

Plan of Thompson's Station

Draft June 6, 2006

PART ONE: BACK GROUND REPORT

For planning purposes, the Thompson's Station Planning Commission authorized this document to provide a guidepost to all land-use and transportation decisions for the Town of Thompson's Station. This document is created for the Thompson's Station Planning Commission, the Thompson's Station Board of Mayor and Alderman, the town staff, and all town stakeholders. It is designed to encompass the goals and objectives in all town planning activities. This document functions as a *Land-use and Transportation Policy Plan* for the Town of Thompson's Station. It is divided into two components: part one is a background report and part two contains the proposed development plan and transportation improvements.

Section 1: Introduction

The Town of Thompson's Station is at a crossroad in its evolution as an incorporated municipality. After just a decade of existence, the town now must face, and plan for unprecedented growth. As such, this *Plan of Thompson's Station* is presented to provide some direction as the town faces the challenge of balancing the impending growth in a manner that respects the rural character and history of the town. It must be noted at this point that this plan can only function in concert with the other land-use regulations, the property enforcement by town officials, and the ongoing input from all the stakeholders within the town. *MAP 1 TOWN LIMITS AND URBAN GROWTH BOUNDARY* illustrates the town's corporate limits and urban growth boundaries as of July 1, 2006.

MAP 1 TOWN LIMITS AND UGB

Purpose of the Plan

The purpose of this document is to provide Thompson's Station, Tennessee with a policy plan for the future development of land and transportation facilities. A Land-use and Transportation Policy Plan is an essential planning instrument for a community with the primary purpose of producing an overall development plan and identifying strategies for implementing the plan. The objective of such a plan, as outlined in Section 13-4-203 of *Tennessee Code Annotated* is to serve as a guide for "accomplishing a coordinated, adjusted and harmonious development of the municipality which will, in accordance with existing and future needs, best promote public health, safety, order, convenience, prosperity, and general welfare as well as efficiency and economy in the process of development."

The *Plan of Thompson's station* covers a planning period of approximately of fifteen years, 2006-2021. The information presented in this plan should be used as a framework to guide municipal and county officials, community leaders, business owners, citizens, and other stakeholders as they make decisions that effect the future growth and development of the town. The plan is not intended to supersede the responsibility or authority of local officials and department heads. Instead, it is designed to give the public and private sectors a basis to make better decisions about land- use development and transportation infrastructure. The development goals, objectives, and policies and the implementation strategies presented in this plan should be periodically reviewed, and when necessary, updated to reflect unanticipated occurrences or trends. At the very least, a five year review process should be established to update the plan to reflect the current needs of the town.

Section 2: Frame of the plan

This Plan formulates a coordinated, long-term development program for the Town of Thompson's Station's and its identified projected growth area. It is divided into two separate parts. Part One of the plan is designed to set a baseline of information relating to the goals of the town, environmental constraints, land-use, and transportation infrastructure. An amalgamation of this background information provides all town stakeholders and decision- makers with maps and data from which knowledgeable choices may be made about growth and development issues facing the town. Part Two of the plan contains several components that, taken together form a Development Plan for the town. The components contain information for the proposed development of the town relating to intensity of development, traffic improvements, and the construction of greenways. The proposed Development Plan lays out the manner in which growth shall occur within the Town of Thompson's Station. It must be noted at this point that this *Plan of Thompson's Station* is just one tool in the land-use regulation tool box designated by the state to the town, and, as such, this plan must be used in conjunction with the other land-use regulations to allow the town to truly utilize all the regulations available to both promote and guide the development over the next fifteen years.

Scoping

In the fall of 2004, and again in the Christmastime of 2005, the stakeholders of the Town of Thompson's Station were surveyed in order to gauge the public's vision on the way to best structure new land-use regulations, including the comprehensive plan, the zoning ordinance, and the subdivision regulations. Additional information has been garnered though the meeting of a plan and steering committee and through the public input meetings. The results of the surveys and meetings from the core of this plan. The surveys and meetings served as the scoping phase for this plan. Scoping is the issue-gathering phase of any planning process that sets the framework for the actual work-product that then sets the goals by which new growth and development will occur within the town. The goals, as stated below, are a direct product of the scoping process.

Goals

The following are the stated goals of the Planning Commission of the Town of Thompson's Station, Tennessee in the development process:

- A. To conserve open land, including those areas containing unique and sensitive natural features such as woodlands, steep slopes, streams, floodplains, and wetlands, by setting them aside from development;
- B. To provide greater design flexibility and efficiency in the siting of services and infrastructure, including the opportunity to reduce length of roads, utility runs, site grading and the amount of paving required for residential development;
- C. To reduce erosion and sedimentation by the retention of existing vegetation, and the minimization of the development on steep slope;
- D. To promote the infiltration of storm-water on-site, thereby helping to reduce groundwater run-off
- E. To provide for a diversity of lot sizes, building densities, and housing choices to accommodate a variety of age and income groups, and residential preferences, so the community's population diversity maybe maintained;
- F. To implement adopted Town polices to conserve a variety of irreplaceable and environmentally sensitive resource lands, including provisions for reasonable incentives to create a greenway system for the benefit of present and future residents;
- G. To minimize impacts on environmental resources (sensitive lands such as wetlands, floodplain, and steep slopes) and disturbance of natural or cultural features (such as mature woodlands, hedgerows and tree lines, critical wildlife habitats, historic buildings and fieldstone walls); as well as to provide opportunities to enhance or restore existing resources that been diminished or degraded through past land management practices;
- H. To protect areas of the Town with productive agricultural soils or future agricultural use;
- I. To create neighborhoods with direct visual access to open land, with amenities in the form of neighborhood open space, and with a strong neighborhood identity;

J. To provide for the conservation and maintenance of open land within the Town to achieve the above-mentioned goals and for active or passive recreational use by residents;

K. To conserve scenic views and elements of the Town's rural character, and to minimize perceived density, by minimizing views of new development from existing roads;

L. And to improve all traffic networks within the Town, by requiring connectivity and safety in all public ways within the Town.

Section 3. Environmental Constrains

The natural environment, that is, the environment existing prior to urban development often dictates the pattern of land-use in a community. Simply put: all development occurs within a natural environment, and that environment imposes constraints and limitations on all development. Ignoring these factors can prove to be extremely costly to specific property owners and to the community as a whole.

Not all land is suitable for development. Therefore, as land-use development occurs, environmental constraints, which cannot be altered, must be considered in the plans for development. The limits and types of land-use should be responsive to the environmental constraints in order to protect the welfare of the general populace. Through increased knowledge of these environmental constraints and the appropriate use of the land, the mistakes of the past can be avoided for the future development. The purpose of this section is to review and evaluate the environmental constraints influencing the land-use patterns in the Town of Thompson's Station and its projected growth area.

This section is organized by segregating out each individual environmental constraint that affects the growth and development within the Town of Thompson's Station. However environmental constraint does not influence development independently and, as such, a comprehensive understanding of all environmental constraints within the Town is vital to allow growth that is minimally harmful to the environment, both built and natural. Therefore, *MAP 2 ENVIRONMENTAL CONSTRAINTS* presents a composite map all the environmental features within Thompson's Station. The remainder of this section examines, in a more in-depth manner, the topographical and hydraulic factors with the town.

MAP 2 ENVIRONMENTAL CONSTRAINTS OF THOMPSON'S STATION.

Topography

Topography of an area is one of the key defining area characteristics that dictate where growth is suitable and those areas that should be persevered as natural areas. Most important for the town are those areas of extensive slopes. Slope is the degree of rise or fall, or an expression of steepness, over land surfaces. A slope of 20 percent indicates the land elevation will rise 20 feet for each 100 feet of horizontal distance traversed. Those areas with moderate to steep slopes, including hills and ridge tops, should be persevered to help the Town retain important viewsheds.

In the analysis of slopes in Thompson's Station, a four category system was utilized. These have been chosen because they are generally agreed to be of particular value in determining the most appropriate use of the land based upon its slope. The following is a slope-development chart that should govern new developments within the town.

Percent of Slope	Nature of Slope	Development Suitability
0-5	Virtually flat	High Suitability
6-12	Gentle Slopes	Moderate Suitability
13-20	Moderate Slopes	Low Suitability
20+	Rough and Steep	Not Suitable

Hydrology and Land-use

Hydrology is the study of water-its distribution, quality and its effects, both on the surface and below. Hydrology is significant to this plan because land-use is perhaps the most important determinant of some characteristics of water. Hydrology is vital in planning for new growth in Thompson's Station because of the presence of the West Harpeth River within the Town.

The use of land is always primarily determined by the hydrologic characteristics of an area. An understanding of the impact of urban land-use on the local hydrology is necessary for making progressive decisions in allowing new growth. Thus, the following is a brief outline of the hydrologic impact of land-use development.

The existing pattern of land-use within an area has a direct affect on the hydrology of an area. The more impervious surface an area has, the more severe the stormwater run-off problems become. In an area with troublesome drainage problems, such as Thompson's Station, all community decision-makers need to be sensitive, aware and active about land -use decisions and the hydrologic effects of those decisions. Each new development should be thoroughly examined for its impact on the hydrologic system of the town.

Management of the natural drainage ways within Thompson's Station is an essential component of the of the Town's ability to ensure quality of life for the residents and protection of private property. As previously mentioned in the slope section of this chapter, the West Harpeth River is the primary drainage area for the Town. To ensure quality growth, new developments should be designed with as little disruption of the natural drainage ways as possible. By allowing the natural drainage ways within the Town to remain intact, the impact of all new developments will be lowered, resulting in less flooding problems.

The West Harpeth River provides the town with many areas in which flooding is a challenging problem, especially as new development occurs. All new development in the town should be reviewed with a higher understanding of the linkage of increasing impervious surfaces, disruption of the natural drainage ways, and flooding problems in the area.

As long as the floodplains consist of trees, open fields, or marshes, flooding is not problematic. However, when the people's activities occupy and disrupt the floodplain, hazards develop. It is therefore, only logical that, in order to eliminate flood hazards development must be kept out of the floodplain. This can be accomplished in Thompson's station through a combination of the enforcement of floodplain management and progressive land-use controls.

Section 4 : Existing Development Pattern

This section provides *MAPS 3 EXISTING LAND-USE* of the development patterns in the Town of Thompson's Station and *MAP 4 EXISTING MAJOR THOROUGHFARE PLAN*. This section provides a snapshot of the town's land-use and transportation network in the spring of 2006. The Town's existing development pattern forms a framework through which new development options must be considered.

MAP 3 EXISTING LAND USE

MAP 4 EXISTING MAJOR THOROUGHFARE PLAN

PART TWO: DEVELOPMENT PLAN

Section 5: Proposed Development Plan

This section of the *Plan of Thompson's Station* contains the proposed elements of this plan including development patterns, greenway trails, a traffic improvement plan, and a set of *Design Guidelines* for the town. These components could function as stand-alone improvement plans for the town, but, taken together, they function as the Proposed Development Plan with *the Plan of Thompson's Station*. Thompson's Station, like most communities, was established and developed without any comprehensive plan, planning

commission, or regulations. For the majority of the community's history, it was a rural and agrarian area, but as urbanization and suburbanization has spread from the Nashville metropolitan area, a rapid increase in growth pressures has come to Thompson's Station.

It must be noted that growth will create change within the Town; however, these forces of change provide the Town a rare and unique opportunity to shape its future growth and development, while giving due respect to its past. In planning for the Town's future, the policy-makers and stakeholders of the Town should look to neighboring communities to see how to handle new growth and, just as importantly, how not to handle new growth. With a careful examination of the existing land-use, environmental constraints, and transportation systems, Thompson's Station may now take control of its own evolution. The following sections provide context for any new growth and development within the Town of Thompson's Station in terms of intensity of growth, greenways, and traffic.

Section 6: Intensity of New Development

This section divides the town in to different segments, allowing different intensities of development within the Town based on traffic, utilities, topography, and surrounding development. These areas were developed through two primary means. First, the information gathered in the *SR-840/Columbia Pike Study* provided a baseline of data about the location of new development and the resulting intensity of development. Second, input was sought at a series of plan steering committee and public meetings from stakeholders of the Town. This series of meeting set about to determine how the Town should address impending growth and development. These meetings functioned as a visioning process for the Town and *MAP5 INTENSITY OF DEVELOPMENT* is the result of that visioning process.

MAP 5 identifies four areas of increasing intensity for the town. Intensity, in the context of this plan, means the scale and concentration of developed land in terms of density, traffic flow, and land use. The map divides the Town in to four segments increasing development intensity. The following ranges will be allowed intensity, as shown on the map, for each segment of Thompson's Station:

RED:

This district is intended to permit development in keeping with the rural character of the areas located west of the CSX Railway. The standards of this district ensure the development of the areas in a fashion that either permanently protects these areas or permits an interim use that will easily permit further development at the appropriate time. This district is particularly appropriate for areas with rough terrain and few public services.

YELLOW:

This district is designed to provide suitable areas for low density development characterized by open appearance. This district will consist of single -family detached dwelling and their accessory structures.

ORANGE:

This district is designed to provide suitable areas for medium density residential development where urban services and facilities, including public sewer, are provided or where the extension of such services and facilities will be physically and economically facilitated.

GREEN:

This district is designed to provide suitable areas for higher density residential development where urban services and facilities, including public sewer, are provided or where the extension of such services and facilities will be available prior to development.

MAP5 INTENSITY OF DEVELOPMENT

Section 7 : Traffic Improvement Plan

This section plan provides a working component of the plan that specifies the public ways within the Town of Thompson's station that are identified as in need of improvement due to increased use, deterioration, or other needs. *MAP 6 TRAFFIC IMPROVEMENT PLAN MAP* identifies those public ways that are in need of improvement within the Town of Thompson's Station.

The overall mission of the Traffic Improvement plan is to foster a multi-modal transportation system that enhances the quality of life within the Town of Thompson's Station. The Traffic Improvement Plan envisions a multi-modal transportation system that is compatible with growth objectives as expressed within Part One of the plan, is sensitive to the built and natural environments, and is accessible to everyone. The Traffic Improvement Plan seeks to build on the strengths of the current transportation system, while mitigating its weaknesses. It aims to preserve and maintain the current road system while improving safety. The Traffic Improvement Plan also works in conjunction with the Greenways, Bike, and Pedestrian Plan in section 8 to improve access, mobility, and livability in the town by expanding multi-modal options.

It must be noted that there are many factors over which the town policy-makers have no control. For example, many non-residents use the Town's transportation network as they travel into and out of Thompson's Station; the plan seeks to facilitate their movements while protecting the quality of life for Town residents. Budgetary issues must also be considered in the improvement

of any public ways. The Planning Commission and the Board of Mayor and Aldermen must consider new residential, commercial, or industrial developments based on its integration into the town's existing transportation system and the Town's fiscal ability to safely upgrade the transportation network.

MAP 6 TRAFFIC IMPROVEMENT PLAN MAP

Section 8: Greenways, Bikes, and Trail Plan

This section of the plan provides a working component for an interconnected greenways, bike and trail system for the Town of Thompson's Station. The end result of this element of the plan is to create a pedestrian network for the recreation and connectivity open to both residents and visitors to the Town. The Greenways, Bikes, and Trail Plan sets forth a detailed proposal for areas that should, when developed, provide land and /or finished greenways, bikeways or trails for the town's interconnected pedestrian network. *MAP 7 GREENWAYS, BIKES, AND TRAILS PLAN MAP* presents the interconnected pedestrian network for the Town of Thompson's Station.

The Greenways, Bikes, and Trail Plan is a modal element of the Plan of Thompson's Station. It provides direction to the Planning Commission, Board of Mayor and alderman, and Town stakeholders in establishing bicycle and pedestrian facilities within the Town. It also guides developers and property owners, as well as other organizations and private citizens, in establishing and interconnected pedestrian network during the development process.

Walking is the most basic form of transportation. Everyone is a pedestrian, including persons using wheelchairs and other forms of mobility assistance. Transit or automobile begin and end with a walk. Walking is often the quickest way to accomplish short trips in compact areas. Bicycling is the most energy efficient form of transportation ever devised, getting the equivalent of up to 1,500 miles per gallon (according to an MIT study). People who walk or ride bicycles are the most vulnerable road users, less protected from weather and more likely to be injured in a collision with a motor vehicle; they must often use facilities designed primarily for automobiles. The plan will assist the Town in creating a non-motorized system that is readily accessible to bicyclists and pedestrians.

MAP 7 GREENWAY/BIKES/TRAIL PLAN MAP