TABLE OF CONTENTS

II.	ΕX	XISTING CONDITIONS	II-1
Α		POPULATION AND EMPLOYMENT	II-1
	1.	. Current Demographics	II-1
	2.	. Local Projections	II-1
	3.	. Regional Growth Projections	II-3
В		LAND USE	II-4
	1.	. Existing Conditions	II-4
	2.	. Issues And Opportunities	II-6
С		TRANSPORTATION	II-8
	1.	. Existing Conditions	II-8
	2.	. Current Trends	II-17
	3.	. Issues And Opportunities	II-19
D		HOUSING	II-20
	1.	. Supply, Need And Affordability	II-20
	2.	. Current Trends	II-24
	3.	. Issues And Opportunities	II-24
Ε.	i	ECONOMIC DEVELOPMENT	II-25
	1.	. Existing Employment Charateristics	II-25
	2.	. Current Trends	II-28
	3.	. Issues And Opportunities	II-28
F.		UTILITY INFRASTRUCTURE	II-29

	1.	Existing Conditions	II-29
	2.	Current Trends	II-36
	3.	Issues And Opportunities	II-36
G		COMMUNITY SERVICES/FACILITIES	II-37
	1.	Existing Conditions	II-37
	2.	Current Trends	11-42
	3.	Issues And Opportunities	11-42
Н		ENVIRONMENTAL/ NATURAL FEATURES	II-43
	1.	Existing Conditions	II-43
	2.	Current Trends	II-49
	3.	Issues And Opportunities	II-49
I.		RECREATION AND HISTORIC / CULTURAL RESOURCES	II-50
	1.	Existing Conditions	II-50
	2.	Current Trends	II-53
	3.	Issues And Opportunities	II-53
J.		FISCAL CONDITION	II-54
	1.	Existing Conditions	II-54
	2.	Trends	II-54
	3.	Issues and Opportunities	II-55
K.		HEALTHY COMMUNITY	II-57
	1.	Existing Conditions	II-57
	2.	Issues and Opportunities	II-57
L.		INTERGOVERNMENTAL RELATIONS	II-58
	1.	Existing Conditions	II-58
	2.	Trends	II-58

3.	Issues and Opportunities	II-58
M.	SUMMARY AND RECOMMENDATIONS	II-61
1.	Land Use	II-61
2.	Community Facilities	II-61
3.	Transportation	II-61
4.	Housing	II-62
5.	Economic Development	II-62
6.	Utilities	II-62
7.	Schools	II-62
8.	Natural Resources	II-62
9.	Historical Resources	II-63
10.	Parks And Recreation	II-63
11.	Fiscal Health	II-63
12.	Healthy Community	II-63
13.	Intergovernmental Relations	II-64

LIST OF EXHIBITS

Exhibit II - 1: Population Trends	II-2
Exhibit II - 2: Existing Land Use Map	II-7
Exhibit II - 3: Functional Classification	II-11
Exhibit II - 4: 2000 Commuting Behavior	II-18
Exhibit II - 5: Recurring Daily Congestion, 2008	II-18
Exhibit II - 6: Median Household Income Map	II-22
Exhibit II - 7: TVA Distributors Map	II-34
Exhibit II - 8: Robertson County School Zones	II-41
Exhibit II - 9: Floodplains in Robertson County	II-44
Exhibit II - 10: Watersheds in Robertson County	
Exhibit II - 11: Hydric Soils in Robertson County	
Exhibit II - 12: Prime Farmland in Robertson County	
Exhibit II - 13: Robertson County Historic Places	

LIST OF TABLES

Table II - 1: Population & Jobs Forecast for MPO Counties	11-1
Table II - 2: Population Forecasts	11-2
Table II - 3: Existing Land Use	-4
Table II - 4: Robertson Jurisdictional Roadway Inventory	II-12
Table II - 5: Local Roadways by Jurisdiction	II-12
Table II - 6: State Roadway and Federal Highway Facilities	II-12
Table II - 7: Robertson County Airports & Heliports	II-13
Table II - 8: Route 89X Ridership Data	II-15
Table II - 9: Commuting to Other Counties for Jobs	
Table II - 10: Housing Units by Occupancy and Tenure	
Table II - 11: Median Household Income	II-20
Table II - 12: Home Values 2000 - 2012	II- 2 1
Table II - 13: Housing Units by Year Built	II- 2 1
Table II - 14: Housing Units by Type	II-23
Table II - 15: Quality of Housing Stock	II- 2 3
Table II - 16: Overcrowding	II-24
Table II - 17: Education	II-25
Table II - 18: Robertson County Commute Times	II-26
Table II - 19: Robertson County Industry Sectors 2012	II-26
Table II - 20: Employment and Wages	
Table II - 21: Cost of Living Index	II-28
Table II - 22: Convenience Center Locations	II-35
Table II - 23: Named Streams, Rivers or Branches	11-46
Table II - 24: National Register of Historic Places	II-51

II. EXISTING CONDITIONS

A. POPULATION AND EMPLOYMENT

1. CURRENT DEMOGRAPHICS

According to the US Census, the population of Robertson County was 41,494 in 1990 (see **Table II-1**). By 2012, the County population had grown to 69,505, a 67% increase, which is significant compared to other rural counties in the area. The table also shows the populations of Adams, Coopertown and Cross Plains for each of the decennial census counts and a 2012 estimate. The fastest growing jurisdiction was Coopertown which more than doubled its population in the last 20 years.

2. LOCAL PROJECTIONS

The population projections discussed in this section are based on the MPO's Long Range Transportation Plan and third party software called ESRI Business Analyst. Including two sources of population projections for the County provides a means for comparison and validation. Population trend data for Adams, Coopertown and Cross Plains is provided by ESRI Business Analyst.

ROBERTSON COUNTY

According to the MPO's forecasts, Robertson County's total population was estimated to grow from 61,708 in 2006 to 101,324 in 2035, which is an increase of approximately 64 percent. According to the US Census the 2010 population of Robertson County was 66,283. In comparison of the MPO's forecasts with the current US Census number, the annual rates are close at 2.21 % (MPO) and 1.85 % (US Census).

Table II - 1: Historic Population Trends

	Year			
Jurisdiction	1990	2000	2010	2012
Adams				
Population	531	566	633	665
Households	193	203	224	236
Coopertown				
Population	1,925	3,027	4,278	4,327
Households	658	1,078	1,482	1,499
Cross Plains				
Population	1,020	1,381	1,714	1,750
Households	362	504	611	624
Robertson County				
Population	41,494	54,433	66,283	69,505
Households	14,855	19,906	24,028	25,609

Source: ESRI Business Analyst, US Census and Woods & Poole Economics, Inc.

Population projections conducted by ESRI Business Analyst show the county growing at a slower rate than the MPO data. From 2010 to 2016, ESRI estimates Robertson to grow from 66,283 to 71,389, which is an annual rate of 1.10 percent. The numbers from ESRI are slightly more conservative than the MPO's. However, the comparison of the 2006 population estimate and the 2010 US Census shows the actual average annual growth rate is closer to 1.85 percent.

PARTICIPATING CITIES

For the Town of Coopertown and the cities of Adams and Cross Plains, ESRI Business Analyst was used, due to the limited nature of the data at the regional level. Shown in **Table II-2**, population estimates and ESRI forecasts are provided for 2012 to 2017 for Adams, Coopertown and Cross Plains. Of the three jurisdictions, Adams is anticipated to grow at a higher rate. This factor is slightly misleading due to the small size of Adams. Coopertown has the largest population of the three, but it is also the largest municipality in geographic size and is slated to grow at a much slower rate than the others.

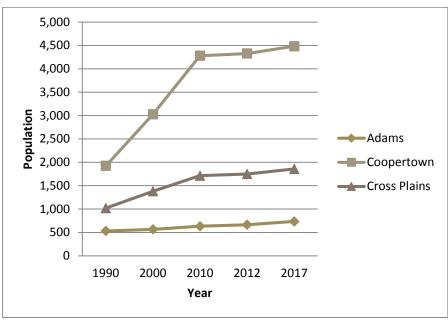
The historic Census figures from 1990 and 2000 show that Coopertown added over one thousand new people in that 10-year period and an even larger increase from 2000 to 2010 as illustrated in **Exhibit II-1**. Adams's population has remained the most constant over the last 20 years having only gained 102 people. All three cities have shown steady growth over the last 20 years, which further validates the general population trend analysis conducted by the MPO.

Table II - 2: Population Forecasts

	Ye	ar	Average Annual	
Jurisdiction	2012	2017	Rate	
Adams				
Population	665	736	2.14%	
Households	236	261	2.12%	
Coopertown				
Population	4,327	4,483	0.72%	
Households	1,499	1,554	0.73%	
Cross Plains				
Population	1,750	1,858	1.23%	
Households	624	663	1.25%	
Robertson County				
Population	67,683	71,389	1.07%	
Households	24,715	26,077	1.08%	

Source: US Census, ESRI Business Analyst and LEA, 2012.

Exhibit II - 1: Population Trends



Source: US Census, ESRI Business Analyst and LEA, 2012.

3. REGIONAL GROWTH PROJECTIONS

CURRENT TRENDS

The County population has steadily increased since 1990 for a total increase of 67% from 1990 to 2012, which is a significant increase in comparison to other rural counties across Tennessee. With an average annual growth rate of 3.05%, Robertson County has experienced growth that is characteristic of the overall region's growth trends. This growth has occurred despite the limited investments made in County infrastructure and services. During this time period it has been common knowledge throughout the region that Robertson County wanted to remain rural and continue with status quo. With new leadership and change of focus to provide more employment opportunities to its residents, the County is poised to leverage business development from existing industry sectors and strategically enhance infrastructure in planned centers of growth.

ISSUES AND OPPORTUNITIES

Although the trends show most of the future growth in the Middle Tennessee region occurring in Davidson, Rutherford and Williamson counties (over 70%), Robertson County is positioned and poised to capture more growth than the historically observed trend. Through the development of this plan and implementation strategies, the County and participating cities are initiating the process to attract more development, jobs and residents than previously forecast in past planning studies.



B. LAND USE

The purpose of this section is to provide the current land use pattern of Robertson County. In addition to an explanation of the existing land uses within the County, this section includes commentary on current issues and opportunities related to land use.

1. EXISTING CONDITIONS

The predominant existing land use in Robertson County is agriculture, which is evident with the large tracts of farmland utilized for growing tobacco and wheat. This is a viable industry in the County and should continue into the future. However, suburban development has intruded into these areas over the last 10 to 20 years and is endangering the long term preservation of the agriculture industry in Robertson County. Urbanizing areas are found in the city cores throughout the County. The largest urban center is Springfield, which is the County seat. Higher intense uses are located along US 41 within Springfield, Greenbrier, Ridgetop and Millersville. White House on the eastern side of the County adjacent to the SR 76 and I-65 interchange is also another core area that offers a mixture of land uses and urban amenities.

Outside of the southeastern quadrant of the County, the cities and towns (such as Adams, Cross Plains, Coopertown, Orlinda, Portland and Cedar Hill) are less dense and exhibit characteristics of village hamlets more so than urban town centers. These areas support the rural areas with small scale commercial/retail uses, government services and recreational opportunities.

Table II-3 illustrates the predominant land use within the County is agriculture consisting of lands with the primary use focused on the cultivation of crops and other similar uses. The centers of commerce are quite evident within the central and southeastern portions of the County, as shown on **Exhibit II-2**. Residential uses (primarily single family) are the second most prevalent use in the County and are highly dispersed with limited cohesion and critical mass.

Table II - 3: Existing Land Use

Land Use	Acres	Percentage
Agriculture	237,233	79.63%
Commercial	2,567	0.86%
Industrial	956	0.32%
Public/Institutional	5,193	1.74%
Residential	51,964	17.44%
Total	297,914	100.00%

Source: Parcel Data, Tennessee Comptroller of the Treasury Division of Assessments, 2012.

AGRICULTURE

Agriculture continues to be the largest segment of land use in the County. Tobacco remains the largest cash crop for local farmers in the County and is an important cultural and economic industry. According to the 2007 Census of



Agriculture, Robertson County produced \$82 million of farmland and agricultural products, which includes tobacco, wheat, cattle, soybeans, dairy and other commodities. Large agriculture producers in the County include Clinard Farm, Green Hill Farm, Honeysuckle Hill Farm and Gus Elliot Farm.

COMMERCIAL

Commercial centers in the County predominantly exist along US 41, US 431 and SR 76 in Springfield and White House. Much of the commercial development on the major roadways is "big box", strip commercial or out parcel retail establishments in suburban, auto-oriented layouts. Commercial establishments include Wal-Mart, Lowes, fast food restaurants, smaller retail shops and shopping centers.

INDUSTRIAL

The industrial land use category represents manufacturing distribution, processing and warehousing uses throughout the County. These uses are primarily located in the Springfield area. Major industrial uses include the Electrolux manufacturing/R&D plant and the industrial park east of the Springfield Robertson County Airport. The presence and influence of the CSX Railroad and proximity to the Interstate were major influences for industrial development in the County.





PUBLIC/INSTITUTIONAL

Properties that are categorized as Public/Institutional are owned and operated by local or state governments or public agencies. These properties are represented as blue on **Exhibit II-2**. Public uses include the Springfield Robertson County Airport, parks, landfill, fire stations, law enforcement stations, schools, and government operations.

RESIDENTIAL

Depicted as yellow on the Existing Land Use Map, residential uses are scattered throughout the County. Most of the residential shown in the Existing Land Use Map is single family. There are some multifamily residential units in the southern portion of Springfield and off of US 41 near Greenbrier and Ridge Top.



2. ISSUES AND OPPORTUNITIES

There are significant opportunities in Robertson County to grow and develop multiple centers of commerce at highly traveled nodes. Due to its location between two interstates and the radial aspect of the state highway system converging at the hub in Springfield, Robertson County is strategically positioned for growth with a solid transportation backbone.

The development of the White House area at SR 76 and I-65 presents an opportunity for an intensified commercial node or activity center as it continues to grow and prosper. Growth in this area is likely due to the availability of utility infrastructure served by the largest utility district in Tennessee (White House Utility District), a new high school and public recreation opportunities.

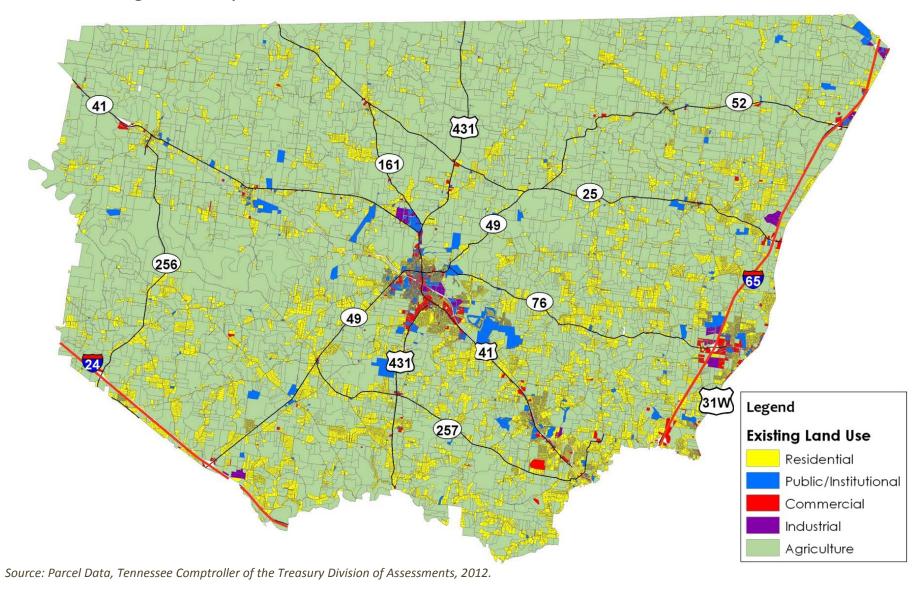
Another issue that could potentially affect the preservation of prime farmlands is the Tennessee Code Annotation (TCA) located in Title 13 that provides the definition of a subdivision. The interpretation of the term "subdivision" allows for lands to be subdivided into lots 5 acres or larger without going through the subdivision plat approval process if no new utility infrastructure or roads are needed to access the subdivided parcels. This could continue to allow the proliferation of urban sprawl and development patterns that are uncharacteristic of the larger farm tracts that have been in place for over a century in the rural areas of Robertson County that are currently utilized for farming operations. More proactive measures should be initiated in order to maintain and preserve the County's agrarian heritage and economy.

Not only is this development pattern threatening the future prosperity of the agricultural industry in the County, but it is also making the provision of necessary services (schools, recreation, roads, police/fire, sanitation, EMS) nearly impossible. All of these services are impacted by a sprawling development pattern and the resulting inefficient means of serving residents as well as the lack of sufficient funding from residential growth in comparison to non-residential development i.e. water, sewer and EMS)

Many of these residential structures benefit from being adjacent to constructed roadways. However, most of these homes utilize on-site sewage disposal (septic tanks) and wells for potable water. Both of these characteristics present environmental degradation issues that may become exponentially exacerbated, if the current pattern of development is allowed into the future.



Exhibit II - 2: Existing Land Use Map



C. TRANSPORTATION

Planning for transportation infrastructure and multiple modes of travel is an integral part of the comprehensive planning approach. Transportation decisions affect almost all aspects of planning from land use policies to environmental protection. Additionally, transportation provides the linkage between goods/locally cultivated products with the regional, intra state, and national systems of commerce. This chapter provides an indepth examination of the existing transportation system within Robertson County and analysis of the future transportation network according to the County's future growth scenario. This chapter was prepared in cooperation with the Nashville Area Metropolitan Planning Organization (MPO).

1. EXISTING CONDITIONS

a. ROADS AND HIGHWAYS

The roadway network in Robertson County is the most utilized form of transportation. The network is comprised of three jurisdictional levels addressing maintenance responsibilities. These three levels are local roadways, county roads, and state roads. Each roadway is designed to accommodate a certain volume of trips during peak hours, which is called the roadway's functional classification.



Major Facilities

The major roads within Robertson County provide intra/inter-county and interstate connections. These facilities include two interstates (I-24 and I-65) that traverse the County on its west and east sides respectively, US 41 that travels through the center of the County, SR 49, SR 25, SR 161, SR 76, SR 256, and SR 65.

Interstate 24 (I-24) - runs southeast to northwest along the southwestern edge of the County. I-24 connects the Middle Tennessee region to Southern Illinois due northwest and Chattanooga, Tennessee due southeast. Through the County, I-24 is a divided road which has three lanes for a large portion of the westbound direction and two lanes in the eastbound direction. This facility provides direct connection to Nashville where it intersects I-65 and I-40.

Interstate 65 (I-65) - runs southwest to northeast along the eastern edge of the County. I-65 provides a connection from the Middle Tennessee region to Chicago, Illinois on the northern terminus and

Mobile, Alabama on the southern terminus. Through the County, I-65 is a divided facility and has two lanes in both the southbound and northbound directions. This interstate does provide direct connection to Nashville where it intersects I-24 and I-40.

US Highway 41 (US 41) - travels in a southeastern-northwestern direction through the center of Robertson County. This roadway serves as the central backbone of the roadway network in the County. As is the case with I-24 and I-65, US 41 provides a direct connection to Nashville, which is one of the major

employment centers in the region. From the northwestern corner of the County to northern Springfield, US 41 is two lanes undivided and four lanes divided from northern Springfield to the southeastern corner of the county line.

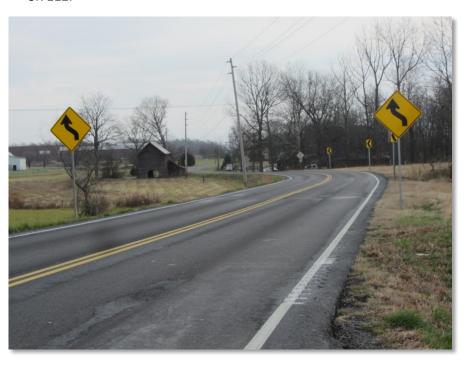
US Highway 431 (US 431) – bisects the County along the north-south axis. US 431 provides a direct connection to Nashville intersecting with I-440, I-40 and I-65. This roadway connects this region to Owensboro, Kentucky (northwestern Kentucky) and Dothan, Alabama (southeastern Alabama). From the north County line to northern Springfield, this roadway is two lanes undivided, four lanes divided through Springfield, three lanes undivided in southern Springfield, and back to two lanes undivided to the south county line.

State Road 25 (SR 25) — is the only roadway within the County that is a designated Tennessee Parkway. Designated parkways are similar to the federal scenic byways designation, which means the scenic views are to be protected including off-site signage restrictions. This roadway travels in an east-west direction within the northeastern quadrant of the County. SR 25 functions as Cross Plains' main street within the City's boundary. Along its entire expanse, SR 25 is two lanes undivided and provides striking views of the County's agrarian character. Adequate protective measures should be in place to retain its designation as a Tennessee Parkway and other roads in the County should be explored for this classification.

State Road 49 (SR 49) - travels in the southwestern-northeastern direction through the center of Coopertown, Orlinda and Springfield. This roadway functions as Orlinda's main street. SR 49 extends from Franklin, Kentucky to Ashland City, Tennessee. From the northeastern corner of the County to I-24, SR 49 is two lanes undivided.

State Road 76 (SR 76) - travels in an east-west alignment through the County. SR 76 provides connections to Portland (across the County line in Sumner), White House, Springfield, Adams, and Clarksville. From the eastern county line to Springfield, SR 76 is two lanes undivided and two lanes divided in Springfield. Leading away from

Springfield, SR 76 coincides with US 41 to Adams where it diverges back to SR 76 through Clarksville eventually intersecting with I-24 and SR 112.



Functional Classification

The County roadway system is comprised of multiple types of roads ranging from high capacity multi-lane interstates to local urban streets as well as unpaved rural roads. All of the roads are given a functional classified based on their physical characteristics, the function of the roadway, and the mobility that is provided by each road type. Due to the rural nature of the County, the state has classified each road as rural based on its context with surrounding development (see **Exhibit II-3**). The roadways in Robertson County are classified into four major categories in descending order from highest capacity to lowest as follows:

<u>Rural Interstates</u> are multi-lane, high volume roadways that are used for through traffic and have no direct access to adjacent parcels of property. Access is typically provided at grade-separated interchanges. Interstate 24 and Interstate 65 serve as the east and west borders for the County.

<u>Rural Arterials</u> move large volumes of traffic between major trip generators. They are designed to carry traffic between neighborhoods or regional development centers and intersect with collector and local roads. Arterials also connect directly to the interstate system. The following roadways are considered arterials roadways in Robertson County: US 41, US 431, SR 76, SR 25 and SR 49.

<u>Rural Collectors</u> provide the connections between the arterials and local roads/properties. Robertson County collectors include East Robertson Road, Cross Plains Road, Kinneys Road, Flewellyn Road, New Chapel Road, Turnersville Road, Gause Road, Springs Road, Old

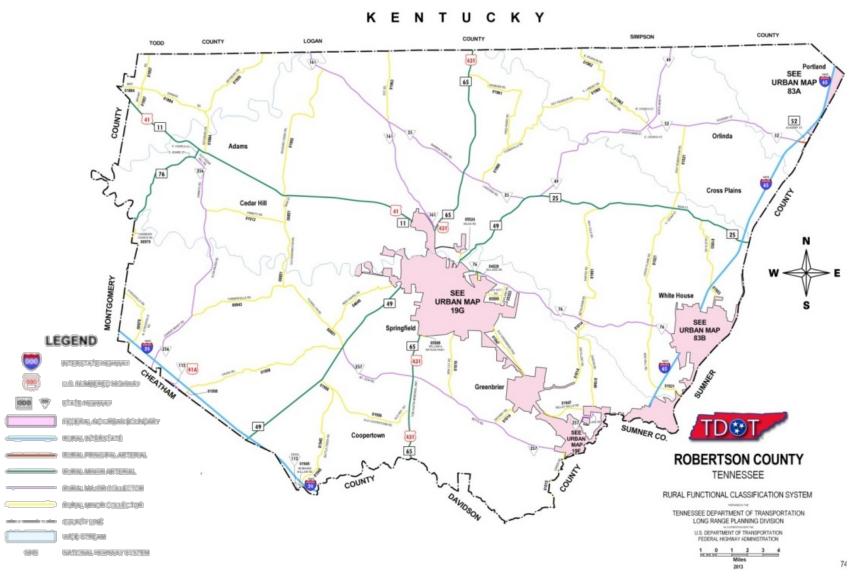
Coopertown Road, Battlecreek Road, Academy Street, Mt. Zion Road, Glen Raven Road, and others.

<u>Rural Local Roads</u> are lower traffic volume roads that provide direct access to private properties in Robertson County. These roadways are the most prominent roadway type in the County. The County is responsible for maintenance of these roads within the unincorporated areas and some of the local roadways within the cities.

The functional classification system provides a measurable scale from which capacity enhancements and funding decisions are made. Roadways that support large traffic volumes in the County are either on the State Highway System or the Federal Highway System. Functional classification also provides the basis for establishing street cross sections and design standards depending on the local context (rural, suburban or urban).



Exhibit II - 3: Functional Classification



Source: Tennessee Department of Transportation, 2013.

Jurisdiction and Maintenance Responsibility

The following tables list the major roadways and the maintenance responsibility of each within Robertson County and the cities of Adams and Cross Plains and the Town of Coopertown.

Table II - 4: Robertson Jurisdictional Roadway Inventory

Roadways			
Adam Dr	Agee Rd	Airport Rd	
Albert Fentress Rd	Allen Rd	Amy Ct	
Anderson Rd	Anthony Rd	Apollo Dr	
Apple Ln	Apple Rd	Armstrong Rd	
Brown Rd	Carr Rd	Corbin Rd	
Cross Plains Rd	Dowlen Rd	Gainous Rd	
Gregory Rd	Gunn Rd	Hancock Rd	
Heritage Hills Dr	Hidden Meadow Dr	Highland Rd	
Hoods Branch Rd	Hoos Branch Rd	Hugh Woodard Rd	
Johnston Springs Rd	Kilgore Trce	Kinneys Rd	
Mt Olivet Rd	Mud Cat Rd	Nikki Dr	
North Pinson Rd	Oakland Rd	Old Washington Rd	
Powell Ln	Robert Elder Ct	Robertson Rd	
Skyhawk Ct	Skyhawk Ct	Smiley Hollow Rd	
South Old 31W	Stacy Springs Rd	Stroud Rd	
Wandaland Rd	Webster Rd	Wilks Rd	

Source: TDOT TRIMS database.

Table II - 5: Local Roadways by Jurisdiction

Roadways	Jurisdiction
N Adams St	Adams
N Commerce St	Adams
S Adams St	Adams
Alvin Head Rd	Coopertown
Alycia Way	Coopertown
Annsley Pl	Coopertown
Apache Trl	Coopertown
Myra Ct	Coopertown
Scott Ln	Coopertown
Tanner Trce	Coopertown
Trevor Ct	Coopertown
Atkins Dr	Cross Plains
Glidewell Rd	Cross Plains
Hwy 31W	Cross Plains
Lassie Ln	Cross Plains

Source: TDOT TRIMS database.

Table II - 6: State Roadway and Federal Highway Facilities

Roadways
Highway 161
Highway 49
Interstate 24
Interstate 65
State Hwy 25
State Hwy 256
State Hwy 257
State Hwy 52
State Hwy 76
State Hwy 765
US Hwy 41

Source: TDOT TRIMS database.

b. AIRPORTS

The Robertson County area is served by several aviation airports, five of which are shown in **Table II-7**. The vast majority of the airports are private airfields that were developed to service the agricultural industry which has included spraying fertilizers and pesticides and for short regional trips. Springfield/Robertson County Airport (M91) is a General Aviation airport jointly owned by the City and County. Since 1991, the airport has transitioned from predominantly recreational usage to 85 percent industrial, business and commercial usage.

The closest commercial passenger airport to Robertson County is Nashville International Airport (BNA), which is approximately 35 miles from Springfield, Tennessee. This airport is responsible for approximately 10 million passengers a year, and over 45,000 tons of freight. Nashville International Airport provides flights to 70 US locations, Canada and Mexico. As the largest airport in Middle Tennessee, it handles the bulk of domestic travel for the region.



Table II - 7: Robertson County Airports & Heliports

Name	Туре	Owner Type	Location	City	Elevation
Springfield Robertson County	Airport	Public	4432 Airport Road	Cedar Hill	706 Ft
Holenthawall	Airport	Private	6024 Earhart Rd	Springfield	645 Ft
Nobuzzn	Airport	Private	3502 Jim Gower Rd	Springfield	650 Ft
Foreman Field	Airport	Private	4217 HWY 49 West	Springfield	705 Ft
Northcrest Medical Center	Heliport	Private	100 Northcrest Drive	Springfield	689 Ft

Source: Federal Aviation Administration, 2012.

c. RAIL

The Nashville area is the central radial hub for rail facilities in Tennessee. In addition to the highly connected rail network, there is a convergence of highway, air and port activity that is centered in the Nashville core. Emanating from the hub in Nashville and generally following the US Highway 41 corridor, the CSX Transportation Class I (being the primary freight haulers) railroad runs through the heart of Springfield and Robertson County. Traveling northwest the CSXT railroad directly connects to Hopkinsville in western Kentucky, which connects with Bowling Green and further northeast to Louisville.

CSX Transportation (CSXT) operates and maintains 22,000 route miles in 22 states, as well as the District of Columbia, and two Canadian provinces. The CSXT network provides freight service from Chicago, St. Louis, Memphis, and New Orleans to the Great Lakes, Boston, New York, Philadelphia, and Baltimore and down the Atlantic coastline to Orlando, Tampa and Miami.

Nashville is the location of CSXT's Tennessee Operating Division

headquarters, which manages 1,377 track miles, two major rail yards and nine terminals. These facilities are responsible for processing CSXT rail line freight coming in from the line that traverses through Robertson County as well as the other rail lines converging in Nashville.

The rail line within the Nashville area accounts for approximately 15% of the total amount of freight tonnage movement as compared to freight moved by trucks which accounts for 82% within the region. A high proportion of the freight coming to the Nashville area is considered through traffic, meaning the destination of the freight is outside of the Nashville area.



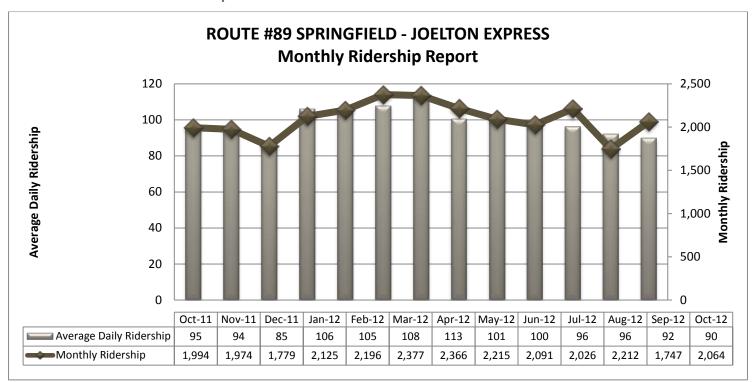
d. Public Transportation

The Regional Transportation Authority (RTA) is responsible for providing mass transit services within the Middle Tennessee region, which includes bus, vanpooling, carpooling and commuter rail service. RTA was established by state statute in 1988. Since its establishment, the RTA has developed an extensive network of transit alternatives with six regional fixed bus routes from the communities surrounding Nashville, the major employment center in the Middle Tennessee region.

One of the six fixed bus routes is a Park & Ride Route 89X that includes two park and ride lots in Springfield. The first lot is in Downtown Springfield at 7th and Main Street and the other is collocated with the Springfield Wal-Mart on Tom Austin Highway.

As shown in **Table II-8**, ridership tends to decrease during the winter months and picks up in the spring. Average daily ridership remains steady around 100 riders per day, which is consistent with the previous year's trends. This route began service in February 2011.

Table II - 8: Route 89X Ridership Data



Source: Regional Transportation Authority, 2012.

e. BICYCLE FACILITIES

Robertson County has the least amount of bicycle routes and trails in the Nashville Area MPO region. Marked bicycle routes are very limited in Robertson County. Many roadways within the County have sufficient right-of-way and developed shoulder, but lack bicycle signage and pavement markings.

A 2009 regional inventory logged approximately 50 miles of bike routes/trails, but no bike lanes in Sumner County and the MPO area of Robertson County. The routes that were found to be signed during the inventory are on Highway 52, Highway 31E, and Long Hollow Pike and a portion of Highway 41 in Robertson County.

f. PEDESTRIAN SYSTEM

Robertson County has the least amount of sidewalks in the Nashville Area MPO region. Pedestrian sidewalks and walkways are most prevalent in the urbanized areas of Springfield, Adams, Cross Plains and Coopertown. Due to its urban character, Springfield has the highest level of pedestrian connectivity in the County. Of the three participating municipalities, Adams and Cross Plains have sidewalks in their central business districts. Coopertown has the least pedestrian connectivity due to its limited urban development. Cross Plains includes a large portion of newly constructed, yet disconnected, sidewalks that are likely due to a recent commitment to enhancing walkability through enforcement of land development regulations.

g. TRAILS

The inventory of trails in Robertson County is limited. There are three identified trails in the County. These include one trail in Springfield, a trail loop in White House and an auto tour route in Coopertown.

Springfield Greenway is located north of the urban area of Springfield and runs along Sulphur Fork Creek for approximately 2.2 miles. The

Trail of Tears Auto Tour Route in Coopertown is approximately 6.4 miles long. Trail of Tears is a path that represents the travel of the Cherokee Indians during the Indian Removal Act in the late 19th century. Although this facility is considered a greenway, there are no bicycle or pedestrian facilities along this route in Coopertown. The White House Greenway Trail is a loop facility that is planned to encircle the core of the city, which is approximately five miles long. This is a multiuse trail that follows the scenic natural terrain and connects parks with four trailheads throughout the city.



Springfield Greenway

h. Intermodal Facilities

The only intermodal facilities within the County are the two Park & Ride lots that provide surface parking for RTA route 89X from Springfield to Downtown Nashville. West of the City of Adams DSF has a large grain processing facility that loads grain on trucks and rail cars for distribution throughout the United States.

2. CURRENT TRENDS

In 2003, the U.S. Census Bureau conducted the Journey to Work Survey that quantified the amount of inter-county work related commuting trips. At the time of the study, 57% of the working population in the County was commuting to other counties for work as shown in **Table II-9** and illustrated in **Exhibit II-4**. However, Robertson County retained the largest number (11,871) of "commuters" for any one County. Although the survey was conducted ten years ago, the travel patterns have remained consistent. When evaluating the balance of housing to jobs availability it is important to review the current location of jobs in the region and the travel patterns of the employed population. According to the survey, 57 percent of employed residents left the County with approximately 41 percent of those commuting to Davidson County for employment.

The Metropolitan Planning Organization (MPO) is the transportation planning entity charged with evaluating the all modes of transportation for Robertson County as well as the Middle Tennessee region. During the development of the MPO 2035 Plan, roadways were evaluated for congestion. The MPO reviews its roadway network and assigns improvement priorities according to the need that is based on a large number of factors. One of those factors is recurring daily congestion (most identifiable factor to a roadway network user), which refers to the predictable travel patterns that result in congestion on the roadway



network on a daily basis.

Exhibit II-5 illustrates most of the region's congestion is concentrated in the Nashville area. There are two small segments in Robertson County shown as congested that are located along I-65 near White House and Portland.

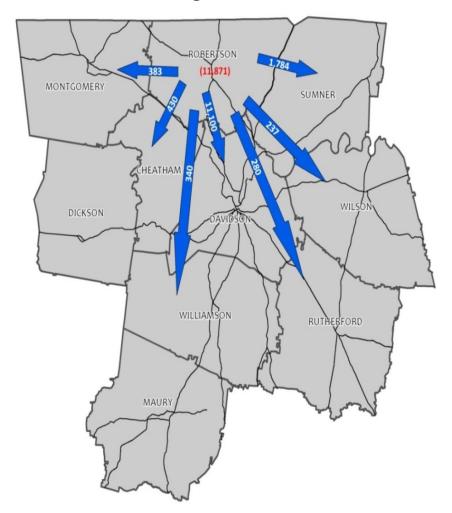
Table II - 9: Commuting to Other Counties for Jobs

Origin County	Destination County/State	Commuters	Percent
Robertson Co. TN	Robertson Co. TN	11,871	43.57%
Robertson Co. TN	Davidson Co. TN	11,100	40.74%
Robertson Co. TN	Sumner Co. TN	1,784	6.55%
Robertson Co. TN	Cheatham Co. TN	430	1.58%
Robertson Co. TN	Montgomery Co. TN	383	1.41%
Robertson Co. TN	Williamson Co. TN	340	1.25%
Robertson Co. TN	Rutherford Co. TN	280	1.03%
Robertson Co. TN	Wilson Co. TN	237	0.87%
Total		26,425	96.98%

Source: U.S. Census Bureau, Journey to Work, 2003.

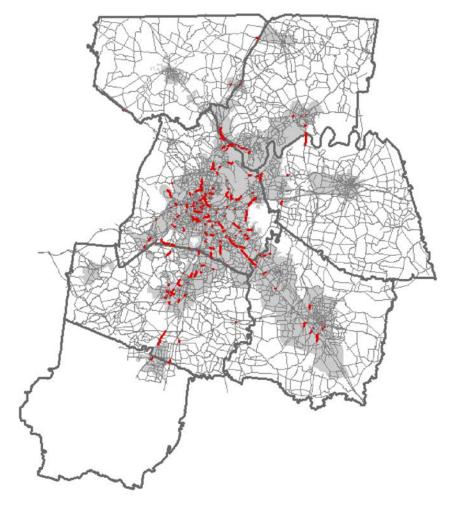


Exhibit II - 4: 2000 Commuting Behavior



Source: U.S. Census Bureau, Journey to Work, 2003.

Exhibit II - 5: Recurring Daily Congestion, 2008



Source: Nashville Area MPO, 2035 Regional Transportation Plan, 2008.

3. ISSUES AND OPPORTUNITIES

Robertson County has a strong regional roadway network that provides access to the entire County. The County has a significant opportunity to continue to enhance and build on its transportation network well into the future. One issue that has affected regional traffic in the County has been the lack of an east-west corridor that allows for free flow of inter-county commerce from I-24 to I-65. At present, SR 49 and SR 76 provide the connection between the two interstates funneling traffic through the heart of congested Springfield. There is an opportunity to provide more direct access from SR 49 to SR 76 utilizing the Batson Parkway alignment.

The Robertson County transportation system is lacking multimodal aspects that provide alternatives to motorized travel. Most of the village/city centers excepting Springfield have very limited to no pedestrian facilities, which does not promote walkability that is common with most traditional small towns. Also chronicled is the lack of bicycle facilities throughout the County. With a very large active population in Middle Tennessee, there is an opportunity to integrate agri-tourism initiatives with multi-purpose trail development.

The majority of the roadways in the County are two lanes with limited to no shoulders and in some instances exhibit difficult maneuvering curves. Several high travel roadways, such as US 431, Cross Plains Road and SR 25 would benefit from safety improvements.

The County has an opportunity to enhance the development of rail facilities and capitalize on the location of village centers adjacent to the rail line. Such an approach would also benefit agricultural industry in terms of processing and distribution. Additionally, as densities begin to increase along the rail line and the demand for inter-county travel begins to significantly tax the capacity and functionality of the roadway network, an analysis should be undertaken to evaluate the need and feasibility for commuter rail.



D.HOUSING

1. SUPPLY, NEED AND AFFORDABILITY

Several factors affect the affordability and livability of housing stock within a region. For the purposes of this section, only Robertson County as a whole will be evaluated for its housing supply suitability. The historic and current supply of housing units is shown in **Table II-10**. The proportions of occupied and vacant units have remained relatively constant over the last 12 years. The current estimated total housing supply for all of Robertson County is 26,525 housing units. Of the total housing supply, 93 percent is currently occupied with 69.7 percent being occupied by the owner and 23.5 percent occupied by renters. Vacant housing units decreased from 2010 to 2012, which may be due to the strengthening economy and reduction in foreclosures.

Table II - 10: Housing Units by Occupancy and Tenure

	Census 2000		2010	2010		2012	
	Number	%	Number	%	Number	%	
Total	20,995		26,086		26,525		
Occupied	19,906	94.8	24,197	92.8	24,715	93.2	
Owner	15,222	72.5	18,296	70.1	18,491	69.7	
Renter	4,684	22.3	5,901	22.6	6,224	23.5	
Vacant	1,089	5.2	1,889	7.2	1,810	6.8	

Source: US Bureau of the Census, 2000 & 2010 Census of Population and Housing, ESRI forecasts for 2012.

Table II-11 shows median household income from 2000 to 2012. The median household income improved by approximately \$11,000 between 2000 and 2010. The median household income levels dropped by \$9,000 within a two-year span between 2010 and 2012. This decrease in income

is likely due to the recession and the lack of a sustainable job market in Robertson County. **Exhibit II-6** shows the distribution of income levels throughout the County. The census tract with the highest level of income is located adjacent to Greenbrier and Ridgetop.

Table II - 11: Median Household Income

Year	2000	2010	2012
Median Household Income	\$43,119	\$54,642	\$45,984

Source: US Bureau of the Census, 2000 Census of Population and Housing, ESRI forecasts for 2010 & 2012.

In determining the affordability of the housing stock in Robertson County, the average contract rent and average monthly mortgage is compared to the average household income. Housing cost burden is the key identifier on whether housing is affordable in a particular area. In the U.S., spending more than 30 percent of one's income on housing is considered to be cost burdened. The 2011 average annual amount spent by a household on shelter was \$13,018 per year. With a median household income of \$45,984 and the median home value of \$146,778, the average housing cost burden in Robertson County is 31 percent. In general, the average household has access to affordable housing. Based on the median household income brackets, of the 24,715 households in Robertson County, 11,095 would be considered cost burdened, which accounts for 45 percent of the County's households.

The current 2012-2013 Federal Poverty Level income for a family of two is \$15,130 per year. Based on the current poverty income level there are approximately 3,400 households under the poverty level in Robertson County.

Unlike many parts of the U.S., Robertson County's home values have remained relatively constant in recent years, as shown in **Table II-12**. The current estimated median values are slightly higher than the 2010 values; conversely, the current average homes values are slightly less than 2010.

Table II - 12: Home Values 2000 - 2012

Housing Value	2000	2010	2012
Median Value	\$105,335	\$146,134	\$146,778
Average Value	\$126,392	\$172,905	\$171,154

Source: US Bureau of the Census, 2000 Census of Population and Housing, ESRI forecasts for 2010.



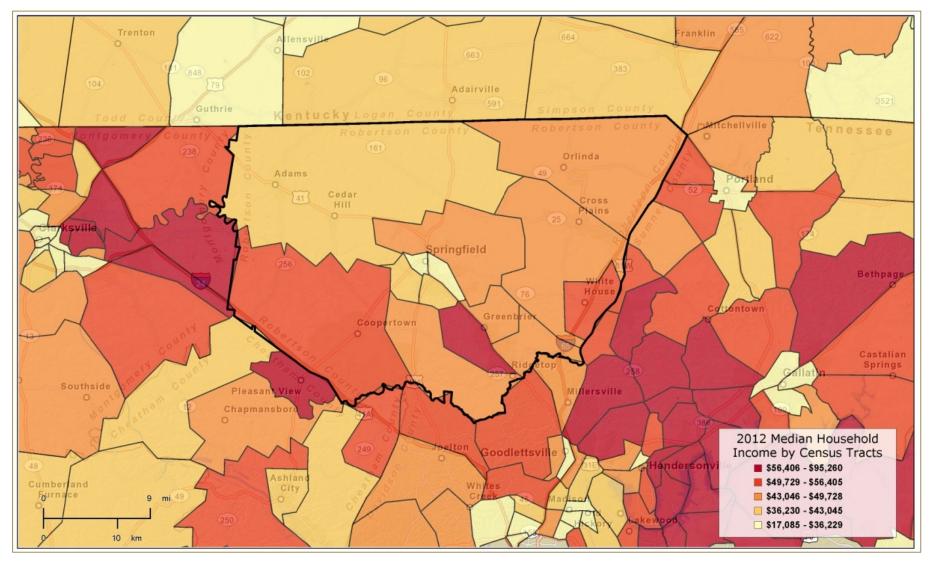
Age of the housing stock is also a factor in the quality of available housing options. The County's housing stock has a median age of 28 years old. Over 24 percent of the homes within the County were built between 1990 and 1998 and approximately 42 percent of the homes were built before 1979.

Table II - 13: Housing Units by Year Built

HOUSING UNITS BY YEAR STRUCTURE BUILT	2005-2009 ACS Estimate	Percent
Built 2005 or later	1,064	4.3%
Built 2000 to 2004	3,338	13.4%
Built 1990 to 1999	6,030	24.1%
Built 1980 to 1989	4,172	16.7%
Built 1970 to 1979	3,787	15.2%
Built 1960 to 1969	2,221	8.9%
Built 1950 to 1959	1,547	6.2%
Built 1940 to 1949	1,008	4.0%
Built 1939 or earlier	1,817	7.3%
Median Year Structure Built	1985	
Total	24,984	100.00%

Source: U.S. Census Bureau, 2005-2009 American Community Survey

Exhibit II - 6: Median Household Income Map



Source: ESRI Business Analyst, 2012.

The information shown in **Table II-14** represents the mix of housing types within the County. Although the mixture of housing types within the County is diverse, single family residential units (detached, attached and mobile homes) account for 90 percent of all housing units.

Table II - 14: Housing Units by Type

Housing Units be Units in Structure	Units	Percent
Single Family – Detached	19,315	77.3%
Single Family – Attached	310	1.2%
Single Family - Mobile Home	2,950	11.8%
Duplex	594	2.4%
Multifamily 3 or 4 Units	482	1.9%
Multifamily 5 to 9 Units	766	3.1%
Multifamily 10 to 19 Units	344	1.4%
Multifamily 20 to 49 Units	122	0.5%
Multifamily 50 or more Units	90	0.4%
Boat, RV, van, etc.	11	0.0%
Total	24,984	100.0%

Source: U.S. Census Bureau, 2005-2009 American Community Survey.

QUALITY OF HOUSING STOCK

The Census Bureau developed an indicator for housing that measures "quality of housing" indicators such as the lack of complete plumbing, kitchen or heating equipment, and the lack of a water system or means of disposing of sewage to quantify if varying levels of substandard conditions are present in housing. **Table II-15** summarizes these statistics for the County and the state and indicates that the interior quality indicators for Robertson County's housing stock are higher in comparison to the State of Tennessee in three of the four housing characteristics. Homes without telephone service occur more frequently in the County than the state.

Table II - 15: Quality of Housing Stock

	Tennessee		Robertson County		
Housing Characteristic	Estimate	Percent	Estimate	Percent	
Lacking complete plumbing facilities	11,930	0.5%	6	0.0%	
Lacking complete kitchen facilities	19,550	0.8%	46	0.2%	
No telephone service available	65,865	2.7%	883	3.7%	
No heat	4,662	0.2%	2	0.0%	
Occupied housing units	2,461,131		24,099		

Source: U.S. Census Bureau, 2009-2011 American Community Survey.



OVERCROWDING

Overcrowding is another indicator of substandard housing utilized by the Census Bureau. According to the U.S. Bureau of the Census, overcrowding exists if there are more than 1.01 persons per room living in a dwelling unit. In making these computations, a "room" is defined as a living room, dining room, kitchen, bedroom, finished recreation room, or enclosed porch suitable for year-round use. Excluded are bathrooms, open porches, balconies, halls and utility rooms. **Table II-16** shows that 469 dwelling units or two percent of homes in Robertson County were considered overcrowded. The number of overcrowded units in the state accounted for fewer than two percent. With a similar overcrowding rate between the County and the state there is no major concern that Robertson has an overcrowding problem.

Table II - 16: Overcrowding

	Tennessee		Robertson County		
Occupants Per Room	Estimate	%	Estimate	%	
1.00 or less	2,414,354	98.1	23,630	98.1	
1.01 to 1.50	36,214	1.5	452	1.9	
1.51 or more	10,563	0.4	17	0.1	
Occupied housing units	2,461,131		24,099		

Source: U.S. Census Bureau, 2009-2011 American Community Survey.

2. CURRENT TRENDS

Housing affordability is based on the percentage of gross income spent on a home. Based on the median home value and median household income, the median housing cost burden is 31 percent, which is considered unaffordable for those desiring to purchase a home. This is due to a lack of housing diversity and income levels lower than regional averages.

The current housing stock in Robertson County is considered "aging" with 42 percent of all homes having been built prior to 1979. If not properly



maintained these structures are likely to fall into disrepair and further compromise the quality of housing stock.

Within recent years, single family residential development has been the only new residential type built in the County. The market forces over the last ten years have dictated this pattern of development.

3. ISSUES AND OPPORTUNITIES

With limited housing type diversity, the County and cities have an opportunity to encourage developers to construct different housing types to accommodate the change in market trends and demographics. This trend is occurring in Nashville and Pleasant View (located in Cheatham County near Coopertown) where a variety of townhomes and multifamily units are being constructed to meet the demand of a younger population.

Affordability will continue to be a challenge with limited housing typology. Single family residential homes are more expensive to build and maintain

on a per unit cost than townhomes or multifamily units. Housing will become more affordable as wage levels increase and the housing mix becomes more diverse. Providing more housing options will attract and retain a younger population and will help to build up the employment base in the County.



E. ECONOMIC DEVELOPMENT

Elements of the employment characteristics of a region are significant determining factors for prospective companies evaluating whether to relocate their headquarters or manufacturing operations.

1. EXISTING EMPLOYMENT CHARATERISTICS

EDUCATIONAL ATTAINMENT

Educational attainment is one of the characteristics that provide a gauge to the site selector of the employment base. Compared to the state of Tennessee, Robertson County has proportionally more high school graduates, but significantly less people with higher education degrees, as shown in **Table II-17**.



Table II - 17: Education

Population Age 25+ Years By Educational Attainment	2005-2009 ACS Estimate	County Percent	Tennessee Percent
No schooling completed	320	0.8%	0.9%
Nursery to 4th grade	160	0.4%	0.7%
5th and 6th grade	888	2.1%	1.5%
7th and 8th grade	1,706	4.1%	4.1%
9th grade	1,070	2.6%	2.4%
10th grade	1,602	3.9%	3.3%
11th grade	1,772	4.3%	3.5%
12th grade, no diploma	988	2.4%	1.9%
High school graduate, GED, or alternative	16,611	40.0%	33.5%
Some college, less than 1 year	2,718	6.5%	6.2%
Some college, 1 or more years, no degree	5,767	13.9%	13.9%
Associate's degree	2,099	5.1%	5.8%
Bachelor's degree	4,097	9.9%	14.6%
Master's degree	1,193	2.9%	5.3%
Professional school degree	427	1.0%	1.5%
Doctorate degree	112	0.3%	1.0%
Total	41,530	100.00%	100.00%

Source: U.S. Census Bureau, 2005-2009 American Community Survey

COMMUTE TIMES

Commute time is another measure that is utilized to evaluate accessibly to jobs. **Table II-18** illustrates that within Robertson County over 48 percent of the employed population travels an estimated 30 minutes or more to work each day. That percentage is much lower in communities with higher development densities and intensities. For example, the average commute time for Davidson County is 23.1 minutes. Approximately 31 percent of the employed population within Davidson County travels 30 minutes or more per day for employment.

Table II - 18: Robertson County Commute Times

Workers Age 16+ Years (Who Did Not Work From Home) By Travel Time To Work	2005-2009 ACS Estimate	County Percent
Less than 5 minutes	823	2.9%
5 to 9 minutes	2,272	7.9%
10 to 14 minutes	3,721	12.9%
15 to 19 minutes	3,512	12.2%
20 to 24 minutes	3,039	10.6%
25 to 29 minutes	1,410	4.9%
30 to 34 minutes	4,447	15.4%
35 to 39 minutes	1,019	3.5%
40 to 44 minutes	1,749	6.1%
45 to 59 minutes	4,503	15.6%
60 to 89 minutes	1,866	6.5%
90 or more minutes	427	1.5%
Total	28,788	100.00%
Average Travel Time to Work (in minutes)	28.2	

Source: U.S. Census Bureau, 2005-2009 American Community Survey

INDUSTRY SECTORS

The current industry sectors within Robertson County are shown in **Table II-19**. Based on the largest number of employees and number of businesses, the Services industry (which includes health, automotive, educational, legal, hotel/lodging, and other services) is the largest sector in the County with 6,360 employees and 746 businesses. The next largest sectors are Wholesale Trade with 5,372 employees and 90 businesses and Retail Trade with 4,643 employees and 404 businesses.

Table II - 19: Robertson County Industry Sectors 2012

Industry Sector	Busine	Businesses		ees
by SIC Codes	Number	%	Number	%
Agriculture & Mining	54	2.8	245	1.1
Construction	196	10.0	1,271	5.6
Manufacturing	80	4.1	2,176	9.5
Transportation	60	3.1	326	1.4
Communication	21	1.1	120	0.5
Utility	13	0.7	150	0.7
Wholesale Trade	90	4.6	5,372	23.5
Retail Trade	404	20.6	4,643	20.3
Finance, Insurance, Real Estate	175	8.9	764	3.3
Services	746	38.1	6,360	27.8
Government	97	5.0	1,388	6.1
Other	21	1.1	69	0.3
Total	1,957	100	22,884	100

Source: Business data provided by Infogroup, Omaha NE Copyright 2012, all rights reserved. Esri forecasts for 2011.

EMPLOYMENT AND WAGES

Wages within the County are highest amongst the wholesale trade industry according to the Tennessee Department of Labor and Workforce Development. The average weekly wage of all industries within Robertson County is \$675 per week. Robertson's average weekly wage is \$272 less than Davidson County and \$141 below the state average.

Table II-20 includes a list of industry types by NAICS code and the corresponding average weekly and annual wages.

Table II - 20: Employment and Wages

Industry Code (NAICS)	Industry	Businesses	Employees	Average Weekly Wage	Average Annual Wage
22	Utilities	2	71	\$550	\$28,600
23	Construction	123	944	\$875	\$45,500
31-33	Manufacturing	79	4,775	\$834	\$43,368
42	Wholesale Trade	73	737	\$1,032	\$53,664
44-45	Retail Trade	155	2,298	\$499	\$25,948
48-49	Transportation and Warehousing	7	72	\$810	\$42,120
51	Information	15	106	\$787	\$40,924
52	Finance and Insurance	54	373	\$717	\$37,284
53	Real Estate and Rental and Leasing	40	100	\$587	\$30,524
56	Administrative and Waste Services	50	864	\$494	\$25,688
61	Educational Services	11	1,871	\$559	\$29,068
62	Health Care and Social Assistance	86	1,601	\$754	\$39,208
71	Arts, Entertainment, and Recreation	17	104	\$997	\$51,844
72	Accommodation and Food Services	77	1,310	\$243	\$12,636
81	Other Services, Ex. Public Admin	73	327	\$397	\$20,644
92	Public Administration	14	803	\$662	\$34,424
	Total	876	16,356	-	-

Source: Tennessee Department of Labor and Workforce Development, 2013.

COST OF LIVING

Cost of living indexes as shown in Table II – 21 provide percentages for overall cost, goods and services, groceries, health care, housing, transportation and utilities based on the national average. Index information for Springfield represents the average of the County, for purposes of this study. The overall cost of living index is 15 percent lower than the national average, four percent below the Tennessee average and five percent lower than Nashville. According the housing index, the Springfield/Robertson is 16 percent lower than Nashville, 26 percent below the Tennessee average, and 47 percent below the national average.

Table II - 21: Cost of Living Index

Index	Springfield	Nashville	Tennessee	US
Cost of living index	85	90	89	100
Goods & Services index	104	104	94	100
Groceries index	100	100	95	100
Health care index	93	93	91	100
Housing index	53	68	79	100
Transportation index	96	96	94	100
Utilities index	86	86	93	100

Source: AreaVibes, Inc. Cost of Living Calculator, 2013.

2. CURRENT TRENDS

Almost 50 percent of the working population in Robertson County is leaving the County each day to work. This economic model is not sustainable for future generations, especially if the County is committed to enhancing the mixture of job types and opportunities for its residents.

Growth for any one industry sector has been limited over the last 10 to 20 years. Manufacturing, retail and service industries and wholesale trade have continued to prosper in the County. Professional services and high

wage jobs are lacking in the County, which is why a large portion of the working population travels outside of the County for work on a daily basis.

The employment base in Robertson County continues to lag behind other parts of Tennessee. Companies that are scouting possible locations for expansion analyze an area's intellectual capital. Educational attainment is one of the factors that relocation specialists evaluate when searching for potential sites. Compared to the state and the region, Robertson County has very low educational attainment levels particularly in the higher education and post graduate levels.

The largest employment center in the County continues to be Springfield that offers a mixture of industry types and wage levels. Within the region, Nashville provides the most employment opportunities and draws their employment base from the surrounding counties including Robertson.

3. ISSUES AND OPPORTUNITIES

The lack of jobs at varying wage levels is creating an unsustainable travel pattern in the County and forcing a large portion of the population to travel outside of the County during the day. Creating jobs is a difficult task especially during an economic downturn. The County has an opportunity to capitalize on the talent pool generated from educational institutions in Nashville.

Realizing Robertson's Future, a four year plan for economic, business and workforce development, has established goals and set aside a budget to implement industry recruitment, works force training, and transportation and infrastructure improvements. This plan should be aggressively implemented by all stakeholders.

The County also has an opportunity to attract businesses that benefit from being close to Nashville, which may be spinoff companies or support services. When recruiting companies/employment base, the County should highlight its proximity to Nashville and a regional airport, access to college graduates, low cost of living, natural aesthetics, small town character, and business friendly climate.

F. UTILITY INFRASTRUCTURE

This section provides specific information about water, wastewater, natural gas, electricity and solid waste utility infrastructure within Robertson County and participating cities. Due to the rural nature of the County, water and wastewater are only available near interstates, major highways and in or near urbanized areas. Water is more readily available than wastewater. Since wastewater is only available in limited areas, the majority of the County is served using septic tanks. Natural gas is only available in portions of the County and is serviced by three different companies. All electricity within Robertson County is purchased from the Tennessee Valley Authority and is serviced by Cumberland Electric Membership Corporation and Springfield Electric Department. Solid waste is handled by the County or private contractor. Detailed information about each of the service providers and who they service are detailed in the following sections.

1. EXISTING CONDITIONS

a. WATER

Adams-Cedar Hill Water System

Adams-Cedar Hill Water System (ACHWS) provides potable water to the City of Adams and Cedar Hill. ACHWS's service area also extends north of Red River and south of Sulphur Fork to service approximately 1,600 customers within the entire service area. With a total capacity of 600,000 gallons per day, the water treatment plant is located on Keysburg Road in the City of Adams. Three water storage



tanks are located throughout the service area with one of the storage tanks having a capacity of 300,000 gallons. All potable water for this utility provider is drawn from the Red River with emergency connections to Springfield and Clarksville water systems available when needed. The Springfield water system connection is located off of Kenney Road in Cedar Hill and the Clarksville connection is located on Ed Jones Road in the Saddlerville community. These emergency connections were added due to the need to search for a long term protection against reduced flow and water quality of the Red River. ACHWS has also explored the possibility of future connections to the Pleasant View Utility District and the East Montgomery Utility District Systems.

City Of Portland Water Utility

Portland Water Utility provides potable water to approximately 6,725 customers within the City of Portland. Started in 2002, the water treatment facility distributes potable water through over 265 miles of underground water lines that connect to the water treatment plant located on Portland Lake Road. Additionally, there are eight water storage tanks located throughout the City. The treatment plant has a capacity of 4.0 million gallons per day but only averages 1.8 to 2.0 million gallons per day. The main source of water is the West Fork of Drakes Creek with City Lake being used as an alternative source during dry months or drought conditions. In an effort to increase capacity, a reuse line is in the process of being completed to return unused and clean water to City Lake. The plant uses a conventional filtration system that includes the process of rapid chemical mixing, flocculation, coagulation, sedimentation and filtration to treat the water each day. While a solution for long range capacity issues has not be finalized, the City has been exploring options of building an impoundment along Caney Fort Creek or connecting to White House Utility District.

Springfield Water Department

Approximately 12,250 customers within the City of Springfield and Robertson County receive potable water from the City of Springfield Utility Department. The Red River serves as the water system's raw water supply before it is taken to Springfield water treatment plant for processing. The plant will have capacity to produce 10 million gallons of water per day when additional off-site improvements are completed. Without the off-site improvements the plant currently can provide 7.2 million gallons of water per day but only averages

approximately 4.45 million gallons of water per day. The water is stored in two ground level water tanks capable of storing eight million gallons of water and three elevated water tanks capable of storing over 1.376 million gallons of water. Residential service installation is made by the City and costs \$700 to \$900 depending on type of installation. Farmers and businesses may purchase water to fill water storage

tanks at designated facilities, if desired. However, this service is not available during water shortages or system failures.

Due to the recent and projected water shortages of the Red River, a recent long range study evaluated the 20, 50 and 100-year possibilities for potable water, which determined that the most economical solution for future water capacity would be to establish a water

connection from a wholesale water purchaser at the County line of Robertson and Davidson County at Highway 431. This solution is currently being explored and will most likely be the future source of water for Springfield.

White House Utility District

The White House Utility District (WHUD) is one of the largest water utilities within the state of Tennessee and serves a 600-square-mile area that includes portions of Sumner, Davidson and Robertson

County. The water district service area extends from White House north toward Portland, south towards the cities of Gallatin and Hendersonville and west to the eastern portions of Robertson County. Cities within Robertson County that are served by WHUD include Portland, Cross Plains, Orlinda, Springfield, Millerville, Greenbrier and Ridgetop.

In order to serve this large district, there are over 1,000 miles of water lines, 21 water storage facilities and other

essential system elements that work to provide 14 million gallons of water per day for the service district. All water is processed through a water treatment plant that sources water from Old Hickory Lake in Hendersonville. This plant is currently capable of processing up to 20 million gallons of water per day and uses a state-of-the-art membrane filtration system.



b. WASTEWATER

City Of Portland Wastewater Utility

The City of Portland maintains over 200 miles of sewer lines throughout the City to serve approximately 3,750 customers. While the majority of the system is within Sumner County, the system specifically services the Tennessee / Kentucky Industrial Park in Robertson County and along Interstate 65 to just north of Highway 52. Additionally, sewer service is located along Highway 52 in Sumner County but not in Robertson County. The wastewater treatment plant is located on Morningside Drive and has a total capacity of 3.8 million gallons per day. With an average daily use of only 1.5 million gallons per day, the wastewater treatment plant has ample capacity for future residents and businesses. Using a system of gravity and force mains with major pump stations located throughout the City to connect to the wastewater treatment plant over 90 percent of the domestic pollutants are removed daily. To help achieve this high percentage, a

State approved Pretreatment
Program is in place for
permitted industries and a
Grease Management Program is
setup for any food prep
businesses. These programs
help ensure that there is
nothing discharged from a
facility that will adversely affect
the plant and that grease and
oil released into the lines will
not create blockages.

City of White House Wastewater Department

The City of White House provides collection and

treatment for approximately 3,850 customers within the city limits and surrounding areas. While not all of White House city limits are within Robertson County, the wastewater treatment plant is located at 725 Industrial Drive in Robertson County. With a capacity of 1.4 million gallons per day, the treatment plant averages a daily use of 0.446 million gallons per day leaving approximately 0.9 million gallons per day available for future development. With plenty of future capacity, the City of White House has no expansion plans in the near future and is currently limited to the plant's maximum capacity due to discharge limitations to the Red River basin. A new treatment plant headworks design and effluent spray irrigation project is currently in the early design stages with hopes to be placed out for bid in 2013. A permit for the spray irrigation will allow for 0.3 million gallons per day to be applied to land via spray irrigation.

Springfield Wastewater Department

With approximately 6,650 customers within the City of Springfield, the

Springfield wastewater department provides wastewater collection and treatment services along with the water services. All wastewater is treated at the City of Springfield wastewater treatment plant located at 530 Lawrence Lane in Springfield. The plant has the capacity to treat up to 3.4 million gallons of wastewater per day and treats wastewater from the City of Springfield and processes wastewater from septic tank haulers. An activated sludge process is used by the plant before treated water is discharged into Sulphur Fork Creek. Daily lab



analysis is performed to ensure compliance with state and federal regulations before treated water is discharged. Operating on the same schedule as the water plant, the wastewater treatment plant has a staff of seven operators and one plant mechanic.

During a recent long range study of 20, 50 and 100-years, it was determined that land application would be necessary to increase sewer capacity. While the plant can be designed to handle more flow hydraulically, the organic capacity has been reached at the outfall into Sulphur Fork Creek.

Tennessee Wastewater System, Inc.

Tennessee Wastewater System, Inc. (TWS- Utility), currently provides wastewater service to portions of Cross Plains and Coopertown

through an effluent collection system, secondary treatment plant and drip dispersal. Being a privately held public utility, all infrastructure expansion is typically driven by current demand. Treatment and disposal for Cross Plains is provided by the Cross Plains Treatment Facility constructed in 2008-2009 and located off of Highway 25. Due to the relatively new nature of the facility and a permitted capacity of 0.074 million gallons per day, the Cross Plains Treatment Facility currently only serves two commercial customers located near I-64. The

facility is designed for a non-aerated capacity of 0.13 million gallons per day and has aerated capacity of 0.5 million gallons per day for a total planned capacity of 0.5 million gallons per day.

Due to the size of Coopertown, the Maple Green Reclamation Facility, constructed in 2001, is larger and provides 142 residential and four

commercial customers with sewerage treatment and disposal. The facility is located off of Sandy Springs Road and has a current permitted capacity of 0.74 million gallons per day. The designated capacity for non-aerated is 0.35 million gallons per day while the aerated capacity is 1.5 million gallons per day. The total planned capacity of the facility is 5 million gallons per day allowing for expansion, if needed.

c. NATURAL GAS

Piedmont Natural Gas

Piedmont Natural Gas has been a natural gas provider for more than one million residential and business customers in North Carolina,

> South Carolina and Tennessee. Although the corporate office is located in Charlotte, North Carolina, Piedmont Natural Gas has employees located throughout their service territories. In Tennessee, their service territory consists of an eight-county region made up of Robertson, Cheatham, Sumner, Wilson, Davidson, Williamson, Dickson and Rutherford. Residential and business customers are able to receive service and repair of natural gas products through the company, as well as receive above and below ground connection to gas piping if lines are in close proximity to their property.



City of Portland Natural Gas Department

The City of Portland Natural Gas department is responsible for maintaining 251 miles of underground piping and delivering natural gas to approximately 4,425 customers. The natural gas distribution

system covers a large area that is more than twice the size of the city limits. The area is defined as north to the Kentucky/ Tennessee border, west into Robertson County, east just short of the city limits of Westmoreland and south just before the ridgeline on Highway 109.

Springfield Gas Department

The Springfield Gas Department purchases and distributes natural gas to approximately 7,000 customers in the Springfield and Robertson County area. The natural gas is purchased, transported and stored

through a contract with the Tennessee Energy Acquisition Corporation. Using the Tennessee Energy Acquisition Corporation, the City of Springfield is able to purchase natural gas at below market prices on a long-term basis and provide customers with a monthly statement where all water, wastewater, gas, electric and sanitation utility services are charged to the customers on one monthly bill.

d. ELECTRIC

Various companies, such as Cumberland Electric

Membership Corporation and Springfield Electric Department, purchase all electricity within Robertson County from the Tennessee Valley Authority (TVA). **Exhibit II-7** illustrates the electric providers' regions and TVA's distribution area. The Tennessee Valley Authority, a corporation owned by the U.S. government, provides electricity for nine million people in parts of seven southeastern states at prices

below the national average. TVA, which receives no taxpayer money and is a non-profit organization, also provides flood control, navigation and land management for the Tennessee River system, and assists utilities and state and local governments with economic development.

Cumberland Electric Membership Corporation

Robertson County is one of the counties within a five-county area that has been served by Cumberland Electric Membership Corporation (CEMC) for over 70 years. Using electric power purchased from

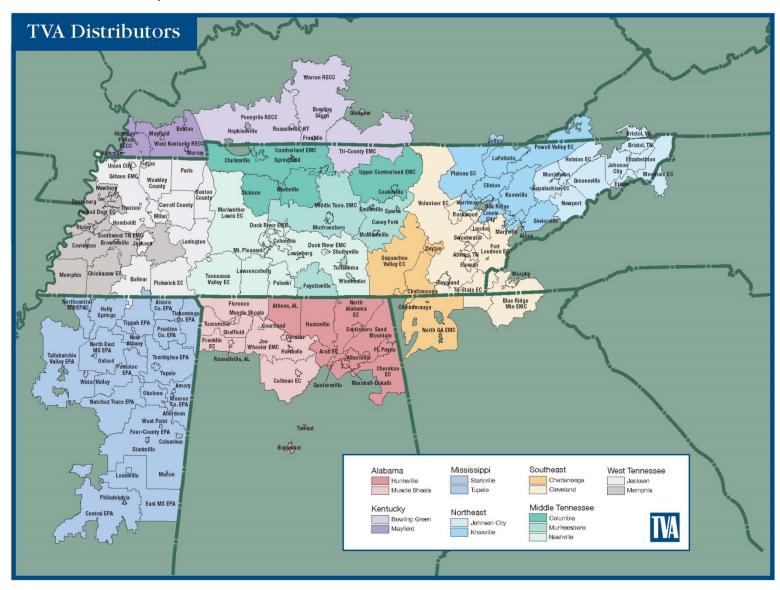
Tennessee Valley Authority (TVA), CEMC has been providing reliable electricity at reasonable rates. With three district operation offices located in Robertson (Portland, Springfield and White House), CEMC provides the majority of the electricity across Robertson County including to the Cities of Adams and Cross Plains. CEMC is established as a cooperative and is a not-forprofit organization governed by a board of directors elected by the membership. When applying for electricity service by CEMC and making the payment of a membership fee, residents become members/ owners of the cooperative.

Improvements introduced by CEMC

within Robertson County during the fiscal year 2011-2012 include the \$2.3 million upgrading of lines, transformers and poles as well as relocating lines primarily in the Adams/ Cedar Hill areas. Additionally, CEMC provided a new communication tower in White House and plans to add six more towers throughout the region in the next two years.



Exhibit II - 7: TVA Distributors Map



Source: Tennessee Valley Authority

Springfield Electric Department

The Springfield Electric Department provides electric power purchased from the TVA for approximately 8,200 customers within the City of Springfield. Facilities used by Springfield Electric Department were mostly constructed by the City with a portion of the electric system being acquired from a plant purchased from CEMC. Additionally, two of the Springfield Electric Department's substations were acquired from TVA through a lease purchase program initiated by TVA in the 1970's. These substations are now completely paid for and owned by the City. Working in conjunction with TVA, Springfield Electric has created Energy Right Heat Pump Program to help customers save money and energy though the use of high efficiency electric heat pumps.

e. SOLID WASTE

Robertson County Solid Waste & Recycling

Robertson County Solid Waste Department (RCSW) operates a Transfer Station and Recycling Center for residents and businesses in Robertson County. The main transfer facility is able to handle in excess of 40,000 tons of waste and recyclables annually. There are seven convenience center locations throughout the county for bagged household garbage only with specific containers for recycling cardboard and newsprint. Other recycled materials such as motor oil, batteries, paint and electronics must be disposed of at the main Transfer Station and Recycling Center. In conjunction with the State of Tennessee, RCSW also provides a Household Hazardous Waste Collection Day once a year for residents to dispose of items such as chemicals, pesticides, herbicides and other hazardous waste. **Table II-22** provides a list of convenience center locations.

Table II - 22: Convenience Center Locations

Location	Address
Greenbrier	3461 Old Greenbrier Pike, Springfield TN
431 CC	4861 Highway 431-N, Springfield TN
49 CC	4080 Flewellyn Rd., Springfield TN
Orlinda	9105 Hwy 49E, Orlinda TN
Crossplains	4563 Yates Cave Rd., Crossplains TN
Cedar Hill	2235 Old Washington Rd., Cedar Hill TN
Main Facility	2916 W. County Farm Rd, Springfield TN (at Transfer Station & on same schedule as the Transfer Station)

Source: Robertson County Solid Waste



2. CURRENT TRENDS

The core areas of each city within the County are receiving potable water and sewer services. Almost all of the utility providers have adequate capacity to accommodate additional development with some requiring modest upgrades. Potable water supply is a concern throughout the region. Many of the surface



water sources that provide potable water are close to being overdrawn.

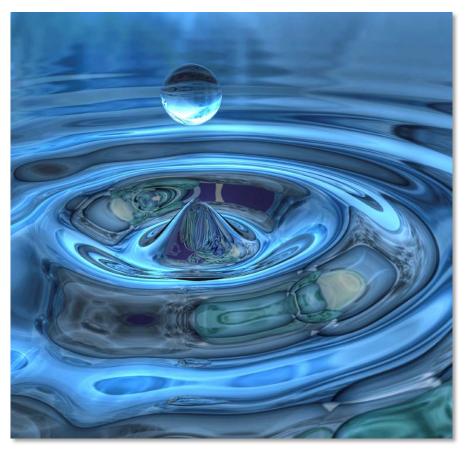
3. ISSUES AND OPPORTUNITIES

Future potable water supply is major issue that all of the local governments in this region are grappling with. Current water supply sources are almost over taxed and may not be able to adequately accommodate future growth. In order to understand the level of severity this shortage poses, the region should undertake a series of regional-scale in-depth studies that evaluate the current status water capacity and determine the future demand based on growth and development plans. Water conservation techniques should be implemented in all of the cities and unincorporated areas within the County. These techniques may include low impact development principles, regional water supply cooperation, plumbing fixture replacement program, developing a reuse water system, irrigation schedules, developing landscaping restrictions or other water conservation measures.

Wastewater effluent disposal is another important issue that has become a challenge for local utility service providers. Much of the treated effluent is pumped into the very rivers that provide the water supply. Although this disposal practice is permitted by TDEC, the long-term effects of

continued release of effluent into already impaired streams and rivers may present irreversible damages to the environment.

Cost for expanding existing facilities will be prohibitive if development is not paying their fair share toward system improvements. The development of a standardized County concurrency system should be evaluated for all utilities. Local government should not be expected to subsidize all costs and fiscal impacts associated with development.



G.COMMUNITY SERVICES/FACILITIES

This section provides specific information on fire, police and schools within Robertson County. While the majority of the community services / facilities are provided by the County, several of the cities have their own volunteer or professional fire and police departments to complement the County provided services. The public school system is operated entirely by the County. Schools are located throughout the county, strategically located near the populous they serve. With this arrangement, local schools have a strong community support base.

1. EXISTING CONDITIONS

a. FIRE AND RESCUE SERVICES

City of Adams Volunteer Fire Department

Fire services in the City of Adams are provided by the local volunteer fire department. The volunteer fire department consists of 20 volunteers and the main fire hall is located at 7721 Highway 41 North. The fire hall includes three bays which house the fire engine, a water master truck, an EMS truck and the fire chief's truck. The fire hall also has a conference room that is used for training and the chief's office. A second fire hall located off of Highway 41N houses the fire rescue boat. With a five-mile radius service area, the average response time is approximately three to four minutes when the call is paged out by Robertson County 911. Mutual Aid Agreements with adjacent cities also help reduce emergency response times as well as additional emergency response capabilities. All calls are received at the fire station and at city hall. City hall assists the fire department with items such as burn permits. Since all funding for the volunteer fire department comes from the City of Adams and Robertson County, the department is very involved in community events. They host several annual events that include the Fourth of July barbecue and fireworks, Toys for Tots and fire prevention education at local schools.



Cross Plains Volunteer Fire Department

Cross Plains also utilizes a volunteer fire department that consists of about 15 local volunteers and a fire chief. The fire chief is employed full time by the City and also acts as the maintenance director for the city. The chief is the only paid personnel within the fire department. All activities are funded by the City, and occur out of the two stations that serve both the City and the County. The main station, known as Station 1, is located off of Highway 25 adjacent to City Hall. Station 2 is located at 6726 Owns Chapel Road in the unincorporated area. Due to the location of the stations, the average response time is nine minutes from page to scene. Additionally, the fire department volunteers conduct fire prevention training at East Robertson Elementary School.

Pleasant View Volunteer Fire Department

The Pleasant View Volunteer Fire Department (PVFD) serves the cities of Pleasant View and Coopertown, as well as portions of unincorporated Cheatham and Robertson counties. The Pleasant View community, incorporated in 1970, operates, maintains and promotes the volunteer fire department throughout its service area. The Coopertown fire station is located on Old Coopertown Road and is manned by the PVFD. The fire protection for Coopertown by PVFD is negotiated through a contract every two years. Through an annual mail out fundraiser, the City of Coopertown solicits donations from citizens to help pay for the cost of fire services.



Springfield Fire Department

The Springfield Fire Department is one of the largest in Robertson County and provides fire suppression, emergency medical first response, rescue, hazardous material response, fire prevention, fire safety inspection and public education services within the city limits. Additionally, they provide mutual aid assistance to other fire departments throughout Robertson County. The department currently has two stations with 29 full-time firefighters, 12 volunteer firefighters and one office manager. The fire stations are manned in three shifts, 24 hours a day and seven days a week. Main Fire Station

is located in the central sector of Springfield and the second fire station, David N. Greer Fire Station, is located in the southeast sector of the City. The department is equipped to respond with three front-line pumper trucks, one reserve pumper truck, one 100-foot aerial platform ladder truck, and one brush fire truck.

b. LAW ENFORCEMENT

Robertson County Sheriff's Department

The Robertson County Sherriff's Department provides law enforcement services to the entire county from the sheriff's office located at 507 S. Brown Street in Springfield. The department is also responsible for the safety and security of the Robertson County Detention Facility. While the department services the entire county, a number of cities (Springfield, Greenbrier, Ridgetop and White House) have their own police departments. The Sherriff's department only assists with calls in those jurisdictions when requested. Additionally, Coopertown and Cross Plains have a small police force that is assisted by the department as requested, and when no law enforcement responder is on duty at those municipalities.



Due to patrol deputies operating in the county at all hours of the day seven days a week, response times can vary depending on the priority of the call and location of the incident. To reduce response times, the county is divided into four "zones" that are staffed by five deputies per shift excluding vacation/ sick leave and time off for training. With a total of 152 employees, the sheriff's department has 21 employees assigned to the Patrol Division, 86 employees assigned to Corrections with the remaining employees assigned throughout the remaining divisions (K-9, Narcotics, Mounted Patrol, River Patrol, Neighborhood Watch Program and the Rape Aggression Defense program). The sheriff's department works with various schools in the County through a School Resource Officer Program that provides safety and law enforcement education. The Department is funded by property tax revenue which is allocated through the county budget.

Coopertown Police Department

The Coopertown police department is relatively new and small by comparison to the others within the County. Currently, there is one police chief and one additional police officer. Additional officers may be hired as additional fiscal resources become available. Due to the staffing limitations, 24-hour coverage is split between the Coopertown Police Department and the Robertson County Sheriff's Office. Future plans are to re-staff the town's reserve program with a minimum of three officers that ride along with two full-time officers. The reserve program acts as a co-op program for police officers and allows them to learn on the job during a trial basis. Successful reserve police officers are encouraged to apply for full-time positions when they become available.

Cross Plains Police Department

The Cross Plains Police Department provides law enforcement services within the city limits and patrols 49.5 miles of city streets on a daily basis. The average response time is between three and eight minutes from time of dispatch. There are three full-time police officers, one resource officer and one traffic officer comprising the Department.

The County sheriff's department covers for the city when no officer is on duty. Located in conjunction with City Hall and Station 1 of the fire department, all officers are required to have 40 hours of training per year and are funded strictly through the city budget.

Springfield Police Department

In an effort to protect the citizens of Springfield, the police department responds to calls for service, traffic control, direction and enforcement to ensure maintenance of public order, crisis intervention and preventative patrol. It is also the duty of officers to build a relationship within the community. The Springfield Police Department currently has 39 commissioned officers and 32 civilian employees serving as public safety dispatchers, record clerks, office managers and secretaries. The Springfield Police Department provides assistance to and receives assistance from the Robertson County Sheriff's Department and all other public safety agencies within Robertson County through mutual aid agreements.



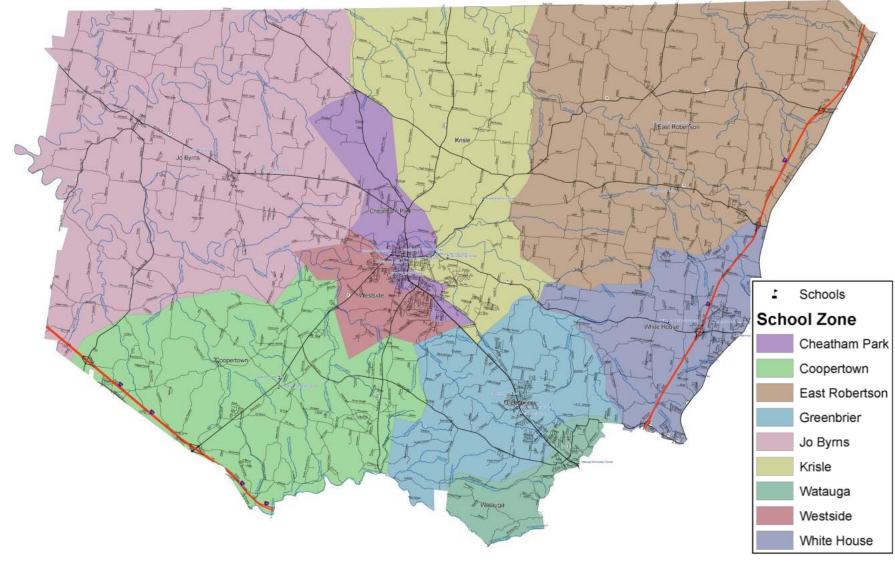
c. Schools

Robertson County Schools System

The Robertson County School system has a total of 18 schools that are divided up between nine school zones, as illustrated in Exhibit II-8. Each school within Robertson County has a different range of grade levels in an effort to allow students to attend schools that are close to their homes. The City of Springfield's three school zones include Cheatham Park, Krisle and Westside, Springfield Middle School and Springfield High School. Students from the Coopertown area attend the local elementary (K-3) and middle schools (grades 4-8) but attend high school (grades 9-12) at Springfield High School. East Robertson Elementary (K-5) and High School (grades 6-12) are attended by all students within the East Robertson school zone, which includes Cross Plains and Orlinda. Jo-Byrns Elementary (K-6) and High School (grades 7-12) serve the students within the cities of Adams and Cedar Hill. Greenbrier and Ridgetop share two elementary schools, a middle and high school while White House has two elementary schools and a high school. Robert F. Woodall Elementary School is kindergarten through second grade while White House Heritage Elementary is for grades 3-6 with White House Heritage High for grades 7-12. The Robertson County Alternative Program serves students from all school zones within the County.



Exhibit II - 8: Robertson County School Zones



Source: Robertson County Public School

Robertson County Private Schools

There are a total of three private schools within Robertson County. They are Ridgetop Adventist Elementary School in Ridgetop, South Haven Christian School in Springfield and Christian Community School in White House. South Haven Christian School and Christian Community School are for grades K-12 while Ridgetop Adventist Elementary School is only for grades K-8. The Christian Community School is made up of an elementary school (K-5), a middle school (grades 6-8) and a high school (grades 9-12). South Haven



Christian School is located on an 18-acre campus and includes students from Springfield and surrounding communities. The campus is divided into preschool and elementary wings, administrative offices, library, cafeteria, gymnasium and a building that accompanies the junior/ senior high school students.

Highland Crest College

Established in 2011, the Highland Crest College Campus was conceived through a partnership between Robertson County and the City of Springfield with support from NorthCrest Medical Center and land donated by Bill and Jean Batson. The campus is located just off Batson Parkway south of Springfield and offers classes by Volunteer State Community College and Austin Peay State University. The classes offered meet the general education requirements of these schools. The facility consists of four classrooms, a multi-purpose room, a science lab, an interactive television classroom, a book store, a library, learning support center, and ten faculty offices.

2. CURRENT TRENDS

Primary education within Robertson County is adequate to accommodate the current demand. The County Board of Education is evaluating on a regular basis the needs for expanding primary education services? The establishment of Highland Crest College was a significant secondary educational boost to the

County by allowing students the opportunity to continue their education in a small conveniently located setting in the same County.



3. ISSUES AND OPPORTUNITIES

With the establishment of a state of the art secondary educational facility (Highland Crest College), the County has a significant opportunity to collaborate with local and potential relocating businesses in crafting and developing degree programs and specialized curriculum that complement area industry needs. This can be used as an economic development tool when recruiting and retaining businesses to Robertson.

A concurrency system should be developed for community services and public education facilities. The taxes generated by development do not offset the capital costs associated with the construction of new schools and expansions to existing facilities, fire station or police substations. Another means of paying for new facilities should be evaluated. Many communities utilize impact fees, which is incorporated into the cost of development.

H.ENVIRONMENTAL/ NATURAL FEATURES

One of Robertson County's great qualities is the raw beauty of its natural landscapes. The rural aspect of Robertson is a characteristic that has drawn many of its residence and countless tourist and event-goers. This section provides a description of the natural environment features within Robertson County.

1. EXISTING CONDITIONS

a. FLOODPLAINS

Floodplains as defined by the Federal Emergency Management Agency (FEMA) and depicted on Flood Insurance Rate Maps prepared by FEMA, can be seen on **Exhibit II-9**. The geographic boundaries of varying levels of flood risk in Robertson County are highlighted in this Exhibit. Areas not highlighted were those areas defined as Zone X or areas of minimal flood hazard. There are three classifications of floodplains shown on **Exhibit II-9** (Zone A, AE and X-500). Floodplains classified as Zone A are those areas within the 100-year floodplain that have a one percent annual chance of flooding and a 26 percent chance of flooding over the life of a 30-year mortgage. There are no base flood elevations shown for Zone A while Zone AE has the same percent chance of flooding but has base flood elevations. Flood Zone X-500 consists of those areas that have 0.2 percent annual chance of flooding.

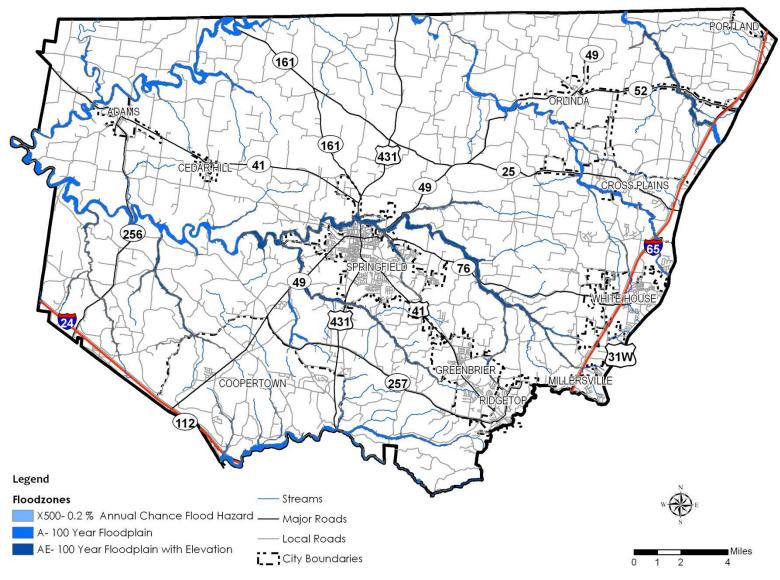
b. WATERSHEDS/STREAMS

The majority of Robertson County is within the Red River watershed with southern portions of the County within the Lower Cumberland River watershed. Major watersheds can be broken down into hydrologic unit codes (HUC) or subwatersheds that provide more detailed information on the direction of water flow. **Exhibit II-10** provides the subwatersheds using the 12-digit HUC codes.

There are a total of 21 subwatersheds with the majority of those corresponding to streams within the county. Robertson County has a total of 56 streams, rivers or branches that are listed in **Table II-23**. As noted above, some of the streams, rivers or branches are used by utility providers as their source of water, or as the discharge location for their treated wastewater.

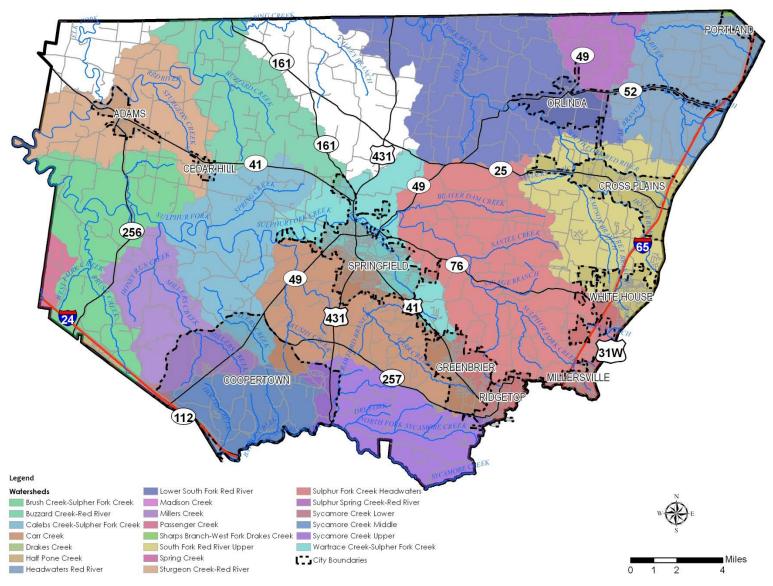


Exhibit II - 9: Floodplains in Robertson County



Source: Greenprint, Robertson County and LEA, 2012

Exhibit II - 10: Watersheds in Robertson County



Source: Greenprint, Robertson County and LEA, 2012

Table II - 23: Named Streams, Rivers or Branches

Watercourse Names				
Battle Creek	Crawford Branch	Mill Branch	Somerville Branch	
Beaver Dam Creek	Dickerson Branch	Millers Creek	South Fork Red River	
Bednigo Branch	Dry Fork	Neal Branch	Spring Creek	
Bednigo Creek	Elk Fork	North Fork Sycamore Creek	Sturgeon Creek	
Ben Hollow Branch	Empson Branch	Passenger Creek	Sulphur Fork Creek	
Browns Fork Creek	Flat Branch	Peyton Branch	Sulphur Fork Branch	
Brush Creek	Frey Branch	Pole Bridge Branch	Summers Branch	
Brush Fork Creek	Holiss Creek	Poorhouse Branch	Sycamore Creek	
Brushy Creek	Honey Run Creek	Red River	Sycamore Creek Fork	
Buntin Branch	Hood Branch	Reeves Branch	Valley Branch	
Buzzard Creek	Hopewell Branch	Sanders Branch	Wartrace Creek	
Calebs Creek	Little Buzzard Creek	Santee Creek	Webb Branch	
Carr Creek	Longbranch	Savage Branch	West Fork Creek	
Chambers Spring Branch	Melton Branch	Smith Branch	Wolf Branch	

Source: Greenprint

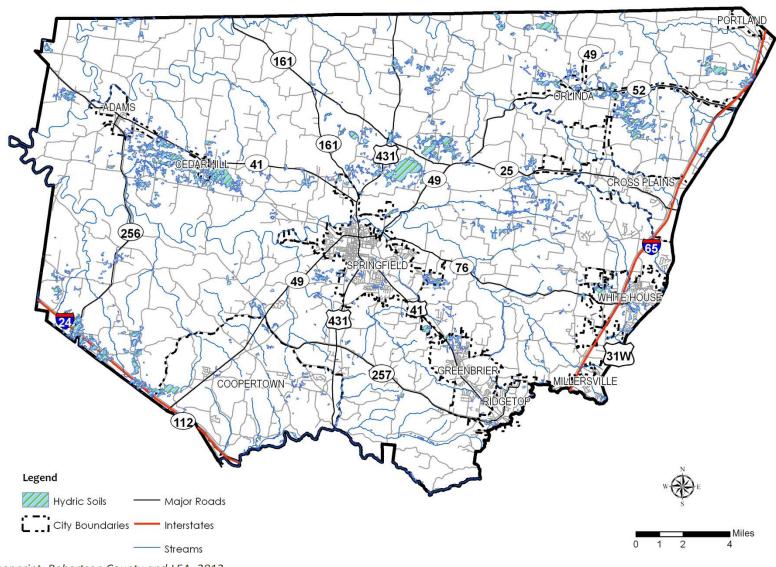
c. HYDRIC SOILS

Hydric soils are those soils formed under conditions of saturation, flooding or ponding long enough during the growing season to develop anaerobic conditions (without oxygen). Hydric soils can be used in a number of agricultural and non-agricultural applications. When combined with hydrophytic vegetation and hydrology properties, there is potential for these areas to be wetlands which would not be suitable to agricultural uses. Wetlands are important to an ecosystem because they are considered nature's water filters. **Exhibit II-11** illustrates the hydric soils within Robertson County and provides locations of potential conservation efforts in the future.

d. FARMLAND

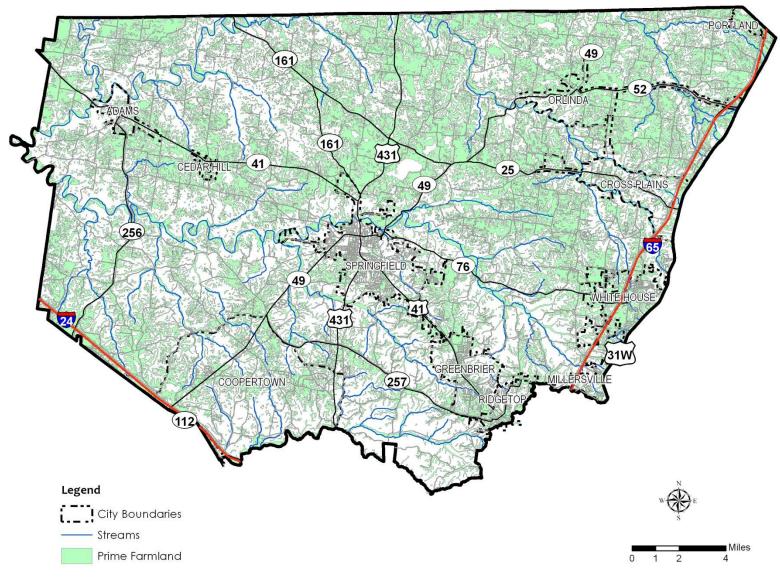
As defined by the U.S. Department of Agriculture, prime farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for theses uses. This land could also be used for pastureland or forestland. As noted on **Exhibit II-12**, the majority of the County is covered with land that is suitable for prime farmland. This is important to note because as growth occurs prime farmland is being converted to non-agricultural uses, primarily single-family residential, at the expense of these agricultural properties.

Exhibit II - 11: Hydric Soils in Robertson County



Source: Greenprint, Robertson County and LEA, 2012

Exhibit II - 12: Prime Farmland in Robertson County



Source: Greenprint, Robertson County and LEA, 2012

2. CURRENT TRENDS

The farmlands in Robertson County are considered one of the great qualities of this area. Crop production makes up a large portion of the local economy and fertile soils are the reason these crops flourish. Fertile land was the impetus of early settlers coming to this County. However, continued sprawling growth, as mentioned in the Land Use Section, is compromising the future vitality of the County's primary industry.

Agri-tourism is a current economic development initiative that hopes to capitalize on the County's agrarian heritage. For example, the Ring of Fire is a trail that winds through the Cumberland Plateau making stops at well-known historical sites and musical festivals. This feature draws many visitors to the County annually and should serve as a model upon which to build other such agri-toursim and cultural opportunities in the County.

3. ISSUES AND OPPORTUNITIES

The future of the County's natural farm lands is threatened by the current development patterns. Continued development of single family homes in a sprawling pattern will slowly reduce the amount of land necessary for sustainable and economical agricultural production. Future conservation measures should be taken to ease the impact this pattern has created. If not already addressed, the cities and County should evaluate the efficacy of developing a County-wide conservation and sustainability plan.

Wetlands in the County play an important role in treating storm water runoff and non-point source pollution from agriculture lands. There is an opportunity to protect wetlands from future development and in return help improve water quality in impaired streams and rivers within the County. There are several large areas, particularly along Sulphur Fork Creek that would benefit from protection and could present opportunities for passive recreation.



I. RECREATION AND HISTORIC / CULTURAL RESOURCES

Recreation places such as parks and historic and cultural resources are unique to each city and provide a context for the county's people and history. Many of the historic and culture resources throughout the county provide a location for reflection while also serving as places for active or passive recreating. It is important to preserve historical/cultural resources as they serve as a reminder of the past and are often viewed as unique attractions for tourists and new residents alike who are seeking authentic quality of life experiences.

1. EXISTING CONDITIONS

a. RECREATION

The only parks available for Robertson County residents are parks within the city limits of the incorporated communities. The City of Adams has two parks, John Strange Park and Bell School Ball Field and Park. John Strange Park is centrally located in the city near the Volunteer Fire Department and City Hall and was named after the City's first mayor. This park is passive with concrete picnic tables and shade trees. An active park, the Bell School Ball Field and Park is colocated behind the Bell School Community Center and offers a covered pavilion with full kitchen, a ball field, playground, and other recreation amenities.

The City of Cross Plains purchased Kilgore Park in 2002 from Sanders Farm. This is the only park within Cross Plains and it is situated to the west of East Robertson High School which shares the baseball field located in the park. Co-location of the baseball field is a mutually beneficial partnership for both the school and City. The field is equipped to not only handle high school play but has three other smaller fields connected by a covered concession for leagues of all

ages. Kilgore Park also has nine soccer fields that can accommodate all ages, a park pavilion that is used for outdoor concerts, a nature center, and a playground. A one-mile gravel-walking trail travels throughout the park giving residents a safe place to exercise and access park amenities.



Bell School Ball field and Park Pavilion



Kilgore Playground



Kilgore Pavilions

b. HISTORIC/CULTURAL RESOURCES

Historic Places

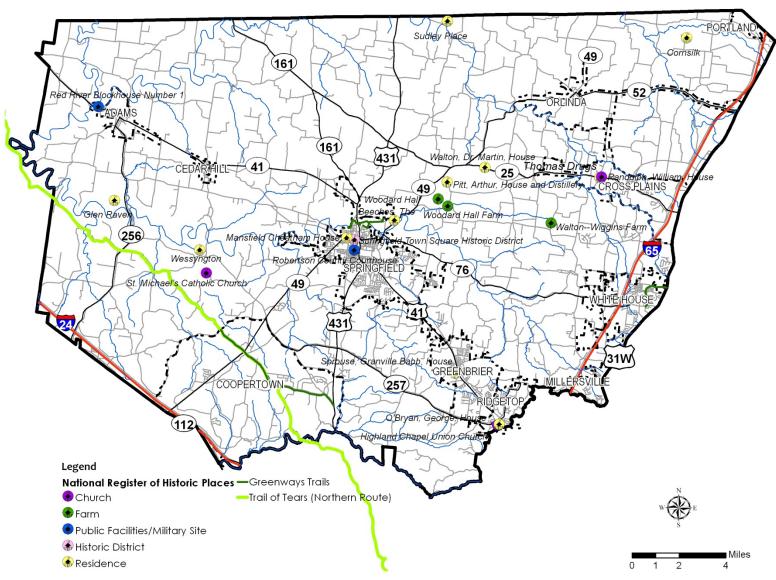
Robertson County has 20 properties that are listed on the National Register of Historic Places. **Table II-24** includes a listing of those that qualify while **Exhibit II-13** illustrates the location of each historic place. These listings represent important places, events, structures and people in Robertson County history.

Table II - 24: National Register of Historic Places

Historic Place or Structure Name	General Location	
Beeches, The	Unincorporated Robertson County	
Cornsilk	Unincorporated Robertson County	
Glen Raven	Unincorporated Robertson County	
Highland Chapel Union Church	Ridgetop	
Mansfield Cheatham House	Springfield	
O'Bryan, George, House	Ridgetop	
Pitt, Arthur, House and Distillery	Unincorporated Robertson County	
Randolph, William, House	Cross Plains	
Red River Blockhouse Number 1	Adams	
Robertson County Courthouse	Springfield	
Springfield Town Square Historic	Springfield	
District		
Sprouse, Granville Babb, House	Greenbrier	
St. Michael's Catholic Church	Unincorporated Robertson County	
Sudley Place	Unincorporated Robertson County	
Thomas Drugs	Cross Plains	
Walton, Dr. Martin, House	Unincorporated Robertson County	
WaltonWiggins Farm	Unincorporated Robertson County	
Wessyngton	Unincorporated Robertson County	
Woodard Hall	Unincorporated Robertson County	
Woodard Hall Farm (Boundary	Unincorporated Robertson County	
Increase)		

Source: Greenprint, Robertson County and LEA, 2012

Exhibit II - 13: Robertson County Historic Places



Source: Greenprint, Robertson County and LEA, 2012

c. CEMETERIES

An important part of the County's history is its cemeteries and burial grounds. Cemeteries and burial grounds hold the history of those who fought during the civil war battles and lived within the County. Robertson County has a number of cemeteries that have significant importance to different communities and should be protected from future development. While certain cemeteries are clearly marked throughout the County, others are not as well marked and could be at risk of being disturbed by development. One clearly marked cemetery that holds particular significance to the City of Adams is the Bellwood cemetery located along US Highway 41. This cemetery contains the remains of all those related to one of Tennessee's most prominent antebellum politicians, John Bell who served in the House of Representatives from 1827 to 1841, and in the Senate from 1847 to 1859. Relatives of John Bell, either by marriage or bloodline through John Bell Jr. are interred within this cemetery. A complete inventory of the County's cemeteries should be considered to ensure protection of these facilities in the future.



Bellwood Cemetery, Adams, TN

2. CURRENT TRENDS

The cities, County and the Robertson Chamber of Commerce have made a concerted effort to promote and build off the historical and cultural heritage of the County. This trend is planned to continue in the future with an added emphasis on Agri-toursim and the Ring of Fire programming.

The County does not own, operate or maintain stand-alone parks. However, through the cooperation of the public school boards, the County does offer public accessible ball fields that are co-located with the community schools.

3. ISSUES AND OPPORTUNITIES

The County is steeped in historical significance, which has attracted large amounts of people through tourism and for permanent residence. Historic properties are difficult to maintain, especially if the community does not make it a priority. If the cities and the County plan to continue capitalizing on its heritage in the future, preservation efforts should be explored and priorities established for preservation and protection of these community assets. For example, the development of historic districts, promoting historic designations to be completed on eligible properties, development a publicly accessible database of all historic structures, active participation in federal and state historic preservation programs, and at the local level the creation of historic preservation boards.

The lack of County run parks and trails is a problem that could be exacerbated in the future if steps are not taken in the immediate future. Funding of parks is usually the reason these facilities are not available to all residents. The primary question is whether development is paying its fair share for new facilities. Provisions of adequate public services should be addressed at the plan approval and permitting stages. Although this plan does address parks and trails in general terms, a detailed evaluation of existing facilities and future demand as well as a master plan for park facilities and programming should be completed and tied to an impact fee.

J. FISCAL CONDITION

1. EXISTING CONDITIONS

The successful growth and development of Robertson County will depend, in part, on understanding and responding to a variety of existing market and economic opportunities and trends. However, the concept that growth is always good for a community may not correlate to long-term financial stability for Robertson County and cities. Certain types of residential development can actual generate a fiscal drain on the annual budgets of local government. This is especially true where costs of education (facilities and programs) are considered. Rural communities, which are highly dependent on property taxes, are more susceptible to changes in residential property values that can affect fiscal return. Typically, a healthy mix of housing works in the best interests of the community, such as where the inclusion of higher-density housing ameliorates overall traffic and school impacts.

Office, retail, and industrial uses, on the other hand, often generate a significant positive net gain for County and city governments. The demand for public services including public infrastructure and services are typically proportionately less in comparison to residential development including most significantly, the cost of education facilities and programming. Public infrastructure investments typically entail transportation and utility improvements that can be reduced significantly if new development can be focused upon sites already served with utilities and transportation facilities. To ensure balanced and sustainable fiscal growth in local government, economic development must lead the way with a proper mix of residential types including higher density residential.

2. TRENDS

To fully understand the fiscal limits and available resources to support investment in infrastructure and other capital improvement projects that will position Robertson County and the cities for attracting and retaining

economic development, a detailed fiscal condition assessment should be performed to confirm trends in revenues and expenses and the factors that are influencing these trends and whether such factors are under local control. Are revenues tracking generally with growth trends? What are the key sources of revenue for capital projects and ongoing County and city services? What is driving changes in revenues for the County and cities? Is there a link or correlation between revenues, costs, and land use decisions that have been made?

Are costs tracking generally with growth trends in residential and non-residential development? What is the County and cities primary current capital expenditures and ongoing service costs? How are major capital investment decisions made? Who pays for major capital improvements in the County and cities? When considering the net impact of a major new private development project on local government's budget, local officials must shift the paradigm to think of a project from the perspective of what revenues will the project generate? What services will it incur? Is there existing capacity to serve the project? Does the new project pay for itself? If not, how can the plan be modified to be fiscally sustainable for the County and cities?

Sound "fiscal health" for Robertson County calls for community leaders to look beyond a "quick-fix" type economic development strategy to a long-term fiscal investment strategy based on diversification of the economic base. Conducting impact assessments of various types of businesses and industries can help guide the County and cities toward strategies that are suitable, fiscally sound, and economically healthy for the community.

Controlling the County's destiny, however, is not limited to decisions on appropriate land uses, the intensity of the land uses, or the forms of development – the "where", the "how" and "how many." It includes designs on the sequence of development as well, or the "when" of development. Controlling the sequence of development ensures that the County and cities grow in a logical manner that does not burden the County's – and region's – environmental resources, fiscal health, education system, and transportation network and other infrastructure

elements, now or in the future. These considerations differ from decisions about the appropriateness of a particular development or use of land for a specific area. Development that is contiguous with urbanized areas, accessible to public utilities, and can be efficiently integrated with the transportation network including the use of a wide variety of potential transportation options while fulfilling the County's and city's housing and economic needs in a fiscally sound and logical sequence will have a positive and sustainable impact upon the community.

3. ISSUES AND OPPORTUNITIES

Robertson County and the cities will need to engage in a "regional" conversation about how to coordinate comprehensive plan policies and the implementation of physical improvements under a collective umbrella. A "common vocabulary" will be needed that is centered on shared values to build upon a common economic vision. Educating elected officials and stakeholders will increase local capacity to embrace change and development while also prioritizing public investment given limited fiscal resources available in the County and cities to achieve fiscally sustainable economic results using the recommended tools contained in The Plan.

Robertson County officials and key stakeholders need to make the connection between economic and population growth and fiscal "health". The County and cities must invest in "Place" to create lasting value and prosperity building upon local strengths to create high quality of life while doing more with less through compact development patterns and strategic public investments in order to connect the dots between economic and fiscal health. To grow strategically, community leaders must grow value in existing neighborhoods, invest public dollars strategically at a cooperative-level (more effective than individual projects initiated by smaller cities) while thinking about "Complete Communities" that address housing, transportation, and public facilities collectively.

Creating positive "Community Cash Flow" strategy will be crucial to the economic success of Robertson County and cities within the County. Communities looking to bring new dollars into a community to ensure a

balance of economic activity (or "community cash flow") can look at two sources of new dollars: those brought in by individuals, and those brought in by entities [organizations, businesses, government]. There are two types of new individual dollars that come into a community: earned income (wage and salary income) and transfer income (nonwage income or generated wealth). New dollars brought into a community by entities or institutions cover a wide range of sources, including tourism, expanding markets, pursuing outside investments, government contracts or grants, and developing support sectors. In today's global economy, the economic health of Robertson County can become unstable if there is an imbalance between the amount of local income and wealth leaves the community, and the extent to which "new" dollars come into the County and cities.

We know from resident surveys and public meetings there are residents living in Robertson County but work elsewhere. These residents generate income from an "outside" source and hopefully are bringing that income back to Robertson County to pay for goods and services. They pay property and other taxes that become part of the stable economic base of the community. The opportunity lies in capturing the discretionary portion of these residents' income. Robertson County and cities can better capture individual discretionary dollars of residents who work outside the County if they provide a range of convenient and accessible retail and commercial services at times when those workers are back in the County. These dollars tend to leak away when local service availability and delivery does not meet the needs of the consumer.

Investment strategies must be responsive to changing market conditions.

In growing or emerging markets, private sector investments will lead the way in public sector investments including infrastructure and public facilities.



In declining markets, local officials and key stakeholders must shift their strategy to "unlock private capital" by leading the way for economic development through strategic investment in public infrastructure and facility investments to attract and retain office, retail, and industrial growth.

Public Sector Infrastructure and Facilities Private Development

Robertson County, not unlike many rural developing counties throughout the U.S., is faced with the challenge of facilitating economic and community development in a fiscally constrained environment. The County with participation from cities should conduct strategic infrastructure planning in order to link infrastructure and facility development to land use plans while also using capital improvement plans to target specific public investments and "do more with less." The opportunity exists for the County to target investments where they can attract private investment and strengthen the opportunity for well-planned compact development that provides positive net economic growth of the tax base. The County and cities must seek cost-effective solutions that provide the opportunity to invest in projects that achieve multiple goals while considering life cycle costs (capital, O&M, replacement) in addition to the initial up-front costs of infrastructure and facilities.

Create effective partnerships that serve as "catalysts" for change and economic growth and diversification. Types of partnerships can include public/public, public/private, and public/institutional/private.

Partnerships are formed by engaging with local developers and the business community, identifying common interests, establishing a clear understanding of roles and responsibilities as well as opportunities, and the equitable allocation of risks and rewards. Partnerships provide the opportunity to "do more with less."

The County must also lead by example in the fiscal budgeting process to establish priorities, anticipate changes in costs and revenues and identify "structural" budget challenges and strategies for overcoming, and matching revenues and costs to link "who pays for growth". The County and cities must evaluate fiscal impacts of major new development in order to understand how new development will affect the fiscal resources and budget of each jurisdiction and determine how new services will be financed. The County and cities must align capital investment and fiscal policies to support desired economic and community development. Targeted capital improvement programs should be considered to preserve and enhance value in existing neighborhoods and districts while providing structured fiscal resources to influence the location and magnitude of new development. The County and cities should avoid subsidizing with public funds the costs associated with Greenfield development.

Helping local businesses and organizations expand their markets is another viable opportunity for communities in Robertson County to capture new economic dollars. Strategies might include encouraging relationships between local producers, suppliers and retailers. Creating a local business development and support climate is another way to increase the flow of new dollars coming into Robertson County. New dollars generated by new and expanding businesses – the County with support from cities could develop a support system to help new businesses get up and running, such as a business incubator, "how to" classes, or an ombudsman to provide technical assistance. Technology may also provide an opportunity for Robertson County to bring new dollars into the community -- some of the largest grossing retailers are in fact virtual stores selling products through the Internet, without ever having a geographic place of business. Technology has created a virtual global market place and transportation and delivery systems provide the means to reach those markets. The County with support from cities can create a climate for technology-based businesses by ensuring that adequate telecommunications and business support infrastructure is readily available.

K. HEALTHY COMMUNITY

1. EXISTING CONDITIONS

One of the most critical issues confronting Robertson County and cities is the impact that economic and community development has on public health. Research studies have consistently shown that the design of the physical environment contributes to chronic diseases. Designing healthy communities that facilitate an active lifestyle is critical to the long-term health of Robertson County.

Real, lasting community change stems from critical assessment of current health conditions, an aspirational framing of the desired future, and a clear evaluation as implementation progresses on whether the policies and programs implemented are making a difference and improving the health and well-being of residents throughout Robertson County.

Improving the health of Robertson County is critical for not only enhancing residents' quality of life but also supporting their future prosperity. The Robertson County Health Department along with a variety of other public, quasi-public, private and non-profit organizations found throughout Robertson County have the opportunity to join forces and forge coalitions and partnerships focused upon measurably improving the health of residents while promoting healthy living and providing opportunities for an active lifestyle important in attracting and retaining businesses and residents alike.

2. ISSUES AND OPPORTUNITIES

Issues relating to healthy communities can potential be addressed in every element of The Plan. There are many opportunities to bring specific attention to healthy living in Robertson County. The built environment has an enormous impact on healthy living and lifestyle choices. Consideration of issues such as walkability and physical activity are not a routine part of land use decisions and plan approval processes. Policy makers throughout Robertson County including cities must incorporate

health impact analysis into the planning and permitting process to ensure developers, builders, and the general public understands and supports the importance of healthy communities.

Community planning made in consideration of health impacts is more likely to have positive sustainable financial impact upon local government while also contributing to the long-term health and quality of life of the community at large. Creating healthy communities is a valuable public health initiative that increases opportunities for people to live more active and healthy lives. Creating healthy communities is about creating not only physical and policy changes to the environment, but also social change. Work at the policy level in County government is often critical to bringing about changes.



L. INTERGOVERNMENTAL RELATIONS

1. EXISTING CONDITIONS

Almost as important as communicating with the public is the need for the County to communicate with other government agencies and bodies at the local and regional level. The County is unique in the fact that most actions and plans by other agencies that serve the area also affect the County, likewise, actions and plans of the County affect other government bodies. Several levels of government relations exist in Robertson County. They include but, are not limited to, Robertson County, the Board of Education, and the cities. Intergovernmental relations with the State of Tennessee and other regional entities consist of a vast array of agencies and departments, such as the Department of Transportation, ECD, Environment and Conservation, and many others as well as Cumberland Region Tomorrow and the Nashville Metropolitan Planning Organization (MPO).

The relationships that exist between local, regional, State and federal government entities are complex and interwoven. The efforts of Robertson County and these units of government must be coordinated in order to minimize duplication and incompatible endeavors and to promote cooperation, collaboration and future efficiency. Furthermore, the effective involvement of citizens in government processes is a very real part of intergovernmental coordination and an integral component of comprehensive planning.

Robertson County is home to several urbanizing communities including Adams, Cedar Hill, Coopertown, Cross Plains, Greenbrier, Millersville, Orlinda, Port Royal, Ridgetop, Springfield, and Whitehouse and a multitude of other units of government, including a county-wide school district, utility districts, and other districts. Most of the current intergovernmental cooperation efforts in the County are informal and involve communities working together or sharing facilities or services to meet specific needs generally on a short term basis. This may include

borrowing of equipment or agreeing to ROW mowing arrangements that are more efficient based on location of resources.

More formal intergovernmental cooperation provides some of the most basic services in Robertson County including emergency services through mutual aid agreements Robertson County and its cities have had significant success in facilitating and executing intergovernmental cooperation through both formal and informal agreements. The most significant such agreement is the Urban Growth Boundary Plan that prescribes the urban growth areas for select cities located throughout Robertson County.

2. TRENDS

Intergovernmental cooperation is a necessity for all levels of government to operate in a cost effective and efficient manner while providing citizens with required services. The importance of intergovernmental cooperation has dramatically increased in the last several years in Tennessee, as well as the rest of the U.S., due to funding constraints and mandates to provide services and/or programs. Citizens demand a high level of service for their tax dollars and expect that the services will be provided in the most cost effective and efficient means possible. Intergovernmental cooperation for Robertson County can offer solutions to many of these issues and at a minimum should be pursued to allow for good government relations and a non-competitive environment by the County and cities and surrounding communities in middle Tennessee.

3. ISSUES AND OPPORTUNITIES

The County should consider hosting regular meetings with the cities comprising Robertson County to discuss and plan regional issues. Regular meetings with State and regional agencies should be held to keep these agencies abreast of County issues and planning efforts and for the County to stay abreast of changes in the agencies and their programs. A consistent meeting plan should be adopted and considered part of marketing and promoting the County. The County and cities collectively

have done an outstanding job of creating a common vision for Robertson County and taking steps to forge a productive working relationship with the public, cities, and State and regional agencies during the planning process for this Plan. A formal consistent plan for meeting will help maintain these relationships while positioning the County and cities for continued improvement in collaboration and cooperation.

As the County continues to develop over time, leaders should be encouraged to continue build and improve upon interagency and intergovernmental cooperation. Coordination between local groups and organizations and local, regional and state agencies and governments will be key to remaining a vital and sustainable County.

Robertson County and cities along with surrounding counties and cities should periodically review the potential for intergovernmental agreements to provide more efficient, cost-effective public services. Robertson County should maintain communication with local, regional, state and federal governments and organizations through conversations, meetings, associations, memberships, alliances and partnerships, and other forums that promote cooperation and further community goals. The County with support and participation from cities as well as surrounding communities should explore various types of intergovernmental agreements and programs including:

Joint Ownership Agreements – local governments jointly purchase and share ownership and maintenance of equipment that would be difficult for a single city to county to justify purchasing individually because of high cost and/or limited use.

Group Purchasing Agreements – local governments pool financial resources and purchasing power to purchase goods in bulk or combine their bidding efforts to achieve unit discounts on materials and equipment.

Resource Exchange and Sharing Agreements – local governments rent equipment from one another or purchase services through the use of a per mile maintenance fee, trade equipment or

personnel use on an in-kind basis, or share resources to accomplish projects of mutual benefit such as jointly repairing a roadway.

Within Robertson County, there is overwhelming support for farmland preservation and an emphasis for land development to be located with cities. To foster and support this long-term vision for Robertson County, County and city leaders should encourage public participation in local government. Whether elected or appointed roles, there are plentiful opportunities for involvement including youth involvement through partnerships with local schools to promote long-term residency in the County. Partnering with County schools and/or community colleges including Highland Crest College Campus is a means to develop a youth leadership program as a way to grow young leaders that will participate and become involved in the community. By encouraging youth involvement, County and city leaders are drawing in the involvement of their families and cultivating future leaders of Robertson County.

Regional collaboration – Robertson County working together with cities in the County as well with communities across political boundaries will be essential for successful sustained economic development in today's business world. Since people, dollars, goods and services are all very mobile, the challenge for Robertson County is to form effective regional coalitions that develop, support and promote common economic objectives.

Why collaboration? Seldom can any single community provide all of the features necessary to support the quickly emerging needs of the emerging and ever-changing economy, especially if it has an undiversified manufacturing or agricultural economic base as is found in Robertson County. Regional collaboration of communities is a natural and economically feasible response to emerging trends and needs for business development and retention. Robertson County along with surrounding communities can create compatible and mutually supportive comprehensive plans. By banding together, communities are able to create a number of competitive advantages:

- Provide a wider network of compatible businesses for clustering
- Provide a great array of services available to a larger market
- Create traffic patterns that capitalize on the contributions of multiple communities, while retaining a great number of dollars within the region
- Pool limited government fiscal resources to prevent overlapping or duplicative services
- Consolidate heavy-cost services
- Pool government purchasing to achieve volumes necessary to access deep discounts not available individually
- Share financial resources to protect natural and cultural resources as well as preservation of rural economic base

Robertson County should lead the way in forming a coalition of cities and key stakeholders in partnership with surrounding communities to avoid "going it alone" and unnecessarily isolating itself from a wealth of resources available through collaboration including:

- Maximizing scarce fiscal resources
- Generate new and progressive ideas
- Divide work tasks to save time and expense
- Capitalize on the talents of the various partners
- Project a stronger image and asset base to businesses and people outside the designated region, especially in consideration when global competition is a factor.

Robertson County and its cities should seek to align themselves with strategic partners who can bring valuable information, services and products into the collaborative venture. Partners invited to the table to explore collaboration across the middle Tennessee region should be as broad and diverse as the stakeholders in the County including public,

private, non-profit and education sectors with a range of expertise, community business leaders and residents who are deeply interested and committed to participating including youth. There is no better time than the present for Robertson County to seize the moment and begin to shape its economic future through regional collaboration.



M. SUMMARY AND RECOMMENDATIONS

This section includes a summary and recommendations based on the existing conditions information contained in this part of the Plan. Recommendations outlined below will be utilized to craft the appropriate growth policies that will serve as the framework for future development in Robertson County.

1. LAND USE

Growth policies should be developed to provide a framework for implementation strategies and to guide the County and participating cities in providing a foundation to attract and retain high-value high-paying jobs, more quality development, and residents than previously allocated by past planning studies.

A significant future commercial node at SR 76 and I-65 has the potential to develop quickly due to the presence of roads and utility infrastructure at this location.

In order to protect and preserve prime farmlands, a policy decision needs to be made to restrict agricultural properties from subdividing lands without going through the formal subdivision process. Currently, based on an interpretation of the state's subdivision definition, owners of agricultural lands within the unincorporated area can subdivide lands in 5-acre tracts or greater without receiving approval from the County's governing board. This is counter to the County's vision of protecting its agrarian heritage.

2. COMMUNITY FACILITIES

Urban sprawl is plaguing the County's natural lands. This development pattern significantly degrades the environment as well as increased cost of services. Policies should be developed to reduce sprawl development patterns.

3. TRANSPORTATION

The County should continue to actively seek inclusion as a full member in the Nashville Area MPO.

Continue to be active in the MPO and RTA and coordinate with these agencies on desired roadway/multimodal network and service improvements.

Robertson County has a strong regional roadway backbone that provides access to the whole County. The County has a significant opportunity to continue to enhance and build on its transportation backbone into the future with the addition of complete streets guidelines that promote multimodal alternatives.

Most of the village/city centers, except Springfield, have very limited to no pedestrian facilities, which does not promote walkability that is common with most traditional small towns. Also chronicled is the lack of bicycle facilities throughout the County. Policies should be developed to ensure that sidewalks and bike lanes are planned and programmed for areas that are deficient. Additional policies should be developed to encourage the cities within Robertson to update their land development regulations to require sidewalks with new development or redevelopment projects.

The majority of the roadways in the County are two lanes with limited to no shoulders and in some instances exhibit difficult maneuvering curves. Several high travel roadways, such as US 431 SR 49, Cross Plains Road and SR 25 would benefit from safety improvements. Specific studies should be conducted to identify high priority safety improvements necessary to ensure safer corridors within the County.

Explore policies to enhance the development of rail facilities and capitalize on the location of village centers adjacent to the rail line and secure Bus Rapid Transit as a multi-modal option in the County.

Explore opportunities to connect Batson Parkway from Blackpatch Drive to SR 76 to the east and from US 431 to SR 49 to the west. Also, a future

connection due northwest from SR 49 to SR 41 (near the airport) should be explored.

4. HOUSING

Develop policies that require diverse housing types (townhomes, duplexes, apartments, row houses, etc.) for projects of a certain size.

In order to attract a younger population and in turn allow for more affordable housing options, policies should be developed that require a mixture of income levels related to housing typology.

5. ECONOMIC DEVELOPMENT

Develop strategies to recruit businesses to the County utilizing the talent pool in Nashville.

Promote and recruit industry sectors that benefit from the proximity to industry clusters in Nashville. When recruiting and retaining companies/employment base, the County should highlight its proximity to Nashville and a regional airport, access to college graduates, low cost of living, natural aesthetics, small town character, and business friendly climate.

6. UTILITIES

Future potable water supply is a major issue that all of the local governments in this region are struggling with. In order to understand the level of severity this shortage poses, the region should undertake a series of regional studies that evaluate the current status of water capacity and determine the future demand based on planned growth and development plans.

Policies should be developed to encourage the implementation of water conservation techniques in all of the cities and the unincorporated areas within the County. These techniques may include low impact development principles, regional water supply cooperation, plumbing

fixture replacement program, developing a reuse water system, irrigation schedules, developing landscaping restrictions, or other water conservation measures.

Develop alternative wastewater effluent disposal techniques other than pumping into rivers and surface waters following proper treatment (i.e. rapid infiltration basins).

The County should evaluate the efficacy of a county-wide concurrency system that requires development to pay their fair share based on the impacts on public facilities (utilities, schools, parks, roads, etc.).

7. SCHOOLS

Develop or update standards for new schools that provide equal educational and accessible opportunities to all students.

Collaborate with and utilize Highland Crest College as an asset when pursuing potential business development and retention.

A concurrency system should be developed for community services and public education facilities. Alternative means of funding new school facilities should be evaluated.

8. NATURAL RESOURCES

Future conservation measures should be taken to pursue a more desirable and fiscally sound development pattern within Robertson County than has been experienced in the past. The future of the County's natural farm lands are threatened by current development patterns. Continued development of single family homes in a sprawling pattern will slowly reduce the amount of land necessary for sustainable and economical agricultural production while further exacerbating the disparity between fiscal expenditures and capital improvement investments and the sufficiency of revenues needed to cover such expenditures and capital needs by the County and cities.

If not already addressed, the cities and County should evaluate the efficacy of developing a County-wide conservation and sustainability plan.

There are several large areas, particularly along Sulphur Fork Creek, that would benefit from protection and could present opportunities for passive recreation. The County should consider purchasing outright or developing a partnership with natural land trusts to purchase environmentally sensitive lands that could serve a dual recreational purpose. Public-private partnerships with non-profit organizations and institutions should also be forged for such purposes.

9. HISTORICAL RESOURCES

Historical resources are an integral part of the agri-toursim industry the County is promoting. If the cities and the County plan to continue to capitalize on its heritage in the future, preservation efforts should be explored. For example, the development of historic districts, promote historic surveys to be completed on eligible properties, develop a publicly accessible database of all historic structures, actively participate in federal and state historic preservation programs and at local levels create historic preservation boards.

10. PARKS AND RECREATION

The County should develop a recreation and trails master plan in order to identify location, type and priorities for new public recreational facilities.

The demonstrated lack of single use parks is evident within the County. However, most of the County schools are collocated with park amenities. These facilities should be advertised to the community as recreational outlets. The County should make these parks available to the public after school hours.

11. FISCAL HEALTH

The County and cities are attempting to facilitate growth and economic development in a fiscally constrained environment. To overcome this

challenge, the County and cities must gain an understanding of the fiscal conditions present including past and future trends. The County along with the cities must establish priorities, anticipate changes in cost and revenues, and develop strategies for overcoming fiscal budgetary deficiencies. The County and cities should give close consideration to the fiscal impacts of major new development in order to understand the fiscal implications such development will have upon costs and revenues including capital improvements and infrastructure that may be required. Community growth and economic development that considers the fiscal health of the community creates an environment for responsible growth that is sustainable, fiscally sound, and economically healthy for the entire community.

12. HEALTHY COMMUNITY

The health and well-being of residents in Robertson County is influenced by a myriad of factors including most critically the impact from economic and community development. In order for Robertson County to aspire to a healthier lifestyle, a clear vision for a healthy community must be embraced by public and private sector community leaders. Improving the health of Robertson County residents is critical for not only enhancing quality of life but, also to support their future prosperity. The built environment has an enormous impact on how people live and lifestyle choices. The County and cities must form partnerships to not only raise awareness on the importance of healthy living and lifestyle choices but, the importance of community planning in shaping the quality and character of growth and economic development. The County and cities should create healthy communities throughout Robertson County where people are able and encouraged to walk and bike for both pleasure and purpose, have access to affordable and nutritious food, and have access to decent and affordable health care services.

13. INTERGOVERNMENTAL RELATIONS

The County and cities recognize the importance of building and maintaining intergovernmental relationships that embody communication, coordination and collaboration. The relationships that exist in Robertson County and cities between local, regional, state and federal governmental entities are complex. Intergovernmental cooperation is a necessity for all levels of government to operation in cost effective and efficient ways while providing residents and businesses with required services. As the County and cities continue to develop and grow over time, community leaders will be encouraged to continue building and improving upon interagency and intergovernmental cooperation and coordination. Regional collaboration and cooperation will be essential for Robertson County for sustained economic development through the formation of effective regional coalitions that develop, support and promote a common vision and economic and community growth objectives. Collaboration that engages a variety of stakeholders within and outside the community creates a variety of competitive advantages for Robertson County to position the community for sustained economic success.

