, 44). While residential infill is encouraged, concern is also expressed that an ample supply of land for residential development should be ensured (30).

The Countywide Growth Policy Plan, created as a direct result of the growth management legislation, should demonstrate stronger support for inward growth. Although the Countywide Growth Policy Plan makes note of the state’s desire for municipalities to work towards “controlling and managing growth” and consider “areas within current municipal boundaries that could be used, reused, or redeveloped” (Coffee County 1999, 5), this does not appear to significantly impact the delineation of the urban growth boundary. Commenting on the considerable size of the urban growth boundary territory, the Coordinating Committee provides the justification that the large extent is necessary in order to accommodate future arterial growth (1999, 6). The Tullahoma Urban Growth Boundary Report’s Assumptions and Basis for Projections include the contradictory statements that infill and reuse projects will be encouraged, despite also indicating that the UGB is based upon the accommodation of anticipated arterial development in keeping with existing patterns (1999, B12 & B17).

*Is there an analysis of redevelopment potential and is it encouraged?*

*Is the potential build-out for residential development quantitatively identified?*

A comprehensive analysis of redevelopment potential within the city has not been conducted as a component of the Comprehensive Development Plan or the Countywide Growth Policy Plan. The Comprehensive Development Plan states that sixty-four percent of land in the urban area is vacant (Tullahoma 1986, 7). This figure takes into account land dispersed throughout the city that has either not been converted to urban uses, is undeveloped open space, agricultural land, or vacant land located within developed areas (1986, 7). While this percentage is indicative of the potential for infill in the town and the current dispersed development patterns, the precise build-out potential within the city is not quantitatively identified.

With regards to redevelopment potential, the Urban Growth Boundary Report for Tullahoma
of the Countywide Growth Policy Plan identifies 4,100 acres of unimproved land within the city capable of being developed (Coffee County 1999, B6-B7). The potential build-out for residential development is not quantitatively identified beyond identifying that there are 10,880 acres currently zoned residential and only 3,458 acres in residential use. The analysis within the report concludes that there is a shortage of improved vacant land in the city (1999, B8), and that there are 4,100 acres of vacant unimproved land available for development not in the flood plain (1999, B8).

**Do infill and redevelopment projects require more variances than open land projects?**

**Are there zoning districts that specifically accommodate infill and redevelopment?**

While the Comprehensive Development Plan is required to articulate a guiding vision for development, implementation and realization of this relies upon appropriate regulatory support in the form of land use controls. No zoning districts exist in the local regulations that specifically accommodate infill and redevelopment. Infill and redevelopment projects may require more variances than open land projects. With the exception of the small C-1 Central Business district, all zoning districts have generous yard requirements (Tullahoma 1988, Article IV) and no waiver of these requirements is provided as-of-right for existing non-conforming sites and structures. Even within the R-3 High Density Residential District, no leeway is given to promote the development of infill sites; all structures or expansion of structures are required to meet the specified yard, lot area, building coverage and open space requirements (Tullahoma 1988, Article IV, § 6E). With regards to the alteration or expansion of non-conforming buildings and structures, yard requirements are not diminished, the lot coverage percentage cannot exceeded as required in the district, and off street parking must be provided (1988, Article VI, § 1).

**Regulatory Analysis: Direction of Growth Conclusions**

In summary, the Comprehensive Development Plan and Countywide Growth Policy Plan largely appear to be permissive of many types of development including patterns of both inward and outward growth. This characteristic is more surprising in the case of the Countywide Growth Policy Plan. The assessment of redevelopment potential does not extend beyond providing a land inventory to estimate what this could accommodate either with current or modified land usage patterns. Given the high percentage of land in Tullahoma identified as vacant in the basic inventory that was conducted in the earlier Comprehensive Development Plan, it would be hoped that the Urban Growth Boundary would respond to this indicator of development potential within the existing city limits, and that the Coordinating Committee would take this into account in determining projected future land needs through further elaboration on the original assessment. Local plans and regulations acknowledge and encourage the continuation and extension of past development patterns. The guiding documents weakly promote growth management practices of promoting an inward direction of growth, but this is not translated to
regulatory support for that intent.

**Regulatory Requirements: Land Use**

Similar to the direction of growth, a vision for land use in should be articulated by the a comprehensive plan and implemented by the local zoning ordinance. Land use policies in alignment with growth management objectives should demonstrate alignment between substantiated projected land needs and the territory zoned to accommodate them. Included in the zoning ordinance should be districts that preserve agricultural land and natural resources, and districts that allow for mixed land uses where appropriate. The following inquiries explore Tullahoma’s regulatory requirements for land use as they pertain to growth management practices.

*Is fringe land zoned as exclusively agricultural, or does the zoning ordinance include a substantial minimum lot size (10 acres minimum, preferably 25-40 acres) that discourages single-family tract housing and preserves large sites for viable farm use?*

*Is development permitted outside the UGB only if services are provided by the developer?*

Tullahoma’s Zoning Ordinance contains the designation APPA-1 General Agricultural District. The description of this district indicates that the zone encompasses both agricultural areas for protection and areas to be converted to urbanized uses in the near future (Tullahoma 1988, Article VI, § 1). Although the intent of this district is “to protect any agricultural uses until urbanization is warranted” (1988, Article VI, § 1B), the development standards do little to protect agricultural uses because single-family development is still permitted and the minimum lot size established is only five acres (1988, Article VI, § D). Most importantly, Tullahoma’s current zoning map no longer identifies any land zoned under this classification (2007).

Zoning of fringe land outside the municipal limits is not under Tullahoma’s regulatory authority. In 2003, Coffee County adopted a zoning ordinance thereby gaining zoning jurisdiction over the territory contained by Tullahoma’s urban growth boundary. All land outside the municipal limits contained by the UGB has been given the zoning classification of RS-1 Suburban Residential by the County. This district permits single-family residential development along existing arterial or collector roads, or on streets brought up to these standards by developers (Coffee County 2003, Article 4, § 4.042). The minimum lot size for single-family development is 30,000 SF, and only 15,000 SF if access to the public sewer is provided (2003, Article 4, § 4.042).

In the area adjacent to but beyond the urban growth boundary, the county has zoned the land as either A-1 Agriculture and Forestry, or C-1 Rural Center District. The A-1 district permits single-family residential development with a minimum lot size of one acre, and some commercial uses may also be permitted on review as a special exception (2003, Article 4, § 4.041). The C-1 Rural Center District is intended to be a flexible zone that allows multiple uses including residential, retail, educational, medical, and light industrial, along existing collector and arterial roads in the rural area. Minimum lot size requirements vary from 15,000 SF to one acre depending on the availability of water and sewerage services (2003, Article 4, § 4.043).
Are mixed land uses promoted by the comprehensive plan?

Does the local zoning ordinance provide at least one or more zoning districts that allow mixes of residential and commercial uses?

Are residential uses allowed in the central business zoning district?

The Concept Plan component of the Comprehensive Development Plan calls for increased mixing of land uses in the Inner City surrounding the Central Business District (Tullahoma 1986, 11). The Economic Development section indicates that mixed use areas “could be permitted” in some parts of the Urban Area, but should be limited to neighborhood-serving commercial and office uses (Tullahoma 1986, 16).

The Zoning Ordinance does little to advance these objectives, in very few areas permitting mixed uses as-of-right, and only in districts that comprise a small area of the city. In the R-3 High Density Residential district (which comprises 9% of the city’s land), the Zoning Ordinance permits office and professional uses provided they meet the bulk regulations of that district (Tullahoma 1988, Article IV, § 6). Dwelling units are permitted in the C-1 Central Business District (1988, Article IV, § 9). However, within the other two commercial districts, C-2 General Commercial District and C-3 Neighborhood Commercial District, only dwelling units intended for the owner of the building on the premises are permitted (1988, Article IV, § 10 & 11). It should also be noted that although the Zoning Ordinance indicates the existence of three types of commercial districts, only the C-1 Central Business District and C-2 General Commercial District appear on the current zoning map, occupying 2% and 29% of the city respectively.

Planned Unit Developments (PUDs) provide the only other opportunity for mixed land uses in the Zoning Ordinance; these are permitted only in residential districts and must be approved by review (Tullahoma 1988, Article V, § 3). Commercial and office uses are permitted in a PUD on review, provided that the development is at least twenty acres (1988, Article V, § 3). One acre of commercial or office development can be included for every fifty dwelling units (1988, Article V, § 3).

Is the land use plan efficient in terms of the amount of undeveloped land devoted to residential uses when compared with the projections of residential land needed?

Are these projections based on a housing needs assessment?

Are the projected acreage needs exceeded by no more than 15%?

The Comprehensive Development Plan calls for assessment and planning to accommodate future housing needs (Tullahoma 1986, 31), but a housing needs study as a basis for residential land use needs is not included in the Comprehensive Development Plan or the Countywide Growth Policy Plan. In both documents, the assessment of residential land use need is limited to the inclusion of population projections. The Countywide Growth Policy Plan indicates that the land use projections are based on existing population to acreage ratios, viewing these densities to be at “optimum levels” (1999, B12). The Urban Growth Boundary Report of the Countywide Growth Policy Plan anticipated 25.8% population growth over the next twenty years beginning in 1999 (Coffee County 1999,
B11). Of the 10,880 acres with residential zoning in the municipal limits (including 3,500 acres of unimproved land that could potentially be developed), only 3,458 acres (31.7%) were in use as residential property (Coffee County 1999, B7). In addition to the 7,422 acres of residentially zoned land within the city not currently in residential use, the territory encompassed by the urban growth boundary provided an additional 12,160 acres for future development and annexation, now zoned entirely RS-1 Suburban Residential by the county.

Based on the 3,458 acres in use as residential land in Tullahoma in 1999 and the city’s 2000 population of 17,994, the population density in the city limits at the time of the urban growth boundary’s delineation was approximately 5.20 people per acre. If this same density were applied to the residential land encompassed by the urban growth boundary, the UGB area could accommodate 63,232 people assuming all of the land to be developable. A population increase of this magnitude is highly unlikely over the twenty-year growth policy planning period, clearly indicating an overabundance of residentially zoned land. Using the same density figures the unimproved residential land capable of being developed that was identified within the city limits (3,500 acres), could accommodate more than two times the current population (18,200 additional residents) prior to annexing any new territory within the UGB.

Is the local urban growth boundary based on a realistic assessment of land use needs?

The UGB was based on the several assumptions including that the growth rates for residential, commercial, and industrial would remain constant, that the current population density per acre of the town was optimum and sufficient to be used to project future land area needs, and that arterial development was expected to persist (Coffee County Coordinating Committee 1999, B12).

An inventory of current land usage in Tullahoma revealed 4,100 acres of unimproved land that was capable of being developed (Coffee County Coordinating Committee 1999, B6), of which 3,500 acres were zoned residential; 280, commercial; and 320, industrial (B7). Although unimproved vacant property makes up 25% of the city’s land (Coffee County Coordinating Committee 1999, B8), and the population projections for Tullahoma for 2020 forecasted only 25.8% growth (Coffee County Coordinating Committee 1999, B11), the extent of the UGB demarcated was incongruous to these projections. If the city were to annex all of the land available in its UGB territory, Tullahoma’s area would be increased by 1.7 times, from 16,640 acres to 28,800.

Are goals, policies, and implementation measures established to set aside a certain percentage of total land area in the community as open space or green space?

Included among the Natural Environment goals of the Comprehensive Development Plan is the development of an Open Space Network for respect and protection of environmental resources (Tullahoma 1986, 32). Objectives and policy recommendations include the development of guidelines to promote harmony between development and the natural environment, and the
designation of open space areas for recreation, buffering, and conservation (Tullahoma 1986, 32-33). The Open Space Network is to include undeveloped land, water areas, and recreation space where infrastructure expansion should be prohibited or limited (Tullahoma 1986, 13).

Within the Zoning Ordinance, there is an Open Space Preservation District (OS-1) to protect open space, land for parks and recreation, as well as "scenic routes, historical and archaeological sites, watersheds and water supply areas, hiking, cycling and equestrian trails, and fish and wildlife and their habitats" (Tullahoma 1988, Article IV, § 2). However, only 2% of land within the city is classified under this designation.

**Regulatory Analysis: Land Use Conclusions**

A review of the local zoning map shows any agricultural land within the city limits of Tullahoma to no longer be protected, despite the presence of an agricultural zoning district within the Zoning Ordinance. A review of the zoning regulations further reveals that given the modest population projections an overabundance of land has been residentially zoned. The low-density residential designation comprises the majority of this territory. This has occurred both within the city limits and in the UGB area, despite the fact that land within the city is not being utilized to its full capacity. The designation of these large areas for residential development thwarts growth management efforts by promoting dispersed development patterns. This, coupled with the lack of regulatory support for mixed uses, further weakens the relationship between residential areas and the central city creating a landscape of discontinuous low-density development. The open space and agricultural land that still exists within the city is most likely the result of a lack of development pressure rather than a concerted effort of conservation.

The Countywide Growth Policy Plan should represent a departure from past policy; instead it relies upon existing density levels that resulted from old planning practices as a standard of optimization in determining its UGB. In the fringe territory, the minimum lot size established by the Coffee County Zoning Ordinance is not sufficient to deter single-family tract housing; this is particularly discouraging since this ordinance was adopted after the growth management legislation. As planning instruments, comprehensive plans and zoning ordinances are critical to achieving land use practices consistent with growth management objectives. However, the state Growth Policy Act only mandated the creation of growth policy plans rather than requiring reforms for the traditional regulatory instruments. As a result, the Comprehensive Development Plan and Zoning Ordinance of Tullahoma remain in use, despite their age and the fact that they reflect planning that predates contemporary growth management practices.

**Regulatory Requirements: Development Patterns**

Growth management seeks to foster development patterns that minimize urban sprawl. As an alternative to the dispersed patterns associated with sprawl, growth management tactics promote dense and compact development to enable the preservation of open space and more efficient land development patterns. Traditional
neighborhood developments, cluster developments, and conservation subdivisions are often identified as development types consistent with growth management goals, as they promote connectivity and provide a means of concentrating development to efficiently utilize the land and conserve open space without sacrificing overall development density. Locally the Zoning Ordinance and Subdivision Regulations are critical in achieving these types of development patterns. The following inquiries investigate the development patterns promoted by Tullahoma’s local planning documents.

**Do land use regulations establish minimum densities to promote efficient use of lands designated for higher densities?**

The local planning regulations do not establish minimum densities to promote more efficient land use patterns. The Subdivision Regulations reference the lot size regulations as established by the much older Zoning Ordinance (Tullahoma 2007, Article 3, § 303.6.1). These regulations set forth minimum lot sizes, in effect establish maximum densities for the districts.

**Are there discretionary provisions that result in housing being built at lower densities?**

Each residential zoning district permits the construction of any development conforming to the standards of any of the lower density residential districts (Tullahoma 1988, Article IV). For example, a proposed development meeting R-1AA standards would be allowed in the R-3 High Density Residential District.

**Do minimum lot sizes allow for urban size lots (5,000-6,000 square feet)?**

Lot sizes stipulated by the zoning ordinance exceed the size of plots associated with development that is urban in character. Minimum lot sizes for the R-1AA, R-1A, R-2, and R-3 Residential Districts are 20,000 SF, 17,000 SF, 10,000 SF, and 7,500 SF respectively for single-family lots with public sewers (Tullahoma 1998, § 4-6).

No minimum lot sizes exist for the O-1, C-2, and C-3 districts, but the large setback requirements (35’ front, 15-25’ side, 30-35’ rear for O-1; 35’ front, 10-15’ side, 10’-30’ rear for C-2; and 35’ front, 15-20’ side, and 30-35’ rear for C-3) preclude urban lot sizes (Tullahoma 1988, Article IV, § 8,10&11). There is no minimum lot size for the C-1 District and setback requirements are limited to a 5’ front setback (Tullahoma 1988, Article IV, § 9).

**Is at least some of the residential land in the community planned or zoned for densities between eight and fifteen dwelling units per acre, with even higher densities provided for in urban centers?**

In the highest density residential district, R-3, the lot size requirements yield a development density of only 5.8 dwelling units per acre for single-family homes (Tullahoma 1988, Article IV, § 6). In the R-1AA, R-1A, and R-2 districts the regulations foster even more dispersed development patterns with permitted densities of only 2.2, 2.6, and 4.4 dwelling units per acre for single-family homes (Tullahoma 1988, Article IV, § 4&5).

The R-3 High Density residential district represents only 9% of the property in the city. A six-unit townhome on a 7,500 SF lot in the R-3 district could potentially yield a development density of 34 dwelling units per acre (Tullahoma...
A two-family structure in R-3 is permitted on a 7,500 SF lot yielding a density of 11.6 dwelling units/acre. Also within the R-3 district, the zoning ordinance states that a multifamily structure is permitted on a 5,000 SF lot (which could yield a density of 26 dwelling units per acre or higher). However this contradicts the minimum lot width requirement (150’) and the front and rear yard setback requirements of 50’ and 35’ respectively. Just the fulfillment of these requirements, without including the depth required for the construction of the building would require a lot size of 12,750 SF (85’ x 150’) (Tullahoma 1988, Article IV, § 6).

Planned Unit Developments, permitted on review, allow for the following maximum densities: 6 dwelling units/acre in R-1 districts, 10 dwelling units/acre in R-2, and 15 dwelling units/acre in R-3 (Tullahoma 1988, Article V, § 3). However, the standards for single-family lot sizes and frontage are still based upon the requirements of the district in which the PUD is located, making it difficult to achieve higher density levels.

**Does the local zoning ordinance provide for traditional neighborhood development?**

**Do local land use regulations provide for “conservation subdivisions” or “cluster subdivisions as a matter of right (versus requiring a conditional use permit)?**

Although the Comprehensive Development Plan encourages the use of PUDs for atypical sites with “special opportunities or limitations for development” (Tullahoma 1986, 30) and encourages developments that use cluster housing because they minimize expenses for infrastructure (44), local land use regulations do not provide for “conservation subdivisions” or “cluster subdivisions as-of-right. Planned Unit Developments (PUDs) are only permitted on review, but are intended to be the means by which residential areas can be created that allow for open space, and creative approaches to site design that address environmental concerns or allow mixed uses as previously mentioned in discussing the land use regulatory provisions (Tullahoma 1988, Article V, § 3).

**Do all or most zoning districts require a minimum open space ratio (i.e. percentage of land area for each development that must be open space)?**

The OS-1 Open Space Preservation zoning district stipulates that manmade improvements shall cover no more than 5% of any given property (Tullahoma 1988, Article IV, §2). Both the R-2 and R-3 districts have area requirements for usable open space, based on a square footage allotment per dwelling unit (Tullahoma 1988, Article IV, §5 & 6). In PUDs 15% of the gross development area must be set aside for permanent usable open space and recreational use (Tullahoma 1988, Article V, § 3). The Subdivision Regulations do not require a minimum open space ratio for developments.

**Regulatory Analysis: Development Patterns Conclusions**

Far from promoting minimum densities, the Zoning Ordinance ensures low-density development throughout most of the city in residential and commercial developments. The requirements articulated by the Zoning Ordinance define development density, and the Ordinance promotes low-density development paradigms
that were widely accepted at the time the document created. Unless the Zoning Ordinance is updated, the Subdivision Regulations as written encourage the persistence of old development patterns because they defer to the older document for lot size, lot coverage, and setback requirements. While moderate density levels are possible through the use of PUDs, the local regulatory provisions complicate achievement of this by requiring additional review of these projects. By contrast, no special approval is required to construct low density development within the high density R-3 district.

The Subdivision Regulations miss an opportunity to exert a strong influence and demonstrate a commitment to growth management by failing to permit conservation subdivisions and cluster subdivisions as a matter of right. All solutions that allow for total site design, clustering, and a break with the low-density norms of the community require special review which serves as a disincentive to developers seeking guaranteed project approval. Provisions to require the clustering of development within subdivisions to preserve open space are not present. The obstacles that face developers proposing innovative solutions through the use of PUDs are indicative of a clear local preference and regulatory promotion for low density development.

Institutional Requirements and Analysis

In the first phase of the research exploring the state’s growth management legislation, analysis of the institutional requirements determined several areas of critical concern. The first deficiency noted was the ability of growth plans and amendments to sidestep substantive state review. The legislation is further weakened by the failure of the state to pass general enabling legislation for local governments to establish impact fees that force developer accountability for the expenses associated with growth. Given the weak institutional roles defined by the state as identified by the study, it can be anticipated that mandatory participation by all municipalities will not be enough to ensure the program’s success. Absent strong local initiative to manage growth, the prospects of success for Tennessee’s current growth management program are dim.

Institutional Requirements

The following inquiries investigate impacts of the local government’s role in planning and development in Tullahoma, to reveal if a local institutional commitment to growth management exists.

**Are local governments empowered to charge infrastructure costs for new development to the developers or are the services provided through property taxes?**

**Did Tullahoma secure the authority to exact impact fees prior to state legislative changes prohibiting the city from doing so?**

Local Subdivision Regulations state that “All required improvements shall be made by the applicant at his expense” and dedicated to the city (Tullahoma 2007, Article 2). The requirements contained within the regulations do not apply to developments that do not require new streets or utilities or in which the resulting tracts are greater than five acres (2007, Article 1). The developer must install public sewer lines and extend the line at his expense if it is not available, and pro-
Figure 5-1: Summary of Regulatory Analysis of Local Planning Documents

<table>
<thead>
<tr>
<th>Regulatory Requirements of Program</th>
<th>+ or -</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Local Regulatory Context</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Local comprehensive plan in place</td>
<td>+/-</td>
<td>Yes, but out-dated</td>
</tr>
<tr>
<td>• Plans and regulations updated since GPA</td>
<td>+/-</td>
<td>Only subdivision regulations</td>
</tr>
<tr>
<td>• Additional GM strategies besides UGB</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Direction of Growth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Inward direction of growth promoted</td>
<td>+/-</td>
<td>Promotes inward and outward growth</td>
</tr>
<tr>
<td>• Analysis/encouragement of redevelopment</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>• Residential buildout potential identified</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>• More variances req’d for infill/redevelopment</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>• Presence of zoning districts for infill/redev.</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Land Use</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Large min. lot size in fringe to deter tract housing</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>• Development outside UGB only if services provided by developer</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>• Mixed land uses promoted</td>
<td>+/-</td>
<td>Only in comprehensive plan</td>
</tr>
<tr>
<td>• One or more zoning districts allow mixed uses</td>
<td>+/-</td>
<td>Comprises a very small area</td>
</tr>
<tr>
<td>• Residential allowed in the CBD</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>• Alignment between residential zoning and need; zoning based on assessment; and projected acreage exceeded by no more than 15%</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>• UGB based on realistic assessment</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>• Percentage of land for open/green space</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Development Patterns</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Minimum densities established</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>• Discretionary provisions allow lower densities</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>• Urban size lots permitted</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>• Some areas zoned 8-15 DU/acre or higher</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>• Cluster or conservation subdivisions permitted</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>• Minimum open space ratio in most districts</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

Source: City of Tullahoma Comprehensive Development Plan (1986); the Zoning Ordinance for the City of Tullahoma, Tennessee (1988); the County-wide Growth Policy Plan for Coffee County, Tennessee (1999); the City of Tullahoma Subdivision Regulations (2007)
vide water facilities if the public main is accessible (2007, Article 3). However, it is also stated that the local Utilities Board can make exceptions to the requirement for sewer line extension (Tullahoma 2007, Article 3). The Countywide Growth Policy Plan stipulates that developers must pay for streets within new developments and are required to pay for water service provisions if the development requires the construction of new streets (Coffee County Coordinating Committee 1999, B9 & B11).

There are no requirements however to hold developers accountable for any of the additional fiscal burdens attributable to growth and expansion. Tullahoma and Coffee County were not among the jurisdictions that secured the right to exact impact fees prior to the passage of the 2006 County Powers Relief Act modifying the process and rendering them ineligible to do so (TACIR 2006). The city will now only have the authority to exact impact fees if they meet the state’s standards for classification as a high-growth county (Tennessee § 67-4-2902).

Are provisions in place to promote administrative efficiency such as stream-lined permitting processed and clear, objective standards that can ensure the approval of projects consistent with growth management goals?

The General Policy Plan of the Comprehensive Development Plan recommends that a “more effective” procedure for development and redevelopment review be created (Tullahoma 1986, 31). The new Subdivision Regulations (2007) of Tullahoma perhaps represent an attempt to clarify the subdivision review process by clearly detailing all submittal requirements necessary for the approval of Preliminary Plats, Construction Plans, and Final Plats (Tullahoma 2007, Article 5,6, &7).

A sketch plat can be submitted to identify factors that may impact the development’s approval, but is elective for both major and minor subdivisions. (Tullahoma 2007, Article 4, § 401). The intent of the sketch plat is to “advise the subdivider of various possibilities before substantial amounts of time and money have been invested in a very detailed proposal which may contain elements contrary to these regulations” (Tullahoma 2007, Article 4, § 401).

Institutional Analysis Conclusions

The local government has not demonstrated a strong commitment to growth management, either prior to or following the passage of the state growth management legislation. Forcing developer accountability for municipal fiscal expenditures associated with growth and expansion could have deterred inefficient development and sprawl, but this did not and now cannot happen due to the new standards established by the County Powers Relief Act. The streamlining reflected by the new Subdivision Regulations may stem more from a need to simplify permitting procedures in a department with limited personnel resources, rather than growth management concerns. By failing to make the submittal of a sketch plat mandatory, the Subdivision Regulations miss an opportunity to influence development early in the process, when plans are much more flexible and it is possible to exert a greater influence. The Subdivision Regulations still rely upon the Zoning Ordinance regarding development design, and therefore
do little to facilitate redevelopment, infill, and innovative site solutions. Given the ample land available to the community and its moderate growth rate, the minimization of urban sprawl has not been a high priority of the local government. The passive local institutional climate with regards to curbing sprawl, coupled with the institutional weaknesses inherent in Tennessee’s state legislation make successful growth management highly unlikely in Tullahoma.

### Consistency Requirements and Analysis

The first phase of the analysis revealed Tennessee’s state growth management program to have weak consistency requirements and to be lacking in a process of enforcement to ensure uniformity between state goals and local implementation. Insubstantial state review processes compromise the vertical consistency provisions. Horizontal consistency, important in a program that utilizes growth boundaries so that development is not merely shifted to less restrictive areas, suffers by treating counties as discrete entities. Internal consistency is hampered by the limited role of the state in ensuring uniformity in the quality and interpretation of data and its translation to planning practice and growth management tools. Implementation consistency may be a moot point, if the aforementioned problems yield growth policy plans and boundaries that are not appropriately restrictive to begin with. No requirements exist for zoning and subdivision regulations to be created or modified to support the goal of minimizing urban sprawl, further weakening the implementation of the growth management program and its translation to local practices.

### Consistency Requirements

The core question regarding the implementation of Tennessee’s growth management legislation is whether or not local planning is consistent with the state’s objective to minimize urban sprawl. Exploration of consistency at the local level therefore unifies the findings from the preceding analyses of institutional and regulatory requirements, focusing on the areas of concern identified by the analysis of state prescribed consistency requirements.

The initial phase of research analyzing the state growth management policy checked for the presence of requirements for four types of consistency: vertical, horizontal, internal, and implementation. Similarly, the following local level

<table>
<thead>
<tr>
<th>Institutional Requirements of Program</th>
<th>+ or -</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local government requires developer to pay for infrastructure costs</td>
<td>+/-</td>
<td>Only infrastructure contained within the development</td>
</tr>
<tr>
<td>Local government can exact impact fees</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Administrative efficiency provisions</td>
<td>+/-</td>
<td>No provisions to facilitate growth management</td>
</tr>
</tbody>
</table>

Source: City of Tullahoma Comprehensive Development Plan (1986); the Zoning Ordinance for the City of Tullahoma, Tennessee (1988); the County-wide Growth Policy Plan for Coffee County, Tennessee (1999); the City of Tullahoma Subdivision Regulations (2007)
analysis explores these four facets of consistency in the policies and practices of Tullahoma.

**Vertical Consistency**

*Does the local comprehensive plan demonstrate consistency with the state's objective to minimize urban sprawl?*

The Comprehensive Development Plan for Tullahoma predates contemporary growth management practices, written eighteen years before the passage of the state's growth management legislation. While the Comprehensive Development Plan in some instances speaks to the need for efficiency in development and urban expansion, the primary focus of the document equates growth with prosperity and therefore seeks to promote rather than manage it.

**Implementation Consistency**

*Are local planning regulations consistent with the comprehensive plan and/or the state's intent to minimize urban sprawl?*

Is the local zoning ordinance, adopted in 1988, draws from the Tullahoma Comprehensive Development Plan of 1986 as a substantive and guiding foundation. The incongruities of this document with the state’s sprawl minimization goals therefore parallel the conflicts that exist between the Comprehensive Development Plan and state growth management intentions previously mentioned. These inconsistencies however are not particularly unexpected given the different dates of origination of the documents. The Subdivision Regulations are the only local planning document to undergo a major revision since the passage of the state’s growth management legislation. While more streamlined than its predecessor document, the new regulations similarly appear to be concerned with facilitating development, regardless of its alignment with growth management practices. Little is said about the timing and provision of public facilities, and discretionary provisions permit exception to some infrastructure provision requirements.

**Horizontal Consistency**

*Are the growth management efforts of Tullahoma coordinated with surrounding jurisdictions?*

*Do different entities (county- and local-level government) share regulatory authority over the UGB territory and are these consistent?*

Beyond the requirements of the state legislation for each county and its contained municipalities to produce and ratify a countywide growth policy plan, coordination between adjacent jurisdictions is not evident. A small southeast portion of Tullahoma and its urban growth boundary lies in Franklin County. Review of the Franklin County zoning map reveals that the urban growth boundary for Estill Springs, a relatively small community, has been extended so that it directly abuts the UGB of Tullahoma, and a large Projected Growth Area has been designated for much of the remaining area adjacent to Tullahoma lying in Franklin County. This appears to some degree to be a defensive mechanism, preventing the further expansion of Tullahoma into the Franklin County territory.

Another issue pertinent to horizontal coordination involves the regulatory jurisdiction of
urban growth boundary territory. Coffee County adopted a zoning ordinance on April 1, 2003, gaining zoning authority over the territory encompassed by Tullahoma’s urban growth boundary. Prior to that date Tullahoma exercised both zoning and subdivision authority over the UGB area; henceforth the municipality only retained regulatory authority over the subdivision of land in the UGB. Ambiguities in the regulations have been created by this overlap of authority. The Tullahoma Subdivision Regulations reference the Tullahoma Zoning Ordinance with regards to design standards for lots, yet the Coffee County Zoning Ordinance has regulatory jurisdiction in the UGB territory.

Internal Consistency

Do the local planning documents demonstrate internal consistency by reinforcing each other and through common basis on the same underlying assumptions?

Internal consistency in Tennessee would ideally be achieved through the following hierarchy: sprawl minimization requirements are enacted by the state legislation, these goals are translated to the Countywide Growth Policy Plan, the municipality adopts a local comprehensive plan that reflects the intent of the county plan and state program, and Zoning and Subdivision Regulations are created to lend regulatory support to the other guiding documents. Internal consistency and vertical consistency are interrelated; all documents should support the directives that emanate from the state level and all local documents should be consistent with each other, ideally free from contradictions as they reinforce the same development objectives and emerge from a common local planning context. This has not occurred in Tullahoma, as it has not been dictated by the state growth management legislation. The two documents intended to articulate a vision for planning and urban development are not based on the same underlying assumptions. A twenty-one year time lag exists between the creation of the Comprehensive Development Plan and the Countywide Growth Policy Plan, resulting in two documents emerging from different planning contexts. Similarly the local Zoning Ordinance and Subdivision Regulations have disparate origins.

Consistency Analysis Conclusions

Neither the Comprehensive Development Plan nor the Countywide Growth Policy Plan demonstrates a strong commitment to the state’s objective to minimize urban sprawl. While this is not surprising given the date of the Comprehensive Development Plan (1986), it would be anticipated that the Countywide Growth Policy Plan would exhibit a closer alignment with the state’s goal. The document however fulfills the minimal requirements set forth for growth plans by the state. Yet even if the Growth Policy Plan clearly ascribed to growth management principles, it lacks the broad comprehensiveness needed to articulate a vision for local development that ensures alignment with state objectives. Given the lack of vertical consistency, it follows that implementation and internal consistency are compromised as well, since local planning regulations derive their substantive foundation from the vision they are intended to support.
Conclusions

The regulatory, institutional, and consistency analyses have revealed conflicts between the state’s goal of sprawl minimization and the local implementation of the growth management legislation in Tullahoma. The anticipated divergence between the documents predating the growth management legislation and those emerging from or following its enactment is only faintly perceptible. Some of the language in the Comprehensive and the Growth Policy Plan is supportive of inward growth and growth management, a prospect that appeals to the community on the basis of efficiency. Yet subtly pervasive in the Comprehensive Development Plan and the Growth Policy Plan is the sentiment that the physical form of the city is the result of forces beyond the scope of regulatory authority. The assumptions of both of the local guiding documents are based on the observation and expected continuance of established local practices and patterns, and are reinforced by local regulations. The documents, old and new, reveal themselves to be tentative and fearful to restrict growth and to limit the city’s access to territory for development in the future.

While the state legislation intended to inaugurate and inspire a new vision for development in the state, it failed to consider the possibility that this vision may not be embraced by municipalities with the same zeal. The planning practices of Tullahoma have been revealed to be more reactive than proactive; growth management will only become a local priority once it becomes imperative. Tullahoma is a town that has grown moderately over the years and

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Figure 5-3: Summary of Consistency Analysis of Local Planning Documents

<table>
<thead>
<tr>
<th>Consistency Requirements of Program</th>
<th>+ or -</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vertical Consistency</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Local comprehensive plan consistent with state’s objective to minimize urban sprawl</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td><strong>Implementation Consistency</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Local regulations consistent with state’s objective to minimize urban sprawl</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>• Local documents updated to align with GPA</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td><strong>Horizontal Consistency</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Growth management efforts coordinated with surrounding jurisdictions</td>
<td>+/-</td>
<td>Only within Coffee County</td>
</tr>
<tr>
<td>• Regulation is consistent where there is shared authority</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td><strong>Internal Consistency</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Documents reinforce each other and have common basis</td>
<td>-</td>
<td></td>
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</tbody>
</table>

Source: City of Tullahoma Comprehensive Development Plan (1986); the Zoning Ordinance for the City of Tullahoma, Tennessee (1988); the County-wide Growth Policy Plan for Coffee County, Tennessee (1999); the City of Tullahoma Subdivision Regulations (2007)
possesses abundant land resources; because of this, changes to the urban fabric and surrounding landscape may be gradual and piecemeal. The slow pace of development may delay public discourse and action to address the transformation until it is very conspicuous; however regulations take time to affect change and some of the damage may be irreversible by that point. The growth management legislation provided an opportunity to mandate early preemptive action to preserve rural land in the state, yet the discretion provided to municipalities in effect has made the demonstration of a local commitment to growth management optional. The Comprehensive Development Plan and Zoning Ordinance from the 1980s that remain in use reflect the time in which they were written and practices that were widely accepted at the time. The newer regulations, and their consistency in many ways with the old norms, are indicative of shortcomings with the state growth management legislation’s ability to incite change.
CHAPTER 6: ANALYSIS OF LOCAL DEVELOPMENT PATTERNS

How have Tennessee’s growth management policy and Tullahoma’s local planning documents impacted local development patterns?

Introduction

Exploration of local development patterns illuminates whether Tennessee’s Growth Policy Act has impacted urban form outcomes, and if local regulations have yielded an urban form that is incongruous to the intent of the state’s growth management legislation to minimize urban sprawl. The analysis of Tullahoma’s development patterns is used to underscore the key points emerging from the two previous analysis phases. This analysis explores Tullahoma’s development in three time periods: prior to the adoption of the Comprehensive Development Plan (pre-1986), during the interim period between the adoption of the Comprehensive Development Plan and the Countywide Growth Policy Plan of Coffee County (from 1986 to 1998), and following the enactment of the Countywide Growth Policy Plan of Coffee County (from 1999 to present).

Growth Management and Urban Form

As noted in the literature review, Carruthers indicated that successful growth management efforts should result in an increase in urban density levels and a decrease in the rate of conversion of land to urbanized uses (2002a). Agricultural land use change statistics however are typically aggregated at the county level or higher, making it difficult to assess this at the local level (Clark and Howell 2006). The documentation and observation of changes that have occurred regarding the location and dispersal of new development is critical to this study of the local implementation of Tennessee’s growth management legislation, in order to reveal if there is any evidence demonstrating a shift to a more compact or contiguous urban form.

Qualitative assessments of the observed growth patterns and the spatial distribution of land uses can reveal information about the efficiency of land resource utilization. While complex quantitative assessments are beyond the scope of this study, the concepts of continuity and centrality (Galster et al 2001) are generally described in reference to Tullahoma’s development. Identification of the factors that have influenced the development of the urban form are critical to analysis at the local scale, particularly in order to differentiate characteristics resulting from the influence of state and local policies versus attributes that are the result of context-specific forces. Influences emanating from local contextual conditions are explored through historical research and the physical analysis of local conditions.

Development Patterns

The following section describes the development of Tullahoma’s urban form over the three identified time periods that correspond to the passage of major local planning documents. For each planning era the direction and nature of development is discussed, as well as any identifiable development forces or constraints.
Development Patterns: Pre-1986

**Historic Development**

Two key events in Tullahoma’s history have greatly shaped the community’s development. The first formative event was the arrival of the railroads which led to the establishment of the city in 1852; Tullahoma emerged as a regional passenger and freight hub along the Nashville-Chattanooga line (Martinez 1969, 89). Development occurred primarily along the railroad tracks near the depot. This early development was compact and followed a traditional gridiron pattern that is still evident in the central business district.

The second major event happened immediately following World War II, when the U.S. Air Force established the Arnold Engineering De-
development Center (AEDC) in Tullahoma in 1949 (Martinez 1969, 193). The establishment of the permanent research and testing base on lands formerly used as a military camp influenced the development of the city in two key ways. The location and size of the military installation effectively limited eastward expansion of the city and ignited a huge population increase. From 1950 to 1960 the city’s population grew by 61.9% from 7,562 to 12,242, and by 1965 the base employed 4,253 workers (U.S. Census; Martinez 1969, 193). The early compact form of the city did not persist in the presence of these changes, gradually giving way to arterial and lower density development patterns.

Several factors have been cited as contributing to Tullahoma’s general urban form. As previously mentioned, the city is bounded to the east by AEDC. County jurisdictional lines restrict growth and annexation to the south and west of the city. Two TVA reservoirs are located in close proximity to the city: Tims Ford Lake to the south and Normandy Lake to the north. A previous study by the city identified three natural features impacting development: topography, floodways, and soil suitability (Tullahoma 1972, 71). A small waterway, Rock Creek, runs through the city creating a floodway that limits development in some parts of the city; the steep change in topography associated with the waterway served as a barrier to the southern expansion of the CBD and has contributed to arterial development along Jackson Street (refer to Figures 6-1, 6-3 and 6-4). While most of Tullahoma’s topography is fairly gentle, some steep areas exist along the creek and around Ovoca Lake in the northern part of the city (1972, 75) (Figure 6-3). Poor drainage and another flood zone in the southern portion of the city have also constricted development (refer to Figure 6-4).

Pre-1986 Residential Development

The dramatic population increases associated with the end of World War II and the establishment of AEDC led to new housing development. While the city’s earliest residential structures were built in close proximity to the central business district and depot, development quickly began to spread to other areas of the city. Several new residential subdivisions coincided with the establishment of AEDC. Most of these were located west of Rock Creek in the southern portion of the city, developed fairly compactly, and attempted to connect with the street networks of surrounding neighborhoods (Tullahoma 1972, 59) (Figure 6-5). The 1986 Comprehensive Development Plan, in its description of existing develop-
Figure 6-3: Tullahoma's Topography

Source: Tennessee Spatial Data Server
Figure 6-4: Tullahoma's Hydrology

Legend
- Tullahoma City Limits
- Water Bodies
- Floodway
- Tullahoma UGB
- County Boundary

Source: Tullahoma GIS
development patterns, attributes the greater degree of westward residential growth to “the availability of public services and facilities, the suitability of soils for septic tank use, generally less severe terrain, and greater accessibility afforded by major arterials” (Tullahoma 1986, 6). In the 1970s, development increasingly began to spread into the northern portion of the city (1972, 62). The subdivisions of the early 1980s diverged from the patterns of the earlier developments, creating a more scattered pattern of discrete subdivisions. Topography appears to have been a factor in this to some degree as development spread to the north.

Pre-1986 Commercial Development

Early retail in the city was concentrated in the central business district. Atlantic Street ran along the railroad, and development was also present along the parallel road of Jackson Street. Development perpendicular to the railroad occurred along Lincoln Street. Similar to the residential development, the compact early patterns did not endure. The first strip commercial development in town, Tullahoma Plaza, is located on West Lincoln Street, the road extending from the CBD to the subdivisions west of Rock Creek. Discontinuous development in keeping with this new paradigm quickly extended along East Carroll Street (State Route 55), and north along Jackson Street following the new direction of residential development (Tullahoma 1972, 64-65).

Development Patterns: 1986-1998

1986-1998 Residential Development

Observation of the residential development that occurred in Tullahoma in the years following the creation of the city’s Comprehensive Development Plan witnesses a continuation of the trends that were beginning to emerge by the mid-1980s. Subdivisions became more prevalent in the farthest reaches of the city limits and beyond. These new northern subdivisions exhibited low connectivity with surrounding neighborhoods, branching primarily off of Country Club Drive and Short Springs Road. Both topography and the subdivision regulations in place during this time period have likely contributed to the development of these subdivisions as discrete entities. In an effort to discourage through traffic the city’s former Subdivision Regulations, adopted in the mid-1980s and superseded in 2007, stated that “the use of curvilinear streets, cul-de-sacs, or "U"-shaped streets shall be encouraged” (Tullahoma 1988, 3-12). These developments primarily consisted of housing for the city’s more affluent residents, establishing the area as the desirable residential locale. Residential develop-
Figure 6-6: Pre-1986 Residential Development in Tullahoma

Source: Tullahoma GIS and State of TN Comptroller of the Treasury
Figure 6-7: Pre 1986 Commercial Development in Tullahoma

Source: Tullahoma GIS and State of TN Comptroller of the Treasury
ment, rather than commercial, emerged as the major impetus behind Tullahoma’s sprawling development patterns.

**1986-1998 Commercial Development**

Commercial development during the time period from 1986 to 1998 exhibited larger parcel sizes and a continuance of the arterial trends that appeared in the mid-1980s. Major new development included properties along Jackson Street/US-41A to the north (with southward expansion parallel to the street limited by the floodway), and a few large parcels in the eastern part of the city also along arterials. The extension of development along Jackson Street to the north placed new retailers in closer proximity to the new subdivisions in the northern portion of the city that were also appearing during this time period.

**Development Patterns: 1999-present**

**1999-Present Residential Development**

Residential development in Tullahoma from 1999 to the present has largely followed the same patterns of the previous time period. Some smaller developments have utilized existing land in the city, but the haphazard nature of prior development has precluded these from having a strong connection to the surrounding fabric. Similar to the subdivisions that came before them most have few external connections, typically only one road accessing an arterial street (Figure 6-12). Since the passage of the state’s Growth Policy Act and adoption of the Coffee County Growth Policy Plan, development has still appeared beyond the city limits in the urban growth boundary area. This has occurred despite the availability of land within the city suitable for development, and is indicative of the lack of restrictions deterring outward expansion.

**1999-Present Commercial Development**

Commercial development has waned in the city since 1999. The preceding time periods witnessed the establishment of outposts by conspicuous large retailers that predominate the city’s commercial landscape. The spatial extent of the commercial development was largely already established by 1999. New developments have appeared, in some instances infilling remaining vacant sites in town or clustering around the big box retailers that arrived in the period between 1986 and 1999 at the north end of the Jackson Street commercial arterial. These new properties however still occupy large lots, and the road remains a low-density commercial strip congested by numerous curb cuts accessing large swaths of parking. As the primary commercial artery reaches its capacity (absent greater attempts at densification through infill), development has also appeared along Kings Lane, a major access road for the residential subdivisions in the northern part of the city.

![Figure 6-8: Residential development in northern Tullahoma (1986-1998)](source: Tullahoma GIS)
Figure 6-9: Residential development in Tullahoma from 1986-1998

Source: Tullahoma GIS and State of TN Comptroller of the Treasury
Figure 6-10: Commercial development in Tullahoma from 1986-1998

Source: Tullahoma GIS and State of TN Comptroller of the Treasury
Figure 6-11: Residential Development in Tullahoma 1999-present

Source: Tullahoma GIS and State of TN Comptroller of the Treasury
Development Analysis

Direction of Growth

There has been an observable shift in the location and dispersal of development in Tullahoma over time. Residential development appears to be the primary force inciting outward expansion. Over time residential development has occurred at a greater proximity from the city center and demonstrated less of a relationship with the surrounding city fabric. Commercial development appears to have largely followed the path of the residential development, first extending southwest along West Lincoln Street to the early post-war subdivisions, and increasingly to the north along Jackson Street from 1986 to the present.

Closely associated with the direction of growth is the concept of centrality. Centrality has been defined as “the degree to which residential or nonresidential development (or both)
Figure 6-15: Commercial development in Tullahoma from 1999-present

Source: Tullahoma GIS and State of TN Comptroller of the Treasury
is located close to the central business district (CBD)” (Galster et al 2001). Tullahoma exhibits a low degree of centrality in the patterns of both its residential and commercial development. As observed as a development phenomenon over time, residential development continues to increase its spatial extents and exhibit a greater decline in centrality, while the outward expansion of commercial development appears to be more contained after reaching its extent in the period from 1986 to 1999.

Rate of Development

Commercial Development

The period from 1986 to 1998 witnessed a boom in commercial development in the city; development during this twelve year period nearly doubled the commercial land usage existing prior to 1986. The average parcel size of land developed during this period more than doubled, rising to 1.88 acres from 0.71 acres. Thirty-four percent of the city’s commercial parcels were developed after 1985, but these comprise 57% of the commercial land use acreage in the city. Commercial development in the nine years that have elapsed since 1999 has not continued with the same intensity, but the trend of large commercial parcels has persisted and the average parcel size of the development that has occurred is comparable to that of the preceding time period (1.75 acres).

Residential Development

As it is beyond the scope of this study to classify and identify the date of construction for all individual residential properties in and around the city, analysis is limited to major development that could be distinctly classified as falling into one of the three time periods (primarily development located within subdivisions). The intent of this analysis is to determine general development patterns and the method employed is sufficient to achieve this; however, the data may not produce reliable results in terms of assumptions about average parcel sizes and characteristics. Incremental development from all three time periods appears to be randomly scattered throughout the city, particularly in the periphery and the urban growth boundary, but has not been included in this assessment.

Most of Tullahoma’s residential growth occurred prior to 1986, with an average parcel size of 1.58 acres. This indicates that low density residential development patterns had already been established as the norm for the city by 1986. In recent years, the rate of residential development appears to have declined with only 196 acres being developed from 1999 to the present. The average parcel size appears to have declined with each subsequent time period since 1986, but these figures most likely reflect inaccuracies resulting from the exclusion of incremental development in the calculations. It is anticipated that the inclusion of incremental development within the study area would revise this value to

Figure 6-16: Summary of commercial development by time period

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Acres Developed</th>
<th># of Parcels</th>
<th>Avg. Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-1986</td>
<td>206</td>
<td>289</td>
<td>0.71</td>
</tr>
<tr>
<td>1986-1998</td>
<td>182</td>
<td>97</td>
<td>1.88</td>
</tr>
<tr>
<td>1999-present</td>
<td>91</td>
<td>52</td>
<td>1.75</td>
</tr>
</tbody>
</table>

Source: Tullahoma GIS and State of TN Comptroller of the Treasury Real Estate Assessment Data
show that the low density paradigm continues to persist, particularly in the territory of the city’s urban growth boundary.

**Continuity**

Continuity refers to “the degree to which developable land has been built upon at urban densities in an unbroken fashion” (Galster et al. 2001). The continuity of Tullahoma’s urban fabric varies by area and by time period. The commercial core of the central business district, the historic residential areas surrounding the CBD, and the pre-1986 residential development in the southern portion of the city demonstrate the highest degree of development continuity in the city. The continuity of the urban landscape however has disintegrated with the expansion of residential areas in the north. The jagged form delineated by the city’s boundary underscores the low degree of continuity of the urban form, particularly in the north portion of the city, and the impacts of haphazard annexation.

The initial expansion and development of the Jackson Street commercial artery was discontinuous, as exhibited by the distribution of developments from the pre-1986 time period. Gradually over time however, the commercial development along this strip has demonstrated a higher degree of continuity. In this instance and throughout the city, it appears that land ownership has played a role in Tullahoma’s development patterns. The persistence of undeveloped parcels within the city as well as the appearance of infill (albeit low density in character) since 1999 in areas surrounded by older development are indicative of land that has been reserved by local property owners for future development.

**Land Use**

Mixed use refers to “the degree to which two different land uses commonly exist within the same small area” (Galster et al. 2001). Tullahoma’s development patterns are highly characterized by single use districts and a distinct separation between residential and commercial functions. This division is clear in observation of both the actual land use patterns and the local zoning map (Figure 6-18 and 6-19). The small area of the central business district and the older residential areas within walking distance surrounding it have historically stood as an exception to this. However the balance that once existed has yielded to changes in local residential preferences; residents have relocated to newer developments as many of these homes have gradually become occupied by office and commercial uses. The disjunction and distance between uses has intensified with the expansion of residential development, and the relationship between the central business district and its surrounding city has disintegrated. The local zoning districts reinforce the continued proliferation of this trend.

The majority of land within the urban growth boundary is zoned by Coffee County as RS-1,
Figure 6-18: Land use in Tullahoma

Source: Tullahoma GIS
Figure 6-19: Tullahoma's Zoning Districts

Legend
Zoning Districts
- C-1
- C-2
- I-1
- M-1
- OS-1
- R-1AA
- R-1A
- R-2
- R-3

Source: Tullahoma GIS
Figure 6-20: Zoning Map of Tullahoma's Urban Growth Boundary

Source: Coffee County Department of Codes and Safety
Figure 6-21: Land use in Tullahoma’s Urban Growth Boundary

Source: Tullahoma GIS and Tennessee Spatial Data Server
Suburban Residential with the exception of a small pocket of land zoned C-2, General Commercial (Figure 6-20). The RS-1 zoning designation permits residential development along existing arterial or collector roads, or on streets brought up to these standards by developers (Coffee County 2003, Article 4, § 4.042). Current land use data, shows the urban growth boundary to be largely comprised of forest and pasture lands (Figure 6-21). The minimum lots sizes of less than one acre in the urban growth boundary territory (2003, Article 4, §4.042) are insufficient to discourage the conversion of this land and the features that instill the region with character and natural beauty, to a landscape marred by the proliferation of single-family tract housing. Analysis of the development that has occurred in the urban growth boundary since the passage of the Growth Policy Act attests to this, exhibiting an average parcel size of 1.37 acres.

**Conclusions**

Low density development patterns appear to be deeply entrenched as the norm in Tullahoma. This pattern was largely established prior to the adoption of the city’s Comprehensive Development Plan in 1986, and has persisted despite the passage of the Growth Policy Act and the County-wide Growth Policy Plan of Coffee County. New peripheral development has appeared despite the existence of undeveloped land in the city. Some infill has occurred but the city still exhibits a low level of density, continuity, and connectivity as a result of the inefficient land utilization patterns established over the years. Rather than resulting from promotion through growth management practices, the limited infill that has occurred is not necessarily compact and appears to be the result of property owners exercising their option to develop property they have previously held in reserve.

Although the ages of the structures that comprise the area’s incremental development have not been identified in this study, the urban growth area appears to be scattered with predominantly residential development of varying time periods; again, low density patterns appear to be the norm. At this point in time intensive development within Tullahoma’s urban growth boundary is limited. This most likely however has resulted from a lack of development pressures rather than policies limiting outward expansion, as a complete cessation of new subdivision development in the urban growth boundary has not been observed. The characteristics of these outlying residential clusters do not appear to be distinctly dissimilar from their counterparts within the city limits. If forces inciting new growth were to materialize in Tullahoma, proliferation of these patterns in the periphery could be anticipated accompanied by a transformation of the surrounding rural landscape.
CHAPTER 7: CONCLUSIONS AND RECOMMENDATIONS

Has Tennessee’s Growth Policy Act made an impact to date in Tullahoma, Tennessee toward its goal of promoting local planning that “minimizes urban sprawl”, and is this objective supported by the details of the state legislation and local plans, policies, and regulations influencing its implementation?

How can the concerns revealed by this study be addressed to establish a stronger connection between local planning and the intent of the Growth Policy Act to minimize urban sprawl?

Introduction

This concluding chapter summarizes the research findings regarding the effectiveness of Tennessee’s attempt to promote local planning that minimizes urban sprawl, as evidenced by local implementation of the state’s growth management legislation in the city of Tullahoma. As a final component of this inquiry, recommendations are provided based on the three preceding analysis phases and existing literature on the subject of growth management. After identifying specific weaknesses, potential approaches are presented to encourage alignment with the articulated objectives of the state growth management legislation. The chapter concludes with discussions of the future of growth management in Tullahoma, Tennessee; the relevance of these findings for other Tennessee cities; and areas of future research pertinent to this study.

Findings and Recommendations

Tennessee’s Growth Management Policy

Summary of Identified Issues at the State Level

A number of problems have been identified with the regulatory, institutional, and consistency provisions of Tennessee’s growth management legislation. Exhibiting over-confidence in the capabilities and desires of municipalities to engage in growth management planning, local discretion is pervasive in all aspects of the Growth Policy Act’s implementation and compromises its effectiveness. The regulatory mechanisms mandated are only suitable to augment comprehensive planning, yet the legislation fails to require local comprehensive planning or actively promote it on a voluntary basis. Local discretion also extends to the delineation of the urban growth boundaries, with the state making optional the use of professional planning assistance in determining their extents.

Mandatory participation is not enough to guarantee growth management effectiveness in the face of the program’s institutional weaknesses. Growth policy plans receive only cursory review if they meet minimal requirements. Furthermore, the state has weakened the institutional capacity of local governments to promote efficient land utilization by failing to create general enabling legislation for the exaction of impact fees. Absent local initiative to minimize sprawl, the creation of a growth policy plan may be nothing more than the fulfillment of a state-imposed requirement to maintain funding eligibility.

Consistency provisions are weak and vague, and lack a process to ensure enforcement. The aforementioned institutional weakness of insubstantial state review compromises vertical and horizontal consistency. Failing to recognize the interdependence of the growth management ef-
forts of adjacent jurisdictions, neither a regional or state entity is designated to ensure horizontal consistency. Without mandatory involvement of an entity to ensure uniformity in the quality and interpretation of data and its translation to local planning practice and growth management mechanisms, internal consistency also suffers. Further contributing to the uncertainty of Tennessee’s growth management efforts is the failure to require municipalities to adopt local development regulations and ensure that proper land use controls are in place to effectively minimize urban sprawl.

**State Level Recommendations**

Currently, Tennessee’s Growth Policy Act provides a timid framework for growth management planning as the state appears hesitant to challenge the autonomy of their municipal and county governments for the sake of sprawl minimization. Strengthening the legislation will require regulatory and institutional changes. At a fundamental level, growth management is highly dependent upon local comprehensive planning and land use controls, particularly zoning and subdivision regulations. These basics of local planning, and their quality, must first be addressed prior to the state imposition of complex growth management mechanisms such as urban growth boundaries.

An additional administrative burden is placed upon local governments to fulfill the requirements of the Growth Policy Act, yet in its current form it is unlikely that these governments will reap any of the benefits the legislation aspires to promote. The state has shirked its responsibility to provide the necessary support for local governments to engage in growth management and make this vision a reality. Municipalities should have a full range of growth management tools at their disposal, including the authority to exact impact fees. An expansion of the role of the Local Planning Assistance Offices (LPAOs) could address several of the existing inadequacies. If growth management planning is mandated by the state then the use of technical planning assistance should not be voluntary (or only available on a contractual basis) and should be provided by the LPAOs. With greater involvement in the production of local plans and expanded review and approval authority, the LPAOs could also work to coordinate the efforts of adjacent jurisdictions and ensure that urban growth boundary delineation is based upon substantiated needs and projections.

**Local Implementation in Tullahoma, Tennessee**

**Summary of Identified Issues at the Local Level**

Tullahoma exceeds the minimal requirements for planning established by the state and the Growth Policy Act, yet few would recognize the municipality as a practitioner of growth management. The city has a comprehensive plan, zoning, and subdivision regulations; however, these documents do not reflect growth management goals. The regulations do not explicitly promote inward growth or the utilization of vacant land within the city. Low-density residential zoning dominates both the city and its urban growth boundary, thereby promoting dispersed development patterns. Minimum lot sizes in the periphery are not substantially large enough to discourage single-family tract housing, yet within
the city they are too large to allow for urban densities. Cluster subdivisions and conservation subdivisions which could provide an opportunity to preserve open space and utilize land more efficiently are not permitted as-of-right.

Local institutional support for growth management also appears to be inadequate. The local government’s inability to collect impact fees from developers can be attributed to the state, although it is unknown whether or not Tullahoma would exercise the right if it were available to the municipality. The new Subdivision Regulations miss an opportunity for the local planning administration to influence the nature of development in critical early project phases by failing to mandate the submittal and review of sketch plats. Institutionally the local government’s attitude toward development can be characterized as passive and permissive, seeking to encourage any form of development and ensure that ample land is available for growth. The minimal actions required to successfully comply with the requirements of the Growth Policy Act do not ensure vertical consistency with the state’s objective to minimize sprawl and a strong local commitment to sprawl minimization is not evident.

To a substantial degree the local documents persist in perpetuating pre-growth management planning norms and a divergence from these practices has not materialized since the passage of the Growth Policy Act. This situation that is not surprising given the aforementioned weaknesses with the state legislation. The misalignment with the state’s goal of sprawl minimization is less expected in the Countywide Growth Policy Plan and the Subdivision Regulations. The city seems reticent to modify its current growth patterns or restrict future development opportunities, and growth management’s only appeal locally appears to be based on the principles of efficiency the movement promotes—concepts readily embraced, at least rhetorically, by many small towns with limited resources. The planning practices of Tullahoma confirm that cities do not necessarily embrace the growth management goals espoused by the state, particularly where growth management is not imperative. The newer local documents reflect the state’s failure to incite change and Tullahoma’s practices demonstrate that compliance with the state legislation does not necessarily result in planning that is in alignment with the state’s objective of sprawl minimization. The analysis of local development patterns lends further validity to these findings.

**Local Level Recommendations**

Absent local initiative for growth management, state policy mandates are likely a prerequisite for major changes at the municipal level. It is anticipated that the recommended changes at the state level would precipitate many of the following local recommendations. More stringent state requirements bolstered by greater access to technical planning assistance, oversight, and enforcement are the most likely impetus to make growth management a reality. However, local policy changes undertaken by the city’s own volition could drastically improve the viability of growth management in Tullahoma.

It is a city’s comprehensive plan, zoning ordinance, and subdivision regulations that typically exert the greatest influence on local development patterns. The analysis of local planning
documents in Tullahoma has clearly revealed provisions exhibiting misalignment with accepted growth management practices. In order to manage growth and encourage efficient land use, minimum rather than maximum densities should be articulated for urban districts. Zoning districts requiring large lot sizes of ten acres in the urban growth boundary can be used to protect rural fringe land and discourage single family tract housing. By concentrating development in one part of a site in order to preserve open space in another, conservation and cluster subdivisions provide a critical opportunity in a town like Tullahoma that is rich with scenic and natural assets. Failure to permit them as-of-right provides a disincentive for developers to propose these design solutions and sacrifices an opportunity to promote development that strikes a balance between conservation concerns and the need for growth. Similar flexibility is needed in the promotion of infill development to take advantage of existing undeveloped land and redevelopment opportunities within the city, as the current large lot and setback requirement make such development difficult or infeasible.

**Final Conclusions**

**Broader Implications**

This research has revealed changes that must be addressed in order to strengthen state and local growth management in Tennessee and to enable state growth management to become more than merely a legislative mandate with limited impact in Tullahoma, Tennessee. Many of the issues identified by this research are centered on the state’s growth management policy, and therefore are potentially detrimental to the growth management efforts of all cities in the state regardless of their size. Yet small cities face additional challenges given their often limited resources. There are 154 cities in Tennessee; Tullahoma, with a population of less than 20,000 ranks as the 28th largest (U.S. Census 2000). The landscape of the state is dotted with small cities that likely face similar growth management challenges. An evaluation tool has been created to look at the implementation of state growth management at the local level and identify problems with state and local coordination. The study, relevant as an application for other localities and for this specific planning context, has demonstrated a process by which Tennessee municipalities can evaluate their local planning documents and identify how practices can be modified to reinforce the intentions of the Growth Policy Act.

If Tennessee is indeed representative of the newest generation of growth management programs, the study has potentially identified concerns that may be paralleled in other states. While earlier programs had targeted foci—environmental issues, concurrency, sprawl minimization—the programs of the fourth generation or smart growth phase have been acknowledged as broadening the umbrella of issues they attempt to address. In the case of Tennessee while the legislation’s stated intent encompasses many concerns rhetorically, its provisions do not serve as a means to achieve those ends. The study has underscored the importance of assessing the details and nuances of state growth management policies as well as their implementation in order to determine the true validity of the legislation and its purported objectives.
Areas of Future Research

Expanded Analysis of Development Patterns

The framework of this research has provided an evaluation tool that can be undertaken with limited means. However, with the availability of additional resources in terms of time or personnel the study would benefit from expanding the analysis. Exploration of the traits and spatial distribution of incremental development in Tullahoma and its urban growth boundary would be useful in supplementing the existing research. Documentation and analysis of shifts in the internal characteristics of neighborhoods over time would provide information about localized impacts of development regulations at a smaller scale.

Analysis of Rural Land Conversion

A 2006 study by Clark and Howell proposed a method for tracking localized farmland conversion in Tennessee, applying their study to one county in the eastern part of the state. Tennessee’s Agricultural, Forest, and Open Land Act of 1976 created a property tax program by which farmland meeting certain qualifications (the tract is at least fifteen acres and it is being actively farmed or serving as the residence of a family that has farmed the land for at least twenty-five years) can enroll in the program to benefit from a modified property tax structure in which taxes are based on the land’s use value rather than the more costly fair market value. If the land no longer meets the eligibility requirements, it is removed from the program and “rollback taxes” are issued; program withdrawal therefore creates a record in the county tax assessor’s office that may indicate the conversion of a farmland parcel to developed uses. This method could prove useful in quantifying the conversion of land in Tullahoma and Coffee County.

Analysis of Additional Cities

As indicated previously, the issue of mis-alignment between small town planning and state growth management intentions may be pandemic across the state; based on the study of one small city however this generalization may obscure the successful practices of singular cities that are effectively implementing the Growth Policy Act. Future research is needed to determine the extent of the planning problems in the state as it is imprudent to discount the efforts of all small cities as a collective group. This additional research may reveal some towns to be more effective at managing growth and thus provide potentially transferrable lessons that other small cities can use to inform local practices.

Concluding Observations

A distinct local preference for single-family detached housing has been revealed by the analysis of local development patterns; growth management does not require the abandonment of this predilection. If proper regulatory support is in place it is possible for this preference to be realized in a manner that exhibits more efficient utilization of the land and maintains the characteristics that make it desirable. Through planning and conservation, compact neighborhoods can be imbued with a wider range of amenities in terms of usable open space, interconnectivity, and preserved natural surroundings. This enhancement of the quality of development is the underlying goal of growth management.
While growth management and the concerns of smart growth may not currently be a local priority in Tullahoma, changes in the planning context may alter this perspective and eventually necessitate changes in local practices. An expansion of local employment opportunities could bring new residents to town and create development pressures. The U.S. Air Force is currently considering AEDC as the site for its Common Battlefield Airman Training (CBAT) facility, a program expected to generate 800 new jobs directly and 300 indirectly (Hiers 2007). A nine-percent increase in the town’s median age from 34.8 in 1990 to 38 in 2000, points to shifts in local demographics that may impact local residential preferences (U.S. Census 1990 and 2000). An aging population may create new demands for neighborhoods with greater connectivity and walk-ability, as the mobility of older age brackets is often hindered by scattered development patterns. Assumptions upon which the 1986 Comprehensive Development Plan was based are also eroding, as evidenced by the recent escalation of gas prices. Contrary to the Plan’s projection that “alternate fuels and technologies are anticipated to mitigate the loss and allow for urban and economic expansion” (Tullahoma 1986, 8), this has not materialized. In addition to the fiscal burdens placed upon the municipality, dispersed development patterns are now beginning to financially impact households as their transportation costs rise due to automobile dependence.

These shifts may lead to broader public support for changes in local planning, yet enhanced recognition of the influence that local policy exerts upon the physical fabric of the city is also needed. The gradual changes noticed over time throughout the rural countryside—a new string of homes along a rural stretch of road, a new subdivision where there was once a scenic vista—are enabled by local regulations. Influence over the nature and quality of development is not beyond the scope of local regulatory authority. If preservation of natural assets and the scenery of Middle Tennessee are of value to citizens, recognition of this can lead to the creation of land use controls that shape the built environment so that development is in alignment with this priority.

Because the problems of sprawl extend beyond local jurisdictional lines, the coordination of efforts at a regional or state level is critical to the success of growth management. It is apparent that the nuances and provisions of Tennessee’s legislation require fine-tuning and revision, but the state has taken an initial step in a positive direction with the passage of the Growth Policy Act. The intentions articulated by the legislation are laudable, and the state should be commended for initiating state growth management efforts. Full participation by the state’s municipalities indicates that Tennessee’s cities will respond to state-imposed planning mandates. Tullahoma duly fulfilled the obligations set forth by the 1998 growth management legislation as best they were able given limited local planning resources and state support. Bolstered by greater state assistance, potential exists for the realization of the Growth Policy Act’s intentions through future program iterations featuring strengthened mandates.
Figure 6-22: Historic barn and property in Tullahoma’s UGB

Source: Lann Brumlik
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