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Project Overview

For thousands of years, Kentucky served as the hunting ground and home to the Native American Mound Builders and later the Cherokee. These early Americans utilized the rich diversity of flora and fauna and abundant running water in the development of their respective cultures. As European settlers moved into the region they, too, recognized the value of the landscape and set to exploit its many attributes. In 1869, Elliott County was carved from portions of Morgan, Lawrence, and Carter counties. Over the last two centuries, Elliott County has witnessed the rule of the Regulators, a diamond rush, and a timber boom. Since the peak of the timber boom in 1910, Elliott County’s population has waned.

The purpose of this study is to analyze the current economic and physical conditions of Elliott County and identify its many assets. Opportunities for economic development, while preserving the quality of life and unique heritage of the region, will be identified. This study will provide the necessary planning and development guidance to deal with the inevitable changes and challenges facing the community in the years to come. This study will assist the residents and government of Elliott County to maximize the benefits of change and growth while minimizing costly mistakes, thereby protecting the county’s economic and natural resources while averting potentially destructive effects.

This study investigates the current and potential physical and economic conditions of the region and county. It includes a comprehensive county land use plan offering recommendations for growth and land utilization. The study also focuses on the city of Sandy Hook and its potential to serve as the economic and commercial center of Elliott County. Potential development recommendations will focus on emerging cultural and recreational tourism opportunities, particularly in the Laurel Gorge area.

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Chapter 1
Elliott County
Land Use Plan
**Introduction**

Kentucky State Statute 100 (K.R.S. 100) empowers and encourages county governments to control their future through various planning tools. Each county is expected to develop and periodically update a county wide master plan. Such plans should note all existing land uses and designate areas for future expansion. Since Elliott County does not have a comprehensive plan, the initial step in this study was to produce the framework for a comprehensive master plan. The first step in the process is to inventory existing resources. At the same time, citizens must be solicited for their opinions concerning the future of the county. This ongoing process results in a comprehensive land use plan which guides development, prioritizes public investment and designates resources to be preserved.

The first chapter of this study presents an inventory of the physical features of Elliott County. The input received from citizens during two public meetings was integrated into the analysis which is the final step leading to the development of a land use plan.

The resulting land use plan provides guidelines to ensure that land use decisions will allow for economic growth while maintaining a high quality of life and preserving the heritage of the county. Several goals were developed to guide the land use plan.

**Goals and Objectives**

**Goal 1: Create a county-wide land use plan.**

**Objectives:**

- Assess Elliott County’s natural resources and analyze their potential for future development.
- Develop land use guidelines for the State Road 7 corridor.
- Identify and evaluate economic, environmental, and social impacts related to the prison development.
- Encourage land development in areas with existing infrastructure.
- Preserve environmentally and historically sensitive areas.

**Goal 2: Stimulate economic development.**

**Objectives:**

- Explore agricultural alternatives.
- Promote local employment through development of entrepreneur programs, e-commerce, and tax incentives.
- Develop a solid waste management plan.

**Goal 3: Evaluate transportation system throughout the county.**

**Objectives:**

- Identify roads appropriate for scenic byways.
- Make recommendations about setback and development guidelines for scenic byways.
Regional Map

Elliott County is bordered by six counties. State Roads 7 and 32 divide the county roughly into quarters and provide the link to three major transportation corridors: I-64 to the north, The Bert T. Combs Mountain Parkway to the south, and the Country Music Highway (US 23) to the east. Elliott County is located in the center of a region with several state park lakes, wildlife management areas and the Daniel Boone National Forest.
**Landcover**

Types of land cover by their nature imply certain types of land use. In Elliott County the steep river gorges combine forest and rock outcroppings. Cleared land is generally in pasture or row crops. Similarly, cleared alluvial soils are also either pasture or row crops. The largest area of cleared land is in the northwest section of the county where soils are deeper and agricultural activity predominates.
**Geology**

Elliott County features two distinct geologic regions (see illustration). The Sandy Hook fault essentially divides the county in two. The northwestern part is characterized by steep gorges and broad, flat ridge tops. The southeastern part contains broad river valleys and the ridges are more narrow and steep.
Northwestern county profile.

Rolling to steep hills of the northwest

Little Sandy River valley

The plains, steep slopes and narrow bottoms of the Little Sandy River Gorge and its tributaries

Very steep hills and narrow creek bottoms in the upper slopes becoming wide alluvial plains toward the center of the county

Fig. 1-4
**Slope Analysis**

The slope of the land has a great impact on the suitability for development. Land with slopes less than 9% are well suited for residential and commercial development. Depending on the severity of steeper slopes, recreational or agricultural use is possible.
Agricultural Suitability

Elliott County has three distinct types of soil. In the northwest part, the soils on ridge tops are moderately deep and suitable for agriculture. In the southern part of the county, the river bottoms have deeper, sandy soils which are suitable for agricultural uses. The majority of the land in the southeast is typified by shallow soils on the ridge tops and steep slopes -- best suited for use as woodlands.
**Watersheds and Surface Water**

Elliott County possesses an abundance of surface water. Because of the county’s location and geological composition, it is at the top of two watersheds. This means very little water runoff from other counties drains into the county.

In Elliott County, 95% of the water runoff drains into the Little Sandy River; 5% of the runoff drains into the Licking River. Thus, the citizens of Elliott County have control of water quality throughout the county. To ensure good water quality in the future, the county must carefully monitor waste water disposal, sewage treatment and possible industrial hazards.
Groundwater

The groundwater map identifies the two geologic sections (Kanawha and Cumberland Plateaus) and the three formations in which water is found. The Lee Formation, primarily in the northwest, can supply the water needs for most existing households in the county. The Alluvium areas, mostly in the southern section of the county, should be able to supply small municipalities with an ample water supply. The Breathitt Formation, found at steeper slope areas, can provide only a minimum water supply. Since many Elliott County residents rely on wells as their source for drinking water, maintaining high groundwater quality is important. Therefore, groundwater quality must be considered in any development plans and high pollution activities should be discouraged.

Fig. 1-9
**Water Service**

Elliott County consists of four water service districts: Sandy Hook, Rattlesnake Ridge, Rowan County and Morgan County. The north and west sections of Elliott County have the greatest water service available.

---

Fig. 1-10

PREPARED BY WATER RESOURCE DEVELOPMENT COMMISSION

EXISTING SERVICE AREA

PROPOSED SERVICE AREA

SANDY HOOK WATER DISTRICT
ROWAN WATER INCORPORATED
RATTLESNAKE RIDGE WATER DISTRICT
MORGAN COUNTY WATER DISTRICT
Population Density

Elliott County is divided into two census tracts. The western tract has approximately 4400 people or 2/3 of the population and the eastern tract has 1/3 or 2200 people. The northwestern portion of the county has deeper soils appropriate for agriculture, more buildable land, and greater availability to groundwater and this is reflected in the population distribution (see population density map).
Conceptual Land Use Plan

The conceptual land use plan was developed using information gathered from visits to Elliott County along with the previously discussed maps. The county is comprised of three distinctive types of terrain: the northwestern part is characterized by flat ridge tops; the southeastern part by steep, narrow ridges with wide, flat river valleys; and dividing the two are the steep, narrow gorges of the Little Sandy River.

The northwestern part of the county has deeper soils best suited for agriculture and it is recommended these areas be preserved for agricultural use. The Laurel Gorge is located in this section of the county and a set of guidelines have been prepared to preserve the unique characteristics of this important resource (see section on Economic Development in Chapter 4). These guidelines could be adapted in the future to cover the other three gorges in the county: the Big Gimlet, Big Caney, and Little Caney.

The southeastern portion of the county is composed predominately of narrow, steep ridges and wide alluvial plains. The alluvial areas are suitable for agriculture and could tolerate some limited development outside of the floodplains. The steep ridges are primarily forested and have shallow soils. It is recommended the ridges remain in woodland use.

There are four main areas recommended for development in the county: Sandy Hook, Isonville, the Grayson Lake area, and the State Road 7 corridor between the cities of Green and Newfoundland. Sandy Hook is the county seat and primary town in the county (see Chapter 3). Isonville is located in the heart of the folk art community while Grayson Lake is the northern gateway to the county and is the focal point of recreational activities (see Chapter 4). The State Road 7 corridor is where the new prison facility will be located. This corridor area will be subjected to the greatest pressure for development because of the introduction of municipal sewer and water systems for the prison (see Chapter 4).

There are several roads that exhibit spectacular views for the traveler and could be developed as Scenic Byways. In the northwestern part of the county the roads follow along the ridge tops and provide broad, long distance, sweeping vistas. While in the south and eastern portions of the county, the roads are located in the valleys giving the traveler more narrow corridor views. All of these roads provide the casual traveler with scenic views well worth the drive. The best scenic routes into the county are from the north along State Road 7 along Grayson Lake, from the west on State Roads 801, 519 and 7 along Cave Run Lake, from the south on State Road 7, and from the east on State Road 32 along Yatesville Lake.
Conceptual Land Use Plan

Fig. 1-12
**Proposed Land Use Plan**

Elliott County has many physical resources. It also can draw on its rich cultural history and its citizens as a resource. In developing a land use plan it is critical to consider both the physical and personal factors.

The biggest concern voiced by the citizens at public meetings is to maintain the quality of the environment. The Laurel Gorge is unique at many scales, from the county to the national level. Preservation of the Laurel Gorge is of utmost priority for the county, but they also want to share this treasure with others. The gorge possesses several rare and delicate animal and plant habitats. The Wild Flower Walk is already a nationally recognized event.

The gorge can become the keystone for recreation and tourism in the county. Elliott County has three other gorges: The Big Gimlet, Big Caney and Little Caney. These areas share some of the qualities of Laurel Gorge and the Laurel Gorge preservation guidelines could be adapted for these areas in the future.

Quality of life is another concern of the citizens. At first glimpse, Elliott County seems to be isolated from the rest of the state and country. Few manufacturing and employment opportunities have been available to the people. This isolation has actually afforded protection for the environment and scenic quality of the county. Elliott County has not had to face many of the environmental problems that came with the fast, unregulated growth of the 1950’s and 60’s. Elliott County has the opportunity to develop its resources in efficient and environmentally sound ways. The location at the top of two watersheds guarantees control over one of their most precious resources, water.
Proposed Land Use

Fig. 1-13
Elliott County also has a high concentration of another marketable resource, talent. The county has a large concentration of different types of artists, craftsmen and musicians. This resource will help fuel the tourism industry.

The are many potential recreation opportunities in the county. Camping, canoeing, fishing, hunting, hiking, biking, equestrian and ATV activities are popular in the county and could be marketed on a larger regional scale to boost economic development.

One final concern of Elliott County’s residents is the possibility of a large influx of people and pressures with development. Looking at the population trends for the last century, Elliott County has 1/3 less people now than in the 1900’s. This indicates that the county should be able to accommodate a 50% increase in population and still be under the carrying capacity present at the turn of the century.

These issues, along with the construction of the new prison, were taken into consideration in order to develop a set of land use guidelines. The improved State Route 7 corridor where the prison site is located will experience the greatest immediate pressure. If access to sewer and water systems are made available, development will follow. Immediate action should be taken to ensure proper development.

The prison facility will need access to sewage treatment. The present treatment plant in Sandy Hook is at 80% capacity and is located upslope from the prison site. This means that sewage must be pumped upward to the plant which will require a pressurized line. A pressurized line is difficult and costly to tap into and requires mechanical operations which are more prone to failure.

Elliott County would be wise to build a new sewage treatment plant in a location downslope from its users. Such a facility can utilize gravity flow instead of pressure and would better serve development between Sandy Hook and the prison.

The water supply will also need to be upgraded. Installing a minimum 10 inch water main would not only help provide water to the prison and development areas, but also improve fire protection and lower the county’s fire rating. This translates into better insurance rates, which would make development more economically attractive.

The prison will generate a need for overnight accommodations, restaurants and related services. This need can be used to help the county fulfill another goal, accommodating recreation and tourism. Development areas centrally located along Route 7 can maximize benefits for both the prison and the county’s tourism and recreation industries.

The prison will also bring a need for additional housing. The State Route 7 corridor is again a prime location because of the access to water and sewer systems. The construction of housing can also be a source of jobs for people in Elliott County. Careful placement of housing and layout of streets will ensure safe, efficient and attractive neighborhoods.

An immediate medical care facility will be required by the prison. The county would also benefit from this development. The State Route 7 corridor is a good central location for fast service to the prison and Sandy Hook as well as the recreation areas.
The placement of the prison facility in Elliott County can be the starting point for the county to move forward in the 21st Century. It could yield service demands and jobs that can be used to fuel the growth of the economy, tourism and recreation. The important issue is that prison construction will begin soon and land use guidelines need to be implemented quickly to avoid costly and irreversible mistakes.
Chapter 2
State Road 7
State Road 7 Corridor

A new medium security prison facility is planned near the intersection of State Roads 7 and 504. The facility is slated to open in 2001. Concurrently, State Road 7 will undergo extensive improvements between the cities of Green and Newfoundland.

These developments will have a significant effect on economic development in Elliott County. Proper planning is essential to prevent both costly and unpleasant mistakes; mistakes which could work against the county’s goal of attracting tourists.

A land use plan has been developed to address these issues specifically along State Road 7. Design recommendations have been included for more specific types of development.

The proposed prison will be similar to the Green River Correctional Facility in Central City, Muhlenburg County. The Green River facility has been in operation for five years and at present contains 932 inmates. The population of Muhlenburg County is 32,300 -- 5074 of whom live in Central City (2000 Rand-McNally Atlas).

According to David Higgs, physical manager at Green River, the prison has had the following negative and positive impacts on Central City and Muhlenburg County.

Negative Impacts - Green River Facility:

- Expenditure for outside services: $1 million/yr
- Shortage of rental housing
- Court system backlogged by increase in cases

Positive Impacts - Green River Facility:

- Current employment: 250 (70% from within county)
- Payroll: $5.4 million
- Many services contracted within county, e.g., agricultural produce, vehicular maintenance, etc.
- Two new housing subdivisions built and almost at capacity
- Two new 16-unit apartment complexes built
- Increase in pay scale at local businesses due to labor demand
- New judicial center built at county seat, Greenville
- New ultra-modern, 40-bed motel in Central City
- New convention center/hotel in Greenville
- Increase in number of combination gas/fastfood/convenience stores
- Remodeling of existing fast-food restaurants
- Expansion of fire department to Class A rating; acquisition of new pumper truck
- Ambulance service located in Central City
- Local hospital receives $250,000 in service from prison annually
- Water system expanded - prison uses 3 million gallons per month
- Sewage treatment plant expanded to handle 4 million gallons per day
- Construction of new electric substation by Kentucky Utilities
- Police department expanded to handle additional traffic around city and prison facility, i.e., employees, visitors, state officials, and vendors
Planning for New Correction Facility

The location for the proposed prison is near the intersection of State Roads 7 and 504 on a site with no existing sewer or water system source. State Road 7 eventually will be improved from the Carter County line to Sandy Hook. These improvements will increase the development potential along the corridor.

As the road improvements occur, the existing facility will need support enterprises such as motels, housing for new employees and general commercial development. The new prison should be considered a base for future economic development in the area. The most critical decision facing Elliott County is the infrastructure development related to the prison, particularly the sewage treatment.

Existing plans call for a 10” pressure line to transport sewage from the prison to the treatment plant in Sandy Hook. This existing plant is at 80% capacity and will require a significant upgrade in order to serve the prison. It is not clear whether the planned 10” line will be able to accommodate additional input from facilities such as new hotels/motels, restaurants, etc.

A more economically viable investment for Elliott County in the long term would be to construct a new water/sewage treatment plant down slope from the proposed prison. This would allow development along State Road 7 to proceed using the preferable gravity flow water/sewage system. A potential location for the new treatment plant is on the Little Sandy River near Green, northeast of the prison (Fig. 2-1).

Positive Impacts

- Increase in employment opportunities within county.
- Prison requirement for outside services the community can supply.
- Opportunity for agricultural alternatives to tobacco by providing the prison with locally grown produce.
- Opportunity for expansion of health care services.
- Need for overnight accommodations, restaurants, and retail businesses which could also benefit the tourism and recreational industries.
- Need for new housing and related services.
- Available workforce that can assist in community projects, such as trash clean up.

Fig. 2-1 An alternative sewage treatment location exists near the prison.
Clarifying Prison Misconceptions

There are many fears commonly associated with the development of a prison facility in a community. These fears include the devaluation of property, an influx of inmate families, an increase in crime, and outside economic and political dependence.

In the article “Myths and Realities in Prison Siting,” Crime and Delinquency (January 1992), David Shichor reports that a decline in property values does not usually occur and in many cases the opposite is true. He also determined that even if family ties remain after incarceration most families are not able or willing to move to the prison location. In fact, most inmates return to the communities from which they came. His research found that increased employment of residents helped to decrease dependence on outside economic and political assistance.

Correction facilities work hard to develop and maintain a positive community relationship so that any future expansion locally or construction of a new facility in another community will be welcomed.

Development of the prison facility will create much needed employment in Elliott County. The county should exploit this significant opportunity to update service infrastructure and introduce retail, commercial and service industries which can secure a stable future for its citizens. It is imperative Elliott County plan quickly and responsibly to ensure efficient, safe and attractive development in the area.

Figure 2-2 illustrates the entire corridor from Green to Sandy Hook with general land use classifications: residential, commercial/light industrial, and greenspace. The prison site and possible locations for a new sewage treatment plant and immediate medical care facility are among the specific inclusions.

Several impacts of the prison can be predicted and should be considered. The prison will generate a need for housing to accommodate relocated specialized workers. There also will be a need for overnight accommodations, restaurants, and service industries for prison visitors and employees.

As stated previously, the county’s existing sewage treatment plant is at 80% capacity and is located at a higher elevation than the prison site. Sewage from the prison would therefore have to be pumped uphill in pressurized lines for treatment. Pressurized lines are more likely to fail and are more costly to tie into than a gravity flow system. Building a new treatment plant down slope from the prison is a much better solution and has more potential for the long term economic development of Elliott County.

The prison also will require an immediate medical care facility not available currently in the county. Such a facility could serve the needs of the community while also providing care to the prison.
PROPOSED LAND USE ROUTE 7

Fig. 2-2
A more detailed plan (Fig. 2-4) illustrates cluster housing designs with limited access to State Road 7 and commercial development clustered for convenience, safety and efficiency.

Development plans also should consider the streetscape along the corridor. Improvements to sidewalks will increase pedestrian safety. Buffer plantings can be used to screen and accentuate development along the corridor. Growth along State Road 7 must be well planned to avoid hazardous or unsightly development which could negatively impact the tourism goals of the county (Fig. 2-3).

Fig. 2-3 Successful development would follow guidelines.
Chapter 3
Sandy Hook
Introduction

In 1869, Sandy Hook, then known as Martinsburg, became the county seat of Elliott County. Although the name changed, it has remained the heart of the county in terms of culture, heritage, and leadership. Nestled in the hills of eastern Kentucky, Sandy Hook rests in a tranquil valley, creating a unique relationship with the surrounding landscape. Since it is the county seat, is centrally located, and enjoys a close proximity to Laurel Gorge, Sandy Hook plays a very important role in the future of Elliott County, both physically and economically. The following goals and objectives have been formulated to guide the growth and development of Sandy Hook, while taking advantage of its special qualities.

Goals and Objectives

Goal 1: Plan for the efficient growth and redevelopment of Sandy Hook.

Objectives:

- Identify specific areas for future growth and development based on infrastructure and physical characteristics.

Goal 2: Maintain Sandy Hook as the cultural and economic center of the county.

Objectives:

- Retain local institutions, such as banks, government offices, churches, post office, schools, and library.
- Encourage new residential development in areas around the central commercial district.
- Encourage folk art and tourism-based businesses that will make Sandy Hook an attractive destination for day and weekend trips by regional tourists.
- Create attractive scenic corridors connecting Sandy Hook to community parks, Laurel Gorge and the Little Sandy River.
- Develop Main Street corridor design guidelines.
Conceptual Land Use Plan - Sandy Hook

The conceptual land use plan assesses the inventory, identifying opportunities and constraints to begin utilizing Sandy Hook’s land in a way that works towards achieving the goals and objectives previously outlined in this chapter. The plan explores the relationships of land uses to one another and seeks to increase the critical mass of Sandy Hook to ensure long term viability.

Providing both physical and visual linkages is a very important aspect of this plan. Connecting different elements using pathways, sidewalks, trails, or streets provides convenient access to every area within Sandy Hook. Connecting places visually using sightlines, landmarks, and viewsheds increases awareness of how these elements relate to one another. These connections also give a logical progression from one place to another. For instance, physically linking Route 32 more directly to the core of downtown allows pedestrians to safely and easily move through town. Locating a number of land uses along this path forms an orderly relationship between these areas. Providing a visual cue, such as a landmark, at the terminus or intersection of the path draws people to that point.

There is a need for more variety and interest in Sandy Hook. Placing different land uses adjacent to each other creates situations and opportunities for establishing a greater sense of community. For example, mixed-use areas next to residential infill and a town park allows for increased chances for residents to interact. Concentrating a number of businesses in a large commercial node brings people to a common place to shop and dine. Establishing areas within the city as public green spaces or parks allows for a more diverse range of activities to take place. Once these areas are strategically linked, a cohesive plan is formed. Separating incompatible uses also helps to maintain a unified scheme, such as buffer zones to keep the power station and sewage treatment plant separate from residential and recreational areas.

The potential opportunities and constraints are based on an analysis of an inventory consisting of several components, including: current land uses, circulation patterns, existing infrastructure, and important buildings and landmarks. Additional physical features that are part of this inventory include viewsheds, topographical information, and relationships between the town and the surrounding environment.

Opportunities
- **Cemetery:**
  Provides a good entrance to Sandy Hook with well-maintained grounds and recognizable landmarks
- **Natural features:**
  Little Sandy River has interesting natural features and connects to Laurel Gorge and the Ruin River
- **Main Street corridor:**
  High School, courthouse, etc. make Sandy Hook the physiological center of the county

Constraints
- **Route 32:**
  Lack of sidewalks and streetscape make it unsafe for pedestrian movement
- **Area near Main Street and Route 32:**
  Views of cleared hillside and pollution in the Little Sandy River are unattractive
- **Sewage treatment and transfer station:**
  Provides a visually unappealing backdrop that can be seen from the road
Conceptual Land Use Plan
Sandy Hook Land Use Plan

The conceptual land use plan is then finalized into a land use plan. This plan should be reviewed by the citizens and government of Sandy Hook and be adopted as a guide for future development. Some adjustments may have to be made in order to reach public consensus. The plan also will require periodic updates to ensure that land use decisions affecting Sandy Hook will work towards improving the physical characteristics of the town and the quality of life for the residents.

The overall land use plan for Sandy Hook establishes certain areas of land to be used for residential, commercial, mixed-use, public open space, agriculture conservation, etc. The plan recommends concentrated development along Route 32 and State Road 7 using valleys and setbacks to avoid unsafe and unattractive strip development. This would maximize Sandy Hook’s use of infrastructure, while maintaining a sense of community.

A forest preservation buffer area surrounds the town, assuring that Sandy Hook will keep its rural character by not infringing upon the existing landscape. On the interior of the buffer, a combination of existing housing, proposed residential, and commercial nodes tie into Route 32. These boundaries limit the expansion of new development so it remains confined within the valley. Within the northern boundary of the city, a large portion of existing agricultural land is proposed for conservation. This not only serves to keep valuable farm land intact, but also maintains a certain scenic quality that contributes to Elliott County’s identity.

The land use map for downtown Sandy Hook utilizes the buildable land, existing street system, and current infrastructure to combine different land uses into a dense central core. The nucleus contains mixed-use, commercial, government, additional proposed residential, public spaces and parks. Mixed-use and commercial areas are located adjacent to Main Street in order to take advantage of the highly visible location. Existing government functions should be encouraged to remain in Sandy Hook. The proposed residential areas are placed on the periphery so they can benefit from their proximity to the commercial districts, mixed-use developments, and public open spaces.
Sandy Hook Land Use Plan
Downtown Master Plan

While the land use plan depicts categories of land use such as commercial versus residential, it does not provide an image of how structure and open space relate to each other and what the town will look like in the future. This downtown master plan provides more detail, specifically describing the new residential, mixed-use, and commercial buildings in relationship to their surrounding context and to each other. Also involved is the development of a park system, including a plan for the use of the Little Sandy River. Additionally, more detailed suggestions are offered for the physical and visual improvement of Sandy Hook’s architecture and streetscapes. The goal is to use the design process to provide unity and cohesiveness to attract new residents and visitors to town.

Sandy Hook’s Main Street corridor needs to be emphasized to give it the identity of being the heart of Elliott County. To accomplish this task, the southeast side of Main Street is to remain the predominant government and civic district, while the northwest side becomes mixed-use. Mixed-use buildings would allow new businesses to locate downtown at street level, while encouraging people to live on the second and third floors. Adding these types of buildings would give Main Street more structure by filling in the voids and gaps of vacant lots, while also providing increased variety and interest to the downtown area. A proposed pedestrian bridge connects this core with a commercial node on the north side of the Little Sandy River. Concentrating the commercial buildings in this area discourages strip or linear development along Route 32, and conveniently locates a large number of businesses in one area.

There must also be an identifiable town center. The road system northwest of Main Street works primarily as an extension of Sandy Hook’s existing grid, but is modified to accommodate a large public green space. Adjacent to the mixed-use buildings and surrounded by blocks of residential infill, this town commons becomes the focal point for the city. The location of this park allows it to be used for public gatherings, lunch meetings, and other town functions. It is also visually and physically linked to a proposed riverwalk along the Little Sandy River and to the grounds of the elementary and high schools. The park’s relationship to the school, the proposed residential infill, and the commercial areas, creates an identifiable center for the social and civic activities of Sandy Hook.

The downtown master plan also aids in creating attractive corridors that connect Sandy Hook to community parks, Laurel Gorge, and the Little Sandy River. A riverwalk is proposed to span from the proposed pedestrian bridge, under the intersection of Main Street and Route 32, for about a quarter of a mile upstream. Establishing a riverwalk would reclaim this valuable resource and draw attention to the unique features found along the river. This section of the riverwalk transitions into a hiking trail north of town, following the river until it reaches Laurel Gorge. Additional links can be made to a path that extends from a proposed outdoor classroom behind the elementary school and a trail that follows the Ruin River.

Bordering the riverwalk on the northwest side are proposed mixed-use buildings, including possible folk art shops and a hotel near the corner of Main Street and Route 32. On the other side of Main Street, another residential area connects to the river. These would be townhomes with scenic views of the water and a close connection to a public park to the southeast. This park includes a baseball field, two basketball courts, and a picnic shelter. The placement of new businesses, a hotel, and additional housing combined with the allure of the riverwalk and connected parks, is designed to spark new vitality and inject money into the local economy.
Downtown Master Plan

- Proposed Buildings
- Existing Buildings

- Existing Housing
- Memorial Plaza
- Hotel/ Shops Performance Area
- Theater
- Riverside Townhomes Courthouse
- Riverwalk
- City Park

- Example of Side and Rear Parking
- Town Commons Parkside Townhomes
- Trail to Gorge Pedestrian Bridge
- Riverside Lodging
Riverwalk and Park System

The Little Sandy River provides Sandy Hook with an opportunity to attract passive recreational activities to the town. Unfortunately, the natural beauty and unique geologic formations surrounding the river are not being utilized as an attraction, but rather are being ignored. Trash and litter speckle the banks and access by foot is extremely difficult because of the steep slopes and overgrown vegetation. As a result of misuse and neglect, the view of the river from Main Street is unsightly and unappealing.

In order to reclaim the river from pollution and misuse, a formal riverwalk has been proposed. The design would include several different levels, stepping down from the street to the water’s edge. This would enable people to actually interact with the river and allow the water level to fluctuate freely. In addition to steps, ramps would be available for easy access, along with formal tree and shrub plantings, and comfortable areas for seating. The riverwalk would stretch from the proposed commercial node on the west, under the bridge at the intersection of Main Street and Route 32, before terminating at a proposed recreational park.

By taking advantage of the resources that already exist, the riverwalk and the surrounding area can become the cultural and economic center of the town. A stretch of folk art shops, restaurants, and tourism-based businesses in mixed-use buildings connected to the riverwalk will combine to attract out of town visitors to shop, dine, and spend the night in this section of Sandy Hook. A performance area and stage would also link to these buildings using the river as a backdrop, adding yet another entertainment feature.
Included in Sandy Hook’s park system is the integration of a town commons. This park would become the focal point of town, as mixed-use buildings, proposed residential infill, and the grounds of the elementary school surround it. On an axis created by a pedestrian bridge and the termination of Water Street, the town commons would be used for gatherings, festivals, lunch meetings, displaying historical plaques and statues, and other town functions. The placement of this park connects several different elements, creating an identifiable center for the social and civic activities of Sandy Hook.

The third park located near downtown Sandy Hook uses the existing green space on the eastern edge of the city to bring active recreational activities to town. A proposed baseball field takes advantage of the flat topography of the floodplain. Other facilities included in this park are two basketball courts and a picnic shelter. The basketball courts and picnic area would be placed on a higher terraced section overlooking the baseball field, while a seating area acts as a terminus to the riverwalk. The residents of Sandy Hook as well as visitors could enjoy all of these facilities.
Main Street

The visual and functional improvement of the Main Street corridor is essential to identifying the county seat. The following guidelines will help unify the existing buildings and streetscape, while providing direction for the development of new structures. Combining these guidelines with the other strategies proposed in the downtown master plan will help unify Sandy Hook’s appearance and create a critical mass reflective of a county seat.

Design Guidelines

1. Any new buildings should have the same setback of the adjacent existing buildings.

2. All new buildings should be a minimum of two stories.

3. Projected signs should be no larger than 12 sq. ft. (3 ft.X 4 ft.). Wall mounted signs should be no larger than 20 sq. ft. (2 ft. X 10 ft.).

4. Mixed-used buildings should include commercial space on the first floor and office or residential space on the second and/or third floor(s).

5. Streetlights should have a traditional character yet provide the necessary amount of light to meet Transportation Department standards.

6. New parking lots should not be located along Main Street.
Currently, the buildings along Main Street lack unity in form, scale, and architectural detail. The vacant lots and buildings leave numerous gaps, making Main Street appear unorganized. The raised sidewalks do not have rails in many sections and there is a lack of crosswalks, both of which pose hazards to pedestrians. Overhead power lines disrupt the views of the mountains in the background and bare concrete walls line both sides of the street. Many of the buildings have vinyl siding and are only one story tall.

Fig. 3-11 The facades and building types on Main Street lack unity in form, scale, and detail.

Fig. 3-12 Filling in the gaps of vacant lots with two and three story mixed-use buildings strengthens the Main Street corridor.

Key streetscape elements such as lights, signs, and benches need to be integrated to improve the character and appeal of the downtown area. The addition of awnings on storefronts and flags or banners on light poles would help give Sandy Hook a new identity. Also, by using materials such as stone and/or brick on building facades, the town would capture a more traditional feel. Other suggestions include burying overhead power lines, covering bare concrete walls with a stone facade, and adding street trees on the southeast side of Main Street.

Fig. 3-13 Powerlines and concrete walls disrupt potentially beautiful views from Main Street.

Fig. 3-14 Benches, rails, lights, and traditional materials will improve Sandy Hook’s character and identity.
**Additional Housing**

Providing areas for additional housing is intended to encourage people to locate in Sandy Hook. This alternative concentrates the main residential areas within a four-block radius of the proposed town center, as opposed to allowing growth to spread inefficiently away from downtown. This plan also sets up relationships between the business district on Main Street, the proposed commercial node across the river, and the residential area.

A variety of housing typologies is meant to appeal to a number of different people. The mixed-use buildings along Main Street, the riverwalk, and Water Street would have apartments on the second and third floors, while the blocks surrounding the town center would include townhouses and single family homes. Adding permanent structures, instead of mobile homes would give the town a more stable core from which to build.

Another residential section is proposed to line the riverwalk, southeast of the intersection of Main Street and Route 32. This row of townhomes would overlook the river and connect to the pedestrian corridor created by the riverwalk. Additionally, there is a proposed development of townhouses and/or apartments adjacent to the new commercial node. These would also have an interesting view of the river and would benefit from the close proximity of the new restaurants and businesses. The purpose is to include housing that spans across several different economic levels, therefore encouraging a larger mixture of people to live in Sandy Hook.
Fig. 3-17 The current land use adjacent to the Little Sandy River does not take advantage of the potentially valuable location.

Fig. 3-18 Townhomes lining the riverwalk would enjoy the natural beauty of the Little Sandy River.

Fig. 3-19 The view down 556 shows that Sandy Hook has room for residential development.

Fig. 3-20 Mixed-use buildings bring more variety and interest to downtown.
**Development Along Route 32**

Route 32 is scheduled for minor realignment which provides an opportunity to upgrade pedestrian amenities and influence future infill along this corridor. Without proper planning, uncontrolled strip development along Route 32 could occur, tarnishing Sandy Hook’s character. By not limiting the growth of new businesses to certain areas, sporadic development could take place. If a guide for development is not adopted, the street would become cluttered with unsightly signs, telephone poles, billboards, and parking lots. Not only would this be unappealing, but with increased traffic and no sidewalks, it becomes more dangerous.

Along Route 32, a number of improvements can be integrated, making it a safer, more appealing road in which to drive or walk. Adding a minimum five-foot planting strip with street trees spaced 30-40 feet apart would improve the appearance. To accommodate pedestrians, the addition of sidewalks on both sides beyond the planting strip would separate them from automobiles. Street lamps placed at equal intervals would provide a well-lit, safe road. Also, incorporating these elements would help define Sandy Hook’s city limits simply by the change in the way the streetscape is treated.

![Fig. 3-21 The existing condition of Route 32 does not facilitate safe pedestrian movement.](image1)

![Fig. 3-22 Without proper planning, unsightly strip development could occur along Route 32.](image2)

![Fig. 3-23 A safer, more pedestrian-friendly streetscape along Route 32 would greatly enhance Sandy Hook’s image.](image3)
Chapter 4
Economic Development

- Demographics
- Industry
- Tourism
- Recreation
- Laurel Gorge
Demographics

One of the primary concerns expressed by the citizens of Elliott County is to increase employment opportunities within the county. Currently the employment distribution for Elliott County (Fig. 4.1-1) shows the majority of the jobs are found within service industries, retail trade, and farming.

Employment Distribution in Elliott County

![Employment Distribution Pie Chart]

Source: 1992 Economic Census

Comparison of Farm Number and Acreage

As a result of the lack of employment opportunities and decreasing farm acreage, a high percentage of the workforce in the county commutes to other counties for employment (Fig. 4.1-3).

Percentage of Workers Commuting Out of County for Employment

![Percentage of Workers Commuting Graph]

Source: KY Cabinet for Economic Development

Fig. 4.1-1

Fig. 4.1-2

Fig. 4.1-3

Fig. 4.1-2 illustrates the agricultural trends for the state and Elliott County. The number of farms and amount of farm acreage for both Kentucky and Elliott County are decreasing. However, the percentage of decline in acreage for Elliott County exceeds the state level by 21%.
In addition to working out of the county, many citizens are moving away permanently. Since the inception of the county, the number of residents has fluctuated, but has generally declined from a peak of 10,380 people in 1900 to 6,602 people in 1998 (Fig.4.1-4). The county once supported a larger population and could perhaps do so again, however, this is not the trend.

**Population 1900-1998**

In recent decades Elliott County’s population has declined (Fig.4.1-5). From 1980 to 1990 the population continued to decline while nearby counties located adjacent to interstates and major airports enjoyed an increase in population (Fig.4.1-6).
Figure 4.1-7 shows the states with the 25 lowest per capita income counties in the United States for 1990. At that time, the majority of these counties was found east of the Mississippi River, including seven in Kentucky. By 1997, a shift occurred in which all but three of the counties found on the list were located west of the Mississippi. Every county in Kentucky moved off the list, except for Elliott County (Fig. 4.1-8).

25 Lowest Per Capita Personal Income Counties 1990

Within the Appalachian Regional Commission, the highest percentages of people living in poverty are found in eastern Kentucky and West Virginia, while the lowest percentages are located in New York, Pennsylvania and northern Ohio (Fig. 4.1-9). However, despite the concentration of poverty, these areas receive the least amount of public assistance per household (Fig. 4.1-10). Elliott County has the greatest need yet it receives the lowest level of support from the Appalachian Regional Commission.

Percentage of Persons in Poverty-1990

Appalachian Regional Commission

Amount of Public Assistance Per Household-1990
A similar story exists at the state level. In 1997, Elliott County had the lowest per capita income in Kentucky (Fig. 4.1-11). However, the amount of federal funding per capita received by the county was, again, one of the lowest in the state (Fig. 4.1-12).

A primary concern of the citizens of Elliott County is increasing the potential for economic development and employment within the county. As noted previously, a majority of Elliott County residents are forced to commute elsewhere for employment. Most residents expressed a preference to work in Elliott County.

Residents also expressed a preference for investment and development by its residents versus reliance on non-local interests. A study conducted by the University of Louisville revealed great potential for development of a tourism industry within Elliott County. This industry could be developed in two primary areas.

First, potential exists in the promotion and expansion of the cultural assets of the county; including its historical and archeological sites and its strong folk art community. Secondly, potential exists in the development of outdoor recreational opportunities throughout the county and specifically in the remarkable Laurel Gorge. To a lesser extent, some possibilities exist for the development of more traditional industries in the county.
Industry

Currently, there is virtually no manufacturing within the county and only limited service industry. Industrial development in the near future will likely occur only on a small scale. This is in keeping with the desires expressed by residents at public meetings where significant opposition to large scale manufacturing was voiced.

Elliott County’s isolation from major highways has played a role in the lack of industry while leaving the county in a relatively pristine undeveloped state. This is an extremely valuable asset. Careful consideration must be given to the preservation of the natural environment in promoting industry within the county.

Most important is to ensure that any manufacturing industry brought into Elliott County is environmentally sensitive. Any industry that releases toxic pollutants or byproducts into the atmosphere, the groundwater supply or onto the land should be avoided. The pristine quality of the environment of Elliott County is too important and valuable to sacrifice for immediate financial gains.

There are alternatives to large-scale manufacturing that could be explored. One possibility is smaller-scale manufacturing that would function on resources that already exist within the county rather than requiring materials be shipped in.

The needs of the proposed prison facility and its population could be supplied by businesses located within the county. Increased emphasis on service industries should be explored, to serve people and businesses both locally and throughout the region.

Finally, high technology industry should be considered, particularly computer-related businesses. Software development and internet-related industry is environmentally friendly while providing higher paying jobs. Industry of this type also does not rely on prime geographical location to be competitive.

A goal of the county is to provide incentives to keep the students in the county once they have completed their education, and high-tech occupations are a good way of accomplishing this.
Tourism

Tourism has been identified as having great potential for Elliott County’s future economic growth. In addition to providing employment and income opportunities, tourism is a clean industry which poses very little burden on local tax payers. Elliott County must bring awareness of its resources to the rest of Kentucky, as well as the larger population centers.

Three most popular tourist activities nationwide:
- Shopping
- Outdoor Recreation
- Museums/Historical Sites

Elliott County can offer a variety of outdoor activities and historical, geological and archeological sites of interest. Although the county does not offer many shopping opportunities, folk art in the county has significant merchandising potential.

Travel patterns related to tourism:
- Half of all trips occur over weekends
- Average distance of weekend trip is 250 miles

If Elliott County wants to target the weekend traveler in its effort to use tourism as a basis for economic development, then the available population within this travel distance must be assessed. Fig. 4.3-13 illustrates the population centers within the 250 mile radius. There are approximately 10 million people living within 250 miles of Elliott County in urban areas alone. This equates to a substantial pool from which to draw visitors.

Elliott County must, however, target specific interest groups to guide promotional programs. In other words, promotional material which highlights the flower walk must be developed and distributed to nature lovers while collectors and art dealers must receive information about available folk art. Likewise, key words on the county web page should take the viewer to specifics rather than promoting Elliott County in general.

Fig. 4.3-13 Several population centers are within a 250 mile radius of Elliott County.
Goals and Objectives

Goal: To develop tourism as an industry in Elliott County

Objectives:

Create a folk art destination within the county.

- Provide a new festival space for “Day in the Country”
- Create a folk art hub in Isonville which will compete with the existing center in Morehead

Objectives:

Organize the formation of a historical committee in Elliott County to gather information about the past that might become relevant to the future of tourism in the county.

- Most of the history (e.g., Civil War skirmishes) is not written and is being lost with the older generations
- There are numerous graveyards and historical sites throughout the county that need to be cataloged

History

In Elliott County there are many areas of historical interest, such as Civil War sites, historical buildings, and WPA projects (Fig. 4.3-14). Currently, these sites are hidden away and not easily accessed. With the proper revitalization of these areas, Elliott County could prosper from the tourism brought in by history enthusiasts.

Fig. 4.3-14 Elliott County features many historical buildings.
Folk Art and Isonville

Another major asset of the county is its abundance of folk artists. These gifted citizens have a variety of skills ranging from stone work to metal welding (Fig. 4.3-15). Folk art is often purchased in Elliott County and resold several times before finding its way to a gallery in a major city. Each time the item changes hands, it is substantially marked up in price. Elliott County and its artists could benefit if the collector is encouraged to deal directly with a retailer in Elliott County.

Festivals are another incentive for people to visit the county. Elliott County already hosts several local festivals. The Sandy Hook Tobacco Festival and the Mule Show are held over the Labor Day Weekend and the Laurel Gorge serves as the site for an April educational wildflower walk.

The Keith Whitley Motorcycle Ride is held in June to honor Keith Whitley. “A Day in the Country,” (Fig. 4.3-16) held the last Saturday of June near Isonville, showcases folk artists in the southeastern portion of the county. This event continues to grow in popularity, but could benefit from guidelines to ensure its continued success and maximize its profitability. These festivals should continue and be widely promoted. When possible, facilities should be enhanced to ensure that visitors do not leave disappointed.

Fig. 4.3-16 (above and below) “A Day in the County” is held at Minnie Atkins’ house.

Fig. 4.3-15 (above and below) Elliott County folk artists create a variety of pieces.
Elliott County features a thriving folk art community that could benefit from promotion and organization. A house on State Road 32 near Isonville has been donated for development as a folk art community center. Folk artists could profit from the publicity associated with the center. The center should also facilitate communication between individual artists and maximize marketing and distribution of their work.

A preliminary development plan is provided to illustrate the folk art center as the hub for folk art activities (Fig. 4.3-17). Adequate parking, concessions, and possibly a restaurant, should be incorporated in the development plan.

Fig. 4.3-17  A proposed plan of Folk Art Center could boost Isonville.
Isonville would benefit from streetscape enhancements and could incorporate folk art themed developments, such as a folk art garden (Fig. 4.3-18).

Currently, the expansion of Elliott County’s tourism is limited by the lack of overnight accommodations, with the exception of a single bed and breakfast. Sandy Hook and Isonville could profit from hotel/motel developments. However, other possibilities include additional bed and breakfasts or more rustic accommodations such as lodges or campsites. These facilities could utilize the county’s outstanding natural beauty, while promoting historical and culturally sensitive areas nearby.

Lodges and campsites could be located near the Folk Art Center, which could become an active retreat. Visitors could come to learn and work with the artists or simply observe them. The development of a variety of overnight accommodations is essential to fully realize the economic benefits from tourism.

Fig. 4.3-18 Isonville could incorporate a folk art garden.
**Scenic Drives**

Scenic drives are an essential element of tourism. Several routes in the county have the visual attributes necessary for scenic driving (Fig. 4.3-19). Two distinctly different landscape characters were identified in the county. The roads in the north and western parts of the county are predominately on ridges and offer long and wide vistas (Fig. 4.3-20). The south and eastern parts of the county typically have narrow corridors with limited views (Fig. 4.3-21). All of the routes have significant portions that provide spectacular views for the casual traveler. Promotion of tourism should include a scenic driving tour map combining tourist attractions and recreation destinations.

In order to maintain the scenic quality of the roadways, the following land use guidelines are recommended (Fig. 4.3-22).

- All new structures should have a 50 ft. minimum setback from edge of road
- County businesses and industrial sites should have screening to accentuate the scenic qualities of the surrounding area
- Multiple housing areas and businesses should share a common access drive to public roads rather than have individual drives
- Significant view sheds with important scenic qualities should be designated for preservation
Elliott County possesses many tourism opportunities, but they must be properly organized and promoted in order to succeed. Additionally, the success of these developments will depend upon the county residents becoming entrepreneurs. With these tourism activities in mind, Elliott County could truly become the “Peaceful Valley.”

Fig. 4.3-19 Elliott County possesses many opportunities for scenic drives.
Recreation

Outdoor recreation is important to maintaining a high quality of life. While often associated with tourism, it is also an essential part of the daily lives of those living in Elliott County. The economic benefits of tourism range from usage fees, equipment rentals and licensing fees to secondary profit potential in the form of visitor patronage of restaurants, lodging, gas stations, and other retail outlets such as grocery and supply stores. Elliott County’s varied, largely untainted natural character affords an ideal setting for several recreational activities. Elliott County possesses the capability for the development of hunting, ATV riding, canoeing, horse riding, and RV camping industries. Potential exists county-wide, especially in the Laurel Gorge, for the establishment and promotion of hiking, camping, and nature education opportunities. The following goals and objectives were established for outdoor recreational development in Elliott County.

Goal 1: Preserve and protect the integrity of Elliott County’s natural resources.

Objective:

• Study environmental impact of all outdoor recreational development.

Goal 2: Identify all outdoor recreational opportunities in Elliott County.

Objectives:

• Identify active recreational opportunities (i.e., hiking, horseback riding, canoeing).
• Identify passive recreational opportunities (i.e., scenic overlooks).

Goal 3: Develop a variety of recreational opportunities including:

• ATV riding
• Canoeing
• Athletic facilities
• Horseback riding
• Hiking
• RV camping

Goal 4: Develop a trail system in Laurel Gorge that can be used by a variety of people.

Objectives:

• Create a trail system that is ecologically sensitive.
• Provide handicap accessible sections of the trail system.
Recreational Land Use

Using these goals and objectives along with the countywide master plan developed in Chapter 1, a potential outdoor recreational land use plan has been developed. The location of recreational activities has been based primarily on physical attributes with consideration of the activities’ environmental impact on the area. Existing land ownership was not considered a high priority in developing this plan. This study establishes guidelines which could be applied to alternate locations with similar physical attributes.

Fig. 4.4-1
**ATV Trails**

All-terrain vehicles (ATVs) are widely used throughout the county and impact the environment of the county in a number of ways. Random ATV use can and does have negative impacts on the land, including erosion and the degeneration of natural ecosystems. This effect can be minimized or even eliminated by limiting their use to specifically designated trails. Elliott County has perhaps its greatest resource in the beauty and diversity of its natural landscape, and while every measure must be taken to preserve this resource, there is a need to provide ATV riders with appropriate places to enjoy their sport.

As illustrated on the land use plan, there are several areas where ATV trails would be best located. Site selection should be based on soil suitability, access, topography, and separation from wildlife habitats. To be successful, the trails must have significant length and frequent directional and grade changes. Special care must be taken to avoid environmentally sensitive areas. Ideally, in the ATV trail layout, one main trail should be designed with side trails that branch off and lead to special features such as scenic overlooks. A trail head should be established to provide users with necessary amenities.
Canoeing

The Little Sandy River offers many unique features which make it ideal for canoeing. It is intimate enough in scale to not overwhelm people, yet offers an attractive, natural setting that is very attractive. The river offers the right depth and velocity for canoeing through most of the year. It will be necessary to develop appropriate put-in and take-out spots, and to provide facilities necessary to users. All river access areas should have sanitary facilities and parking areas. The initial put-in location must have a building for registration, phone service, shuttle service, restrooms, and river gauges. Multiple take-out points should be established to allow for varying trip lengths.
Hunting

Hunting is a prominent recreational activity throughout Elliott County. However, an increase in hunting participation could become a source of income to the county. Increased hunting does not include sharing or using “secret” spots that have been used for generations, but rather the formation of hunting preserves. A hunting preserve is a large area of land that is designated for game and the hunting of game. Areas in the southeastern part of the county were selected as potential sites for hunting preserve developments for several reasons. The population density is lowest in this part of the county, and the land is well suited for game animals because it has been relatively undisturbed by development. This area also has adequate food sources, potential for the establishment of a wetland area, and substantial vegetative cover in which deer, elk, and other game animals can flourish. A hunting preserve should have open spaces in the wooded areas, well-defined boundaries, and buffer zones around developed areas. The southeastern portion of the county could easily incorporate these elements.

Elliott County has several thousand acres of land where such preserves could be established. Residents have already witnessed the migration of elk into the county from the Elk Restoration Project taking place in southeastern Kentucky. This project is scheduled to bring 1800 elk into Kentucky over a nine year period. Elliott County should seek participation in the Elk Restoration Program. Economic benefits from hunting vary from region to region. The following chart provides a sample of typical fees.

Typical Fees for Commercial Hunting

<table>
<thead>
<tr>
<th>Type of animal</th>
<th>Fee per day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pheasant</td>
<td>$250.</td>
</tr>
<tr>
<td>Quail</td>
<td>$300.</td>
</tr>
<tr>
<td>Deer</td>
<td>$500.</td>
</tr>
<tr>
<td>Elk</td>
<td>$750.</td>
</tr>
</tbody>
</table>

Package deals (tags, accommodations, meals, etc.): $750. per day

(Figures are derived from random hunting preserve price information.)
**Horse Trails**

The scenic landscape of Elliott County is ideal for equestrian use. Horses, however, are not compatible with other recreational uses because they are easily scared and can cause negative ecological impacts if not limited to specifically designed trails. As with ATVs, it is important to designate equestrian use locations for the citizens of Elliott County in addition to tourists.

As illustrated on the land use plan, the north-central part of the county has the most desirable space in which to develop a series of equestrian trails. Trail designs should appeal to a variety of users at varying levels of difficulty. Trails should be designed in a sequence of loops that can offer a variety of difficulty levels and ride length. The average leisure horse ride is from 4-5 hours in length. This is classified as a half-day ride. In terms of length, a half-day trail should consist of 7-10 miles and a whole-day trail of 10-20 miles. In Elliott County, the ideal trail system should include at least one half-day trail and at least one separate whole-day trail. In designing equestrian trails, it is essential to prevent access by motorized vehicles. Narrow stream crossings, logs, or stairways incorporated into the trail design can help limit access.

In the layout of the equestrian trails, designs should be based on alignment, topography, aesthetic value, points of interest, road crossings, destinations and views. The trail layout illustrated connects to the Little Sandy River at the RV campsite at one end, and into the Grayson Lake Wildlife Management Area on the other end. This trail would provide riders with a variety of different desirable settings and destinations. While equestrian trails are not compatible with other uses at the same time, the possibility exists for wintertime ski and snowmobile use on this trail system.

If the equestrian activities are to have an economic impact on tourism, then an equestrian campground should be developed. Additionally, equestrian trail areas should be accompanied by a staging area. This area should be designed large enough to accommodate trucks and connected horse trailers in a separate loading/unloading zone, as well as parking area for smaller vehicles. Temporary paddocks or boarding facilities should be provided for the horses with plenty of tie locations included. Ideally a “tack shop” would be part of the facility, offering provisions for sale that are commonly associated with horses and horseback riding. An adequate water supply is essential.
Fig 4.4-6 Typical Section of Horse Trail

Fig 4.4-7 Conceptual Trail Design
RV Camping

The variety of recreational activities proposed for the county demonstrates the need for overnight lodging for recreational patrons. Camping goes hand in hand with many of these activities, therefore the development of both primitive and RV campsites should be considered. This section will describe criteria and proposals for RV camping, while primitive camping will be addressed in the Laurel Gorge development section.

The proposed RV campsite is located near the center of the county, close to the Laurel Gorge and Sandy Hook. This places RV campers in close proximity to food and supplies as well as the other proposed recreational facilities. This site conforms to the proposed land use plan developed for the county in Chapter One.

There is a high degree of flexibility in terms of design and layout for RV campsites, but there are certain standards that are broadly accepted and should be adhered to. Beginning with site location, it is important to locate RV campgrounds on sites with 2-15% slope with permeable soil and and adequate existing vegetation to provide screening. Other factors to consider when siting a campground is the relationship of the campground to nearby facilities, good road access, a potable water supply and electricity. In general, campsites need to have room for at least 150 spaces to remain economically viable, so this may be difficult to achieve in Elliott County due to topographical conditions.

Fig 4.4-8 Conceptual RV Campsite Plan
RV campsites should contain a number of facilities and site features. Typically, RV campsites are used by families with children. Therefore playgrounds are a good addition. Washhouses and latrines must be provided; heated if the campground is to be utilized during the winter. The distance from the camping facilities should be no more than 600 feet, and the number of facilities should be approximately one male and female washroom and latrine for every 30 campsite spaces. A trailer waste station should be provided for campers to empty their sewage tanks. Ideally, the campground should be designed with an entrance station. This station can be used for the organization of the campground, collection of fees, dissemination of information, etc. Other site features that should be included in a fully equipped RV campground include dumpsters, laundry facilities, a camp store, telephones, and even a supply of firewood and kindling.

Although the design of the campground is flexible, there are standards which must be met for campsite spacing and parking. Individual camp spaces need to be on a relatively level surface with a length of 50 feet. A spur-type pattern generally works best, and allows for easy backing of trailers. The individual camping units should be at least 60 feet apart, at a density of between six to ten units per acre. The units should include living areas of at least 600 square feet. These living areas should include a trash receptacle, secured table, and adequate screening from other campsites. Finally, walking paths connecting the campsites to one another, the campground facilities, and nearby recreational venues should be included for the safety and convenience of the campers.
Parks and Recreation Fields

The development of parks and recreation fields in Elliott County could prove beneficial to both its citizens and visitors. Three acres of park space per 1000 persons is generally recommended. For an area the size of Elliott County, standard guidelines specify the need for only one recreation field per type. However, the lack of an adequate road system throughout the county makes travel to remotely located facilities both difficult and time consuming. The needs of the entire county could best be met with the development of recreation fields and parks in conjunction with churches and schools. Such facilities could serve church and city leagues and would generally have adequate parking available.

Successful park or recreation field developments should incorporate several basic elements. Developments should feature adequate lighting, picnic and shelter areas, and restroom facilities. Parking should include some permanent paved areas as well as open space that could accommodate overflow parking.
Laurel Gorge

Elliott County possesses many grand natural features: high ridges, deep valleys punctuated with rich agricultural landscapes and lush woodlands. These combinations form beautiful vistas and flourishing habitats. Rivers carve out four gorges in the county: the Gimlet, which connects to Grayson Lake, the Big and Little Caney’s, and the Laurel. Like many areas of Elliott County, Laurel Gorge is largely untouched by development and the associated pollution. It is home to several rare species of fauna and flora including the very rare elk toe mussel. The Little Sandy River has chiseled out steep cliff faces with impressive overhangs and waterfalls. The Laurel Creek meanders through lush rhododendron and upland forests. A kaleidoscope of rocks and sandbars comprise the dynamic river bed. The Laurel Gorge is, indeed, an invaluable natural landscape. The U.S. Army Corps of Engineers, in conjunction with the U.S. Department of Fish and Wildlife, have joined forces with Elliott County to acquire additional land to preserve this natural wonder and provide public access. Certainly, the gorge is susceptible to abuse by insensitive development and pollution. At the same time, the gorge holds great potential as an educational and recreational resource if managed wisely. The following proposals assess and analyze the extensive development potential of the gorge while preserving its integrity. These proposals adhere to the following goals and objectives.
Goals and Objectives

Goal 1: To highlight the scenic beauty and biological diversity of Laurel Gorge for the benefit of Elliott County’s residents and as a potential tourist destination.

Objectives:

• Create a welcome center with parking and handicapped accessible trail to Dog Falls point
• Create a parking area and restore the trail to Bowling Hole
• Create scenic overlooks with parking and seating / observation areas
• Create an extensive trail system utilizing the ridges and designate areas for camping
• Create a variety of interpretive and educational exhibits
• Preserve scenic corridors in areas surrounding Laurel Gorge

Goal 2: To develop Laurel Gorge in a manner that is environmentally sensitive.

Objectives:

• Identify biologically rich areas and sensitive areas and ensure their preservation
• Phase out ATV use and restore the damaged areas

Goal 3: To adopt land use guidelines for the Laurel Gorge watershed to assure the preservation of its delicate ecosystem.

Objectives:

• Establish a conservation district in the lowland areas of Laurel Gorge with the most critical zone for preservation within 100 feet from the cliffline
• Allow no further clear cutting within the Laurel Gorge watershed in order to preserve ecosystem
• Nonresidential uses must be evaluated to assure the absence of pollutants and activities that may jeopardize the water quality of Laurel Creek
• Preserve viewsheds from State Road 32 and Route 556 and encourage agricultural activities along these corridors
• Establish a minimum residential lot size to ensure environmental sensitivity
Watershed

The Laurel Gorge watershed consists of the Laurel Creek and its many tributaries in both Elliott and Rowan Counties. To preserve its natural beauty and pristine qualities, the Laurel Gorge must be protected from improper use and development. Protection of the entire watershed boundaries will require negotiating similar land use restrictions for that portion of the watershed within Rowan County.

Currently, the Laurel Gorge is suffering from unlawful usage, particularly in the form of garbage dumping, which is visibly unattractive and has a negative effect on the water quality. In addition, there must also be concern while development occurs for more subtle contamination, such as ground water pollution and sedimentation.

Waterfall on Laurel Creek

Fig. 4.5-1 County map with Laurel Gorge watershed highlighted.
**Land Use**

As the Laurel Gorge becomes a more desirable destination for tourists, a plan to guide development will become increasingly important. The following four land use categories identify critical areas for the long range preservation of the Laurel Gorge (Fig. 4.5-2).

1. **Conservation areas** will include the floodplain of the waterways as well as a minimum 100 ft. distance from cliffline.

2. **Developable areas** will be limited to residential construction. Cluster development is preferred in order to preserve existing agricultural land. A lot size such as five acres should be considered to reduce volume to septic systems.

3. **Viewshed areas** adjacent to Route 32 should be preserved as a scenic corridor. (Refer to county land use guidelines on scenic byways.)

4. **Recreation areas** will include future trail extension and proposed camping area.

![Laurel Gorge Land Use Plan](image)

Fig. 4.5-2 A land use plan for Laurel Gorge.
Land Acquisition

In addition to the planned expansion area on Clifty Creek, it is recommended that further land acquisition take place in and around the Laurel Gorge. The first expansion area is the remainder of the Laurel Creek. Acquiring this land will help to protect the water quality and biological integrity of the Laurel Creek by controlling the land use in the watershed. This expansion will also increase the recreation possibilities and allow for proposed land uses such as extensive hiking loops (Fig. 4.5-3).

As the recreation demands on Laurel Gorge increase, an expansive upland area should also be acquired. The proposed recreation area contains a large forested site ideal for camping and hiking. This area would provide additional entry points into the Gorge as well as road access from State Route 32. Acquiring this land would allow hiking trails to move upland to avoid sensitive and impassable areas. The purchase of additional land around Laurel Gorge will enhance possibilities for recreational activities while protecting the natural beauty and ecological diversity.

Fig. 4.5-3 A plan illustrating property ownership plan for Laurel Gorge.
Elliott County

Laurel Gorge Concept Map

After establishing land use guidelines and identifying areas for future expansion, the next step is to explore opportunities for future recreational uses. The concept plan in Fig. 4.5-4 illustrates the various types of recreational use in the Laurel Gorge. The most important initial improvement to the Laurel Gorge is the construction of a visitor’s center along with a handicapped accessible trail to Dog Falls. Following this improvement, the section of trail from Dog Falls to Bowling Hole should be created, allowing for day-long hikes.

Extending this trail to Bowling Hole will require a public access point with adequate parking not only for the annual wildflower walk, but also for the influx of through-hikers. A third and final trail expansion would extend from the Bowling Hole area to the proposed camping area. At the Bowling Hole point, the trail would exit the lowlands and follow the ridgeline in order to bypass the ecologically sensitive areas surrounding Laurel Creek. The majority of visitors /hikers will be routed above the cliffline because many areas of Laurel Gorge are impassable except through the stream. The proposed camping area is designed to serve as the trail terminus for hikers as well as a destination for other overnight guests. Areas with possible overlook potential based on their scenic qualities and elevation are indicated on the concept plan.
Fig. 4.5-4 A concept plan showing various trails and points of interest
**Visitor’s Center & Handicapped Accessible Trail**

The development of a visitor’s center will provide an area for groups to gather before hiking the trail. It will also provide an area for interpretive, educational, and orientation activities. The trail from the visitor’s center is to be paved and handicapped accessible for at least one-tenth mile.

1. Provide parking area with approximately 28 spaces, adjacent to Route 557 under new bridge.

2. Provide drop-off area for canoe put-in site.

3. Allow for 8 parking spaces near the visitor’s center for handicapped and employee parking.

4. Establish interpretive center to relay the cultural, geological, and biological significance of the area to users.

*Perspective of entrance to visitor’s center.*

*Plan view of visitor’s center and handicapped accessible trailhead.*
Plan view of entire visitor's center area with footbridge and parking.

Photograph of proposed visitor's center site.

Enhanced photograph depicting proposed footbridge and visitor's center.
Laurel Gorge Interpretive Program Guidelines

An interpretive program will provide information that is not readily apparent to most gorge visitors. This information and knowledge will lead to a more meaningful and enjoyable experience for visitors. In addition to educating visitors, the goal of an interpretive program is to encourage intelligent use of the facilities and to instill a sense of responsibility to help maintain these facilities. Finally, the addition of an interpretive program will enhance the experience for visitors and foster a feeling of ownership and responsibility in preserving these natural areas. The following are suggestions for a multi-faceted interpretive program.

1. Include a brief PowerPoint or other media presentation for viewing in the visitor's center. This presentation could convey the geological processes that formed the Laurel Gorge and a look at the unique species of plants and wildlife that exist in the gorge. It could conclude with a brief overview of the trail sections and their hiking difficulty level along with safety issues.

2. Development of an outdoor classroom/amphitheater adjacent to the visitor's center near the trailhead. This area could be used for group orientation before hiking activities begin.

3. Develop a program for self-guided nature tours allowing visitors to experience the trail at their own pace.

Visual aids would be necessary, such as pamphlets combining a trail map as well as other feature and nature information.

4. Incorporate a demonstration garden into an area near the entrance to the visitor's center. This would enable hikers and other visitors to become familiar with the native plant species they might encounter in the area.

5. Develop a 3-D model to demonstrate how the Laurel Gorge was created geologically over time. This could be located either at the entrance to the visitor's center or placed in the outdoor classroom.

6. All scenic overlooks should have proper signage depicting geological features, plant and wildlife species, and sites of historical significance that can be viewed from the overlooks.

7. Develop a system for plant identification along the paved section of the trail. The traditional method of identification uses placement of plaques with scientific and common names at appropriate locations along the trail. A technologically more advanced alternative would be to label plants with bar codes that could be read by a scanning device that displays information concerning plant types. This device could be loaned or rented to visitors at the visitor's center.

8. Produce various pamphlets with information about the geology, history, biology, horticulture, and special events that take place at the Laurel Gorge. These could be distributed at the visitor's center or other trail access locations.
**Location of Log Cabin**

The proposed reconstructed log cabin holds great potential for displaying pioneer life as it existed in Elliott County while serving as a tourist attraction. Exhibits could be developed to demonstrate how a pioneer homestead functioned, complete with scenes of daily life. Two alternatives exist as site locations for the cabin. One possibility would be to leave the cabin at its existing location to serve as the hub for the proposed camping area. The second alternative would require moving the cabin to a site near the visitor’s center. Figure 4.5-5 illustrates two potential sites along the handicapped trail that would be appropriate locations in order to give a sense of realism to the cabin and its surroundings.

![Log Cabin in its current location](image)

*Fig. 4.5-5 Concept plan with proposed cabin relocation sites.*
Standards for Handicapped Accessible Trail Layout

- Trail grade must not exceed 8%.
- Trail must have a flat landing for every 30 inches of vertical grade change to serve as a user rest area.
- The flat landing must be a minimum of 8 ft. wide to allow wheelchair users to pass one another.
- Trails to be constructed of asphalt material to provide a smooth surface for wheel chairs.

Dog Falls

A primary destination feature near the proposed visitor’s center is Dog Falls (Fig 4.5-6). This area could be accessed by an elevated boardwalk system which would help preserve the ecologically sensitive area.
Phase I of Trail Extension and Bowling Hole Access

Bowling Hole currently serves as the starting point for the annual wildflower walk. As this becomes a more popular and well-known destination for tourists and local residents, the following improvements should be made to accommodate more participants.

- Create parking area for 15 cars and drop off/loading area on donated parcel of land (Fig. 4.5-7). The parking lot should be developed properly to control the additional run-off created by such an area (Fig. 4.5-8).
- Make improvements to current trail to allow handicapped access into Bowling Hole.

Fig. 4.5-7 Bowling Hole parking area plan showing how parking areas can be configured in a manner that preserves existing trees.

Fig 4.5-8 Section of proposed parking area at Bowling Hole illustrating how paved surfaces create additional run-off. An effort should be made to direct this run-off away from important features within the watershed.
Phase II of Trail Extension and Establishment of Camping Area

A camping area, combined with an extended trail system beyond the Bowling Hole point would provide lodging opportunities for overnight guests (Fig. 4.5-9). These improvements will allow the Laurel Gorge to become a destination for week-end travelers that are hiking the trail system or simply enjoying the gorge from the camping area. The following are guidelines for the proposed trail expansion and camping area.

• Provide road access from State Road 32, with a controlled entry point, to 30-40 maintained camp sites. This would allow seasonal operation of camping facilities.

• Provide a combined parking area to accommodate people accessing overlooks and backpackers camping along the trail.

• Camping area to be located within the contiguous forest area west of Bowling Hole and east of Cold Spring.

• Camp sites to be located with 200 ft. minimum buffer from other campsites to provide privacy.

• All campsites to be located a minimum 50 ft. from cliffline for safety purposes.

• All maintained campsites are required to have restroom facilities with sealed storage areas for sewage.
Fig. 4.5-9 Concept plan of proposed camping area including maintained sites and primitive camping areas.
Concepts and Guidelines for Overlooks

The Laurel Gorge affords many opportunities for scenic views, especially from either side of the rim (Fig. 4.5-10). Several locations have been highlighted on the concept map that exhibit views of unique geologic features such as waterfalls and sheer rock faces. Two possibilities exist for access to these overlooks. One is the combination of a small parking area with a short loop trail to the overlook. The other possibility is for a parking area directly adjacent to the overlook structure. All overlook structures must meet OSHA standards and be approved by a qualified professional.
Photograph of overlook looking back towards proposed visitor’s center from Route 7.

Enhanced photograph of proposed overlook in same location.

Section of Laurel Gorge illustrating potential for views from overlooks.
Laurel Gorge Trail Guidelines

In order to ensure safe development of recreational facilities in the Laurel Gorge, certain standards governing trail construction are needed. Trail guidelines provide safety for visitors and enhance the overall experience of the trail. Guidelines also aid in the design and layout of trails in addition to their construction and maintenance. The adherence to the following guidelines will aid the Laurel Gorge staff in the best management practices for trail development.

• Trail construction should impact lightly on natural resources.

• Trail construction should provide safety for all user types.

• Proper trail layout methods during the construction will ensure easily maintainable trails.

• Design trail layout to minimize number of stream crossings and avoid steep terrain.

• All secondary streams should have primitive bridges to protect waterways (Fig 4.5-11).

• Wherever trail erosion is apparent, water diversion techniques should be incorporated (Fig 4.5-12).

• Sections of trail that traverse steep terrain should have rock or timber steps for ease of hiking (Fig 4.5-13&14).
Fig. 4.5-13  Rock steps constructed from materials on site reduce the amount of materials that must be transported for trail construction.

Fig. 4.5-14  Wood steps used to lessen steepness of trail. Steps must be longer than the width of the trail to properly anchor them.
Project Summary

Elliott County has been blessed with unequaled natural resources and a rich cultural history. Land use decisions made now will affect the residents of the county and their quality of life for many years to come.

The construction of the new prison facility can serve as the catalyst for planned development in the area. The potential exists for far reaching economic growth in the service, recreational and tourism industries. These opportunities for employment and community enhancement should be taken advantage of and planned for in ways that preserve the unique lifestyle and natural environment of Elliott County.

The citizens of Elliott County have the unprecedented opportunity at this time to direct the growth and preservation of their county. Planning and development guidelines must be determined and implemented immediately in order to avoid costly and irreversible mistakes and destruction of the natural environment. The planning guidelines and recommendations outlined in the 2000 Heritage Plan can serve as the starting point for this process.

The planning process is an on-going one -- as one plan is implemented, a new one will have to evolve. Public participation is crucial to building trust in the planning process so that future development reflects the aspirations of the majority of the citizens.

A number of projects have been outlined in this study. No attempt has been made to prioritize the order of events since much of that will be dictated by the availability of funding. The development of the gorge as a recreational resource has a headstart on other proposed projects and would provide an early success story to encourage public involvement. With enthusiastic leadership and appropriate planning, the citizens of Elliott County should have the ability and energy to monitor a variety of projects simultaneously.
**Information Sources**


*.yahoo.com/Business_and_Economy/Companies/Outdoors/Hunting/Game_Preserves/.

*Economic Development Information System.*


*Rare Species and Aquatic Faunal Survey of Bluegrass Army Depot, Kentucky.* Tom Bloom, Ronald R. Cicerello, and Brainard Palmer-Ball, Jr.; May 1995.


*U.S. Department Of Agriculture National Agriculture Statistics Service (NASS)* www.nass.usda.gov/ky/coa/elliot

*U.S. Department of Agriculture Soil Conservation Service in cooperation with Kentucky Agricultural Experiment Station.* Feb. 1965, Series 1961, No. 18; Soil Survey: Elliott County, Kentucky.


Appendix A

LA 959: Advanced Regional Planning
Krista Schneider, Professor of Landscape Architecture

This study involved computer lab tutorials and exercises that introduced Geographic Information Systems (GIS) applications to the landscape planning process. Students completed a series of ArcView tutorials to gain an understanding of how GIS software could be used to facilitate and enhance the analysis, inventory, and organization of spatial data in complex planning scenarios.

A class project required the students to apply their knowledge gained in lectures and tutorials to a data analysis and decision making process about a regional landscape. This planning study, in this example the ecological impact of All Terrain Vehicle (ATV) use in Elliott County, served to create a model for the selection of an ATV trail site.

ATV use in Elliott County is a very popular recreational pastime. Because ATV use is projected to increase, there will be a demand for more trails throughout the county. Depending upon the volume of ATV traffic and intensity of use, ATV’s can cause soil erosion, water pollution, and degrade wildlife habitat. This planning study sought to evaluate the ecological impact of a variety of proposed trail alignments to determine the best alternative and its general characteristics.

The ATV impact study began by first compiling a database of information critical to the understanding of landscape function and subsequent ecological impact of ATV trail alignment proposals. Much of the base information (such as roads, streams, aerial photographs, etc.) was compiled from state agency information. Students supplemented this base data by working in teams to generate digital process models for:

- Land Cover
- Slope Analysis
- Soil Erosion Potential
- Wildlife Habitat

Once the database was complete, the students began to analyze the composite vulnerability of the landscape to ATV use. The erosion vulnerability model became a function of steepness of slope, vegetative land cover, and soil erosion potential. The habitat vulnerability model represented areas of high biodiversity (large patches of contiguous interior forest cover containing water) and selected endangered species habitat identified in Elliott County (peregrine falcon, woodpecker, and cougar).

Five alternative ATV trail alignments were proposed throughout the county, each approximately 30 miles in length. These trails were designed to traverse variable topography, have good accessibility from roads, and offer good views. Where possible, loop trails were considered to facilitate transportation of ATV’s before and after use.
Once the ATV trail alternatives were generated, they were evaluated to determine their potential impact on soil erosion and degradation of wildlife habitat. Impact was quantified using a simple raster based data overlay analysis.

While this phase of the study is not integrated into the overall land use study, results indicate Site E as having the least environmental impact. Site C has potential of being contained within an isolated watershed. This appendix is intended to serve as a guide for the process in selecting a site rather than choosing a specific site.

ATV Trail Alternatives
The University of Kentucky in no way guarantees the work performed by students participating in this studio course and makes no warranties, expressed or implied, regarding the quality of any product produced. The community sponsor agrees to indemnify and hold harmless the University against any claims arising out of the sponsor's utilization, sale, or transfer of materials developed in the whole or in part by students in the Landscape Architecture Program. Efforts were made to ensure a quality product but it is important to recognize that the final documents are student work for academic purposes.
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