



2015 NORTHEAST COUNTY SECTOR PLAN



KNOXVILLE • KNOX COUNTY METROPOLITAN PLANNING COMMISSION



Northeast County Sector Plan

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NORTHEAST COUNTY SECTOR

Executive Summary

The Northeast County Sector is approximately 89 square miles in size, the largest of all 12 planning sectors in Knox County. It is rural in character with 78 percent of existing land use designated Agriculture/Forestry/Vacant Land or Rural Residential and populated with small, rural communities like Mascot, Corryton, Gibbs, Ritta, Skaggston, and Shipetown. Significant efforts over the years to preserve the rural character and farmland have placed 40 percent of land in the sector under Tennessee's Greenbelt Law program.

In the last twenty years, 8,393 new residents were added to the Northeast County for a total population of 27,386 in 2010. The housing inventory also grew as new construction averaged 200 permits annually with residential, single dwelling units accounting for the bulk of development. Environmental constraints in the Northeast County have shaped how development has occurred. Steep slopes along three prominent geographical features (Beaver Ridge, McAnnally Ridge, and House Mountain) have limited development potential. Despite constraints, development in the sector has been steady, albeit slower than other parts of Knox County. In the last ten years, almost half of all development was in the Rural Growth Area, which is designated for farming, recreation and other non-urban uses. As growth continues to occur in the coming years, the Rural Growth Area will face increased development pressure.

Employment in the sector is led by Manufacturing and Transportation/Warehousing, which account for 40 percent of the 4,200 jobs located in the sector. In contrast, the vast majority of residents (95 percent) living in the Northeast County commute to a place of employment outside of the sector.

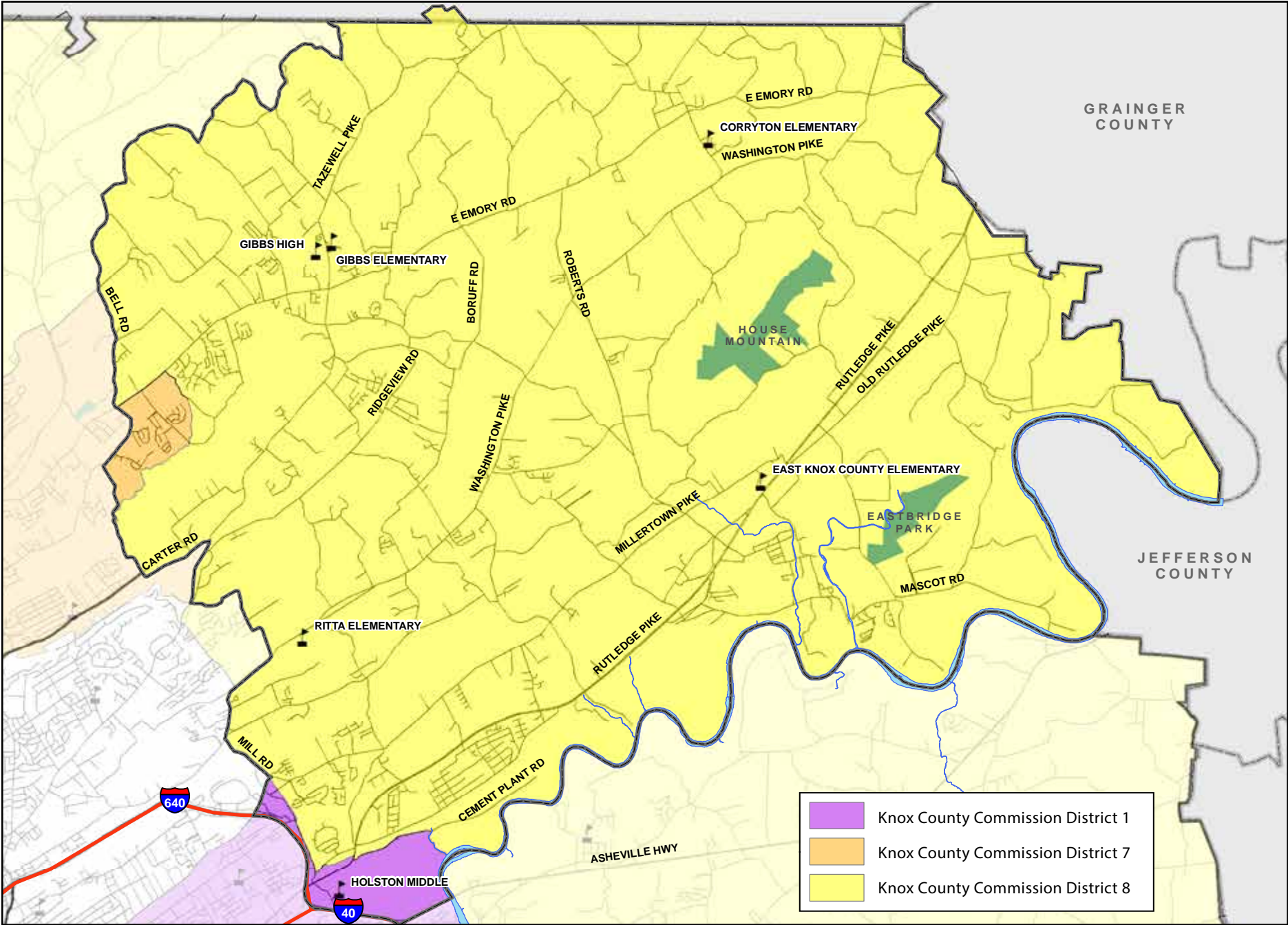


An aerial view of House Mountain and McAnnally Ridge

Since the last sector plan in 2003, there have been several public facility and infrastructure improvements in the Northeast County. Growth in the sector helped foster renovation of the existing Holston Middle School in 2004 and the opening of Gibbs Elementary School in 2007. Transportation across the sector is served well by the existing road network. Recent improvements along Millertown Pike and current construction at the Emory Road and Tazewell Pike intersection help to alleviate congestion in parts of the sector. Public transportation serves a small portion of the Northeast County along Millertown Pike, while the rural landscape and scattered development patterns have created an environment difficult and costly to provide sidewalks.

In the next 15 years, the Northeast County is projected to add between 5,300 and 11,100 people. Many residents choose to live in this area because of the rural character. Long term planning is necessary to balance future development with qualities inherent to the Northeast County. The Sector Plan will include land use, community facilities, transportation planning, and historic resources recommendations organized into 5-year and 15-year implementation stages. These recommendations will be made at the end of the sector planning process and reflect observations from data trends, projects implemented since 2003, and public input from an online survey and public meetings.

Northeast County Sector: Knox County Commission Districts



Section 1:

Background Report

The Northeast Count Sector covers an area primarily in Knox County, with a small portion in the City of Knoxville. The plan was last updated 11 years ago, resulting in adoption by the Knoxville City Council and Knox County Commission in September 2003. In January 2010, the Northeast County Sector Plan was amended through the adoption of the Knoxville-Knox County Park, Recreation, and Greenways Plan.

Comprehensive Planning Process Overview

Comprehensive planning in Knoxville and Knox County can be viewed as a series of plans that start with regional geographies and broad goals and objectives and gradually address smaller areas of the city and county in more detail and with greater specificity. An overview of these plans are outlined below.

The Metropolitan Planning Commission (MPC), under state law, is directed to create a comprehensive plan to provide recommendations for:

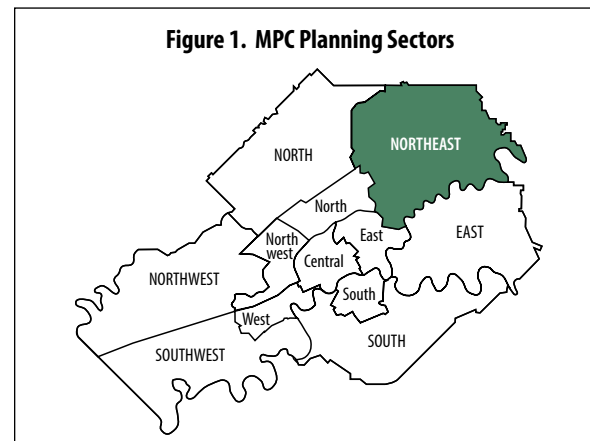
- Roads, and other transportation systems
- Parks and other public property
- The general location and extent of public utilities, including sanitation and water;
- The general character and location of community areas and housing development;
- Uses of land for trade, industry, housing, recreation, agriculture, and forestry; and
- Appropriate zoning relating to the land use plan, outlining permitted uses and the intensity of those uses, such as height and locations of buildings on their parcels

The Growth Plan (*The Growth Plan for Knoxville, Knox County, and Farragut, Tennessee*), adopted in 2000, was mandated under the Tennessee Growth Policy Act

(Public Chapter 1101), and requires city and county governments to prepare a 20-year Growth Plan for each county. At a minimum, a growth plan must identify three classifications of land:

- Urban Growth Boundaries (UGB) must be drawn for all cities and towns. Land within the UGB must be reasonably compact, but adequate to accommodate all of the city's expected growth for the next 20 years
- Planned Growth Areas (PGA) must be reasonably compact, but large enough to accommodate growth expected to occur in unincorporated areas over the next 20 years.
- Rural Areas are to include land to be preserved for farming, recreation, and other non-urban uses.

The General Plan (*The Knoxville-Knox County General Plan 2033*), adopted in 2003, is the official 30-year comprehensive plan for Knoxville and Knox County that outlines a long-range vision and policy framework for physical and economic development. The plan includes the Growth Plan, twelve sector plans, corridor and small area plans, and system-wide plans.



Sector Plans provide a detailed analysis of land use, community facilities, and transportation for 12 geographic divisions in Knox County. The focus is to take goals contained in the General Plan and draft a sector plan that is to guide land use and development over a 15-year period. Also included is a five-year plan with recommended capital improvements and other implementation programs.

Corridor Plans primarily cover land use and transportation recommendations along existing transportation corridors. These plans are more detailed than sector plans because they have a smaller geographic area. Recommendations often deal with economic development, aesthetics, and public safety.

Small Area Plans are neighborhood-based and address more detailed concerns like revitalization or special environmental considerations. These plans are developed as a result of some immediate development pressure on the area and are usually requested by the elected bodies.

System-Wide Plans cover specific systems such as greenways and parks, hillside and ridge top protection, and major road plans.

All plans are developed through citizen participation, including workshops, surveys, and public meetings. Plans are adopted by the Metropolitan Planning Commission, Knoxville City Council, and Knox County Commission and serve as a basis for zoning and land use decisions.

A Summary of Recent Projects

The 2003 Northeast County Sector Plan proposed several improvements that included land use updates to align development efforts, environmental and farmland protection, transportation, and community facilities. The following is a summary of improvements that have been implemented or are in the process of being implemented, as well as other major changes in the sector since 2003:

Community Facility Improvements

- In 2004, Holston Middle School (N. Chilhowee Dr.) underwent \$8.5 million in renovations and additions.
- In 2005, the construction of Gibbs Elementary School (Tazewell Pk.) began, totaling \$14 million and opened in 2007.
- House Mountain State Park received \$200,000 in improvements from the State of Tennessee for the construction of restroom facilities and a picnic pavilion in 2006.
- In 2009, Knox County Schools invested \$50,000 for improvements to Gibbs High School softball concessions/press box, dugouts, and bleachers.

Parks and Greenway Improvements

- In 2013, the City of Knoxville in partnership with Knox County constructed the 0.4-mile section of Love's Creek Greenway in Spring Place Park.

Land Use Changes

- From 2004 to 2013, over 1,200 acres were rezoned from Agricultural to a non-agricultural use in the Northeast County Sector.

Major Road Projects

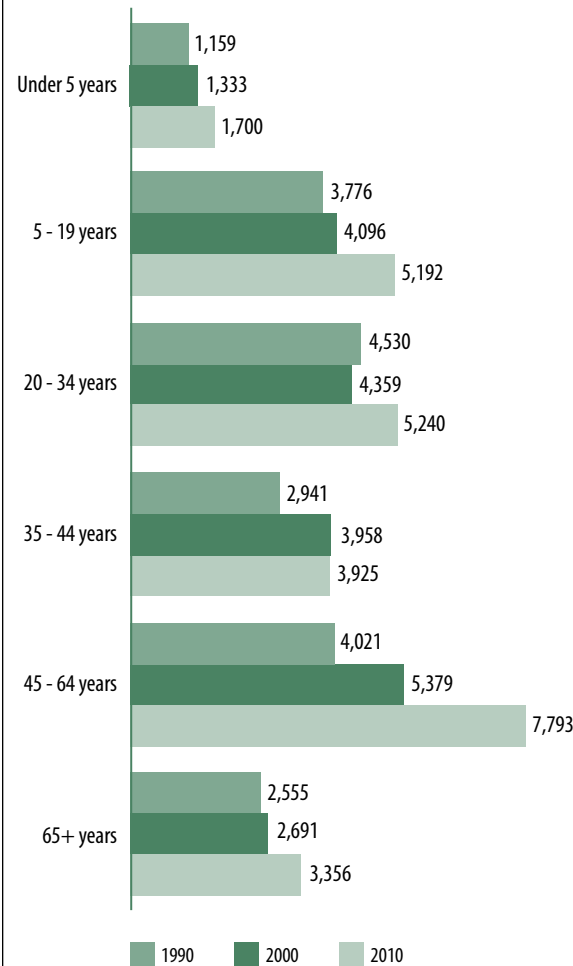
- Millertown Pike from I-640 along Loves Creek Road to bridge before Mill Road was widened and improved.
- Tazewell Pike and Emory Road intersection is under construction for installation of a traffic signal and scheduled to be complete by May of 2016.

Community Profile

Population

In 2010, there were 27,386 people living in the Northeast County Sector, or six percent of Knox County's total population. Over the last twenty years (1990 to 2010), the sector grew around two percent annually with the largest increase occurring between 2000 and 2010.

Figure 2. Northeast County Sector Population by Age Group



Individuals 45 to 64 years old account for the largest age group, nearly doubling from 4,021 people in 1990, to 7,793 people in 2010. Baby Boomers (45 to 64 years) comprise this group, increasing from a 21 percent share of the sector population in 1990, to 28 percent in 2010.

Table 1. Northeast County Sector Population by Age and Sex

Years of Age	1990	2000	% Change 1990-2000	2010	% Change 2000-2010
Under 5	1,159	1,333	15.0	1,700	27.5
5-19	3,776	4,096	8.5	5,192	26.8
20-34	4,530	4,359	-3.8	5,240	20.2
35-44	2,941	3,958	34.6	3,925	-0.8
45-64	4,021	5,379	33.8	7,793	44.9
65+	2,555	2,691	5.3	3,356	24.7
TOTAL	18,982	21,816	14.9	27,386	25.5
Male	9,324	10,930	17.2	13,753	25.8
Female	9,658	10,886	12.7	13,633	25.2

In the last twenty years, Knox County's population increased 29 percent to 432,226 in 2010. A closer look reveals the County Balance accounted for the bulk of growth, increasing from a 49 percent share of the Knox County total population in 1990, to 59 percent in 2010. Knoxville's population only grew five percent since 1990, to 178,874 residents in 2010, while the County Balance increased 53 percent for a total of 253,352 in 2010. For every person added to the City, almost 10 people were added to the County Balance.

Table 2. Knox County Population

	1990	% Share	2000	% Share	2010	% Share
City of Knoxville	169,761	50.6	173,890	45.5	178,874	41.4
County Balance	165,988	49.4	208,142	54.5	253,352	58.6
Knox County	335,749		382,032		432,226	

A closer look at County Sector populations show where growth largely occurred in the County Balance. Compared to other sectors, the Northeast County ranked fourth in population growth adding 8,393 residents from 1990 to 2010. During this period, the North (17,363 residents), Northwest (27,580 residents), and Southwest

(30,469 residents) County Sectors accounted for 84 percent of the 89,376 people added, signifying growth primarily occurred in western Knox County.

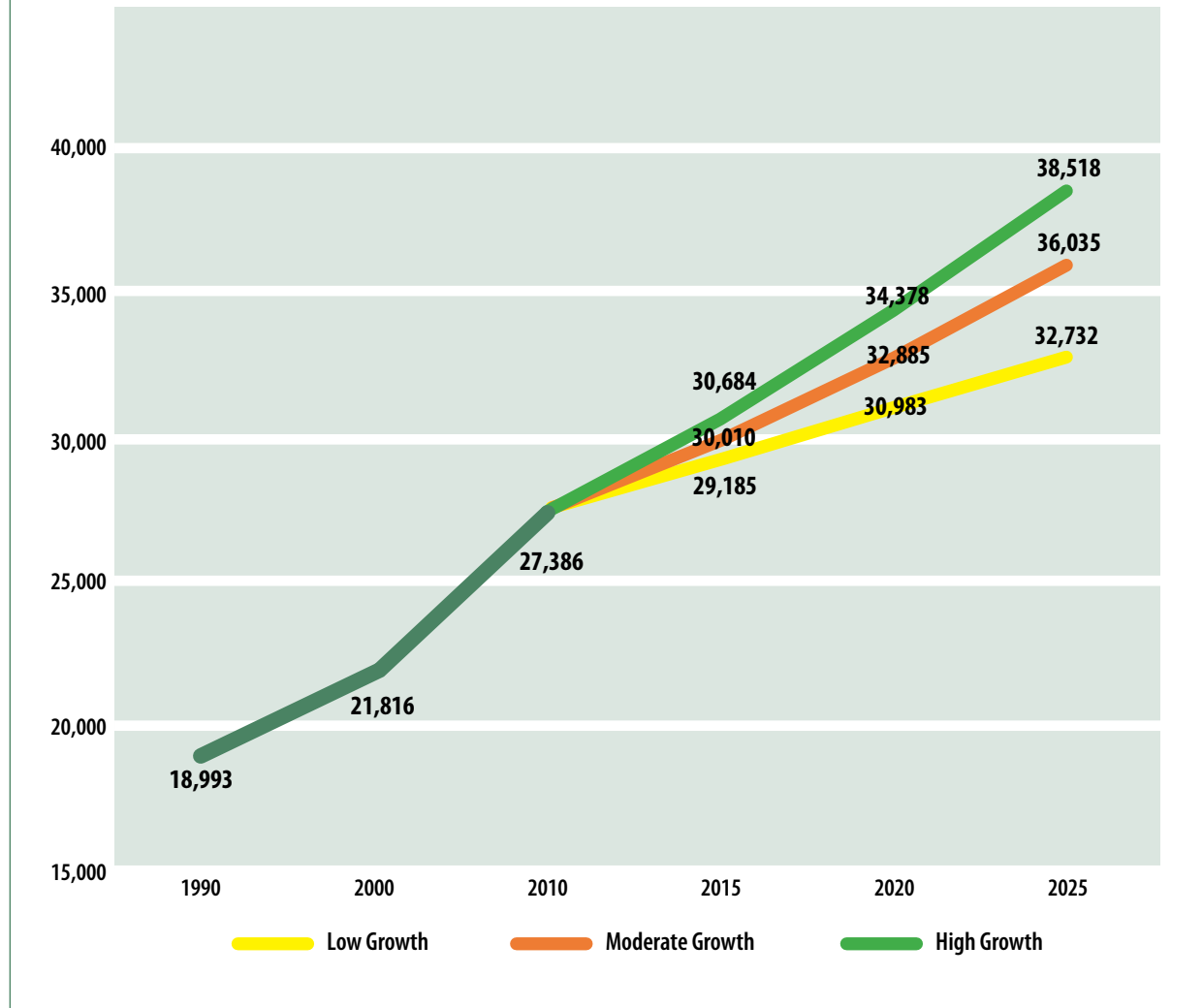
Rank	County Sectors	1990	2000	2010	Net Growth 1990 - 2010
1	Southwest	39,990	56,419	70,459	30,469
2	Northwest	49,422	62,864	77,002	27,580
3	North	32,391	42,557	49,754	17,363
4	Northeast	18,982	21,816	27,386	8,393
5	South	17,759	19,236	20,988	3,229
6	East	12,357	13,313	14,699	2,342
	TOTAL	170,901	216,205	260,288	89,376

What can Northeast County expect to see in the future? Three population projections are shown for the sector, providing totals for 2015, 2020 and 2025. The projections are based on underlying factors inherent to the sector such as historical growth rates, share of Knox County's total population, and the Knoxville Regional Transportation Planning Organization's travel demand model. These three projections assume the underlying factors will continue in the future.

The Low Growth projection results in the addition of 3,597 new residents to the sector from 2010 to 2020, an increase of 13 percent. This projection falls below the historical 15 percent increase from 1990 to 2000, and the 26 percent increase from 2000 to 2010 (see Table 1). The Low Growth scenario uses Knox County population projections from the Center for Business and Economic Research (CBER) at The University of Tennessee as control totals. The Northeast County Sector historically accounts for six percent of Knox County's total population. This share was applied to CBER's countywide population totals for 2015, 2020, and 2025 to determine the Low Growth scenario for Northeast County.

From 2010 to 2020, the Moderate Growth projection results in a 20 percent increase in population, or 5,499 new residents, while the High Growth projection adds

Figure 3. Northeast County Sector Population Projections



6,992 people, a 26 percent increase. These two projections fall between the historical 15 percent increase from 1990 to 2000, and the 26 percent increase from 2000 to 2010 (see Table 1). The Moderate and High Growth projections use Northeast County's annual historical growth rates from 1990 to 2010 (Moderate) and 2000 to 2010 (High). These annual growth rates are applied to the 2010 total population for the sector and carried out each subsequent year to 2025.

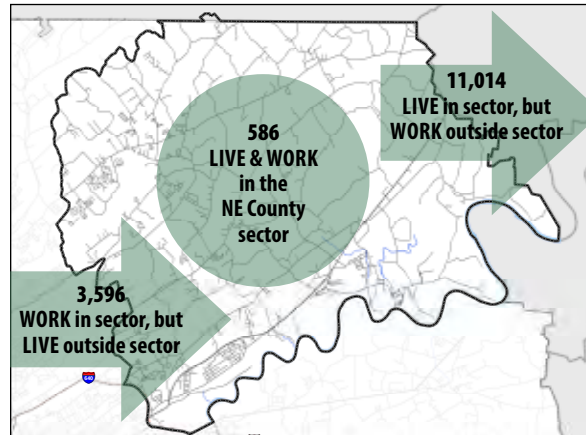
In summary, from 2010 and 2025 the Northeast County could potentially add between 350 and 740 people each year.

Employment

In 2011, approximately 11,600 residents living in the Northeast County Sector were employed with the majority (11,014) commuting to a place of employment located outside the sector. The largest industry employer of people living in the Northeast County was Health Care and Social Assistance with 1,671 residents, while Retail Trade (1,559) and Educational Services (1,273) were second and third, respectively.

The number of jobs located in the Northeast County was 4,182 with the bulk of workers (3,596) commuting to the sector from a place of residence outside the sector. Transportation and Warehousing was the largest industry with 913 jobs, while Manufacturing followed closely behind with 845. Agriculture, Forestry, and Fishing only accounted for 27 jobs, revealing how few people farm as a fulltime occupation.

Figure 4.
Northeast County Sector Employment Inflow/Outflow



Only 586 people actually work and live in the Northeast County, or 14 percent of the 4,182 jobs in the sector.

Table 4. Northeast County Sector Employment, 2011

<i>Northern American Industry Classification System (NAICS) Industry</i>	<i>Live in Northeast County Sector</i>	<i>% Share</i>	<i>Work in Northeast County Sector</i>	<i>% Share</i>
Agriculture/Forestry/Fishing	23	0.2	27	0.6
Mining/Quarrying/Oil/Gas	20	0.2	25	0.6
Utilities	111	1.0	18	0.4
Construction	576	5.0	280	6.7
Manufacturing	956	8.2	845	20.2
Wholesale Trade	685	5.9	292	7.0
Retail Trade	1,559	13.4	258	6.2
Transportation/Warehousing	518	4.5	913	21.8
Information	211	1.8	2	0.0
Finance/Insurance	432	3.7	65	1.6
Real Estate/Rental/Leasing	141	1.2	24	0.6
Professional/Scientific/Technical Services	601	5.2	65	1.6
Management of Companies/Enterprises	178	1.5	2	0.0
Administrative/Support/Waste Management	690	5.9	176	4.2
Educational Services	1,273	11.0	5	0.1
Health Care/Social Assistance	1,671	14.4	205	4.9
Arts/Entertainment/Recreation	132	1.1	0	0.0
Accommodation/Food Services	960	8.3	323	7.7
Other Services (excludes Public Administration)	363	3.1	87	2.1
Public Administration	500	4.3	570	13.6
TOTAL	11,600	100.0	4,182	100.0

Public Facilities and Infrastructure

Schools

There are four elementary schools, one middle school, and one high school in the Northeast County Sector. In the last 11 years, total enrollment for all schools increased 24.6 percent to 4,148 students in 2014. Elementary enrollment increased 30.2 percent, middle enrollment was up 17.8 percent, while high school enrollment grew 19.8 percent from 2004 to 2014.

The Knox County School Board makes decisions regarding school construction and maintenance. In 2004, Holston Middle School underwent extensive renovations and the addition of a new classroom wing, while in 2007, the new Gibbs Elementary School on Tazewell Pike opened.



Corryton Elementary School

In June of 2015, the Knox County Mayor and School Superintendant announced a deal to build the Gibbs Middle School. The tentative location is on land next to Gibbs Elementary School.



Gibbs High School

Table 5. Northeast County Sector School Enrollment

School Name	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Corryton Elementary	188	200	218	217	215	209	208	198	200	200	200
East Knox Elementary	480	495	511	489	498	524	560	522	540	536	522
Gibbs Elementary	646	668	681	697	711	759	814	794	838	839	796
Ritta Elementary	355	381	380	443	430	471	544	548	604	628	655
Holston Middle	751	769	779	725	669	785	851	886	887	854	885
Gibbs High	910	1,011	1,021	969	965	979	1,007	1,024	1,035	1,057	1,090
TOTAL	3,330	3,524	3,590	3,540	3,488	3,727	3,984	3,972	4,104	4,114	4,148

Libraries

The Corryton (7733 Corryton Rd.) and Mascot (1927 Library Rd.) Branch Libraries are located in the Northeast County Sector, while Halls (4518 E. Emory Rd.) and Burlington (4614 Asheville Hwy.) Branch Libraries are just outside, but still serve Northeast County residents.

Parks and Greenways

There are 579 acres of park space within the Northeast County Sector. The largest is House Mountain Park (500 acres), comprising 86 percent of all park acreage in the sector. Other parks include Gibbs Ruritan Park (28 acres), East Knox Park (23 acres), Corryton Park (5 acres), and Mascot Park (3 acres). Northwest County is also home to Three Ridges Golf Course.

Table 6. Northeast County Sector Park Acreage

Park Classification	Acreage
Neighborhood	4.5
Community	74.4
District/Regional	0.0
Private/Quasi Public	0.0
Open Space/Natural Area	500.1
TOTAL ACREAGE	579.0
Acres Close-to-home Parks/1,000 population	3.4
Publicly-owned Golf Courses	245.1

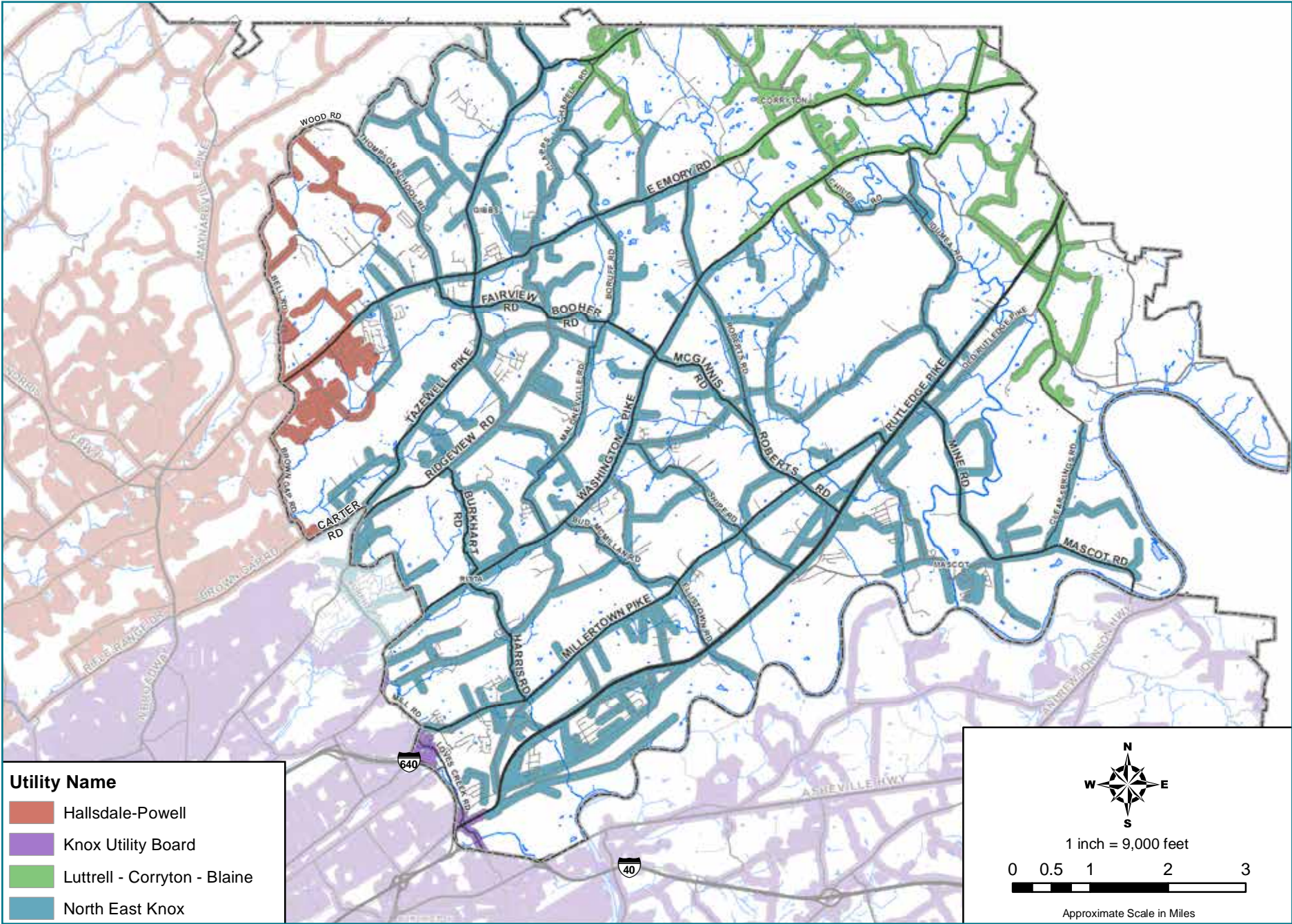
Public Utilities

The Knoxville Utilities Board is the only provider of electricity and natural gas in the sector. Northeast Knox Utility District provides the bulk of water service to the Northeast County Sector, while portions of the sector in the northeast are provided by Luttrell-Blaine-Corryton Utility District and portions in the northwest by Hallsdale-Powell Utility District (Water Service map). Sewer is primarily provided by the Knoxville Utilities Board, while Hallsdale-Powell Utility District provides service to portions in the northwest (Existing Wastewater Service map).

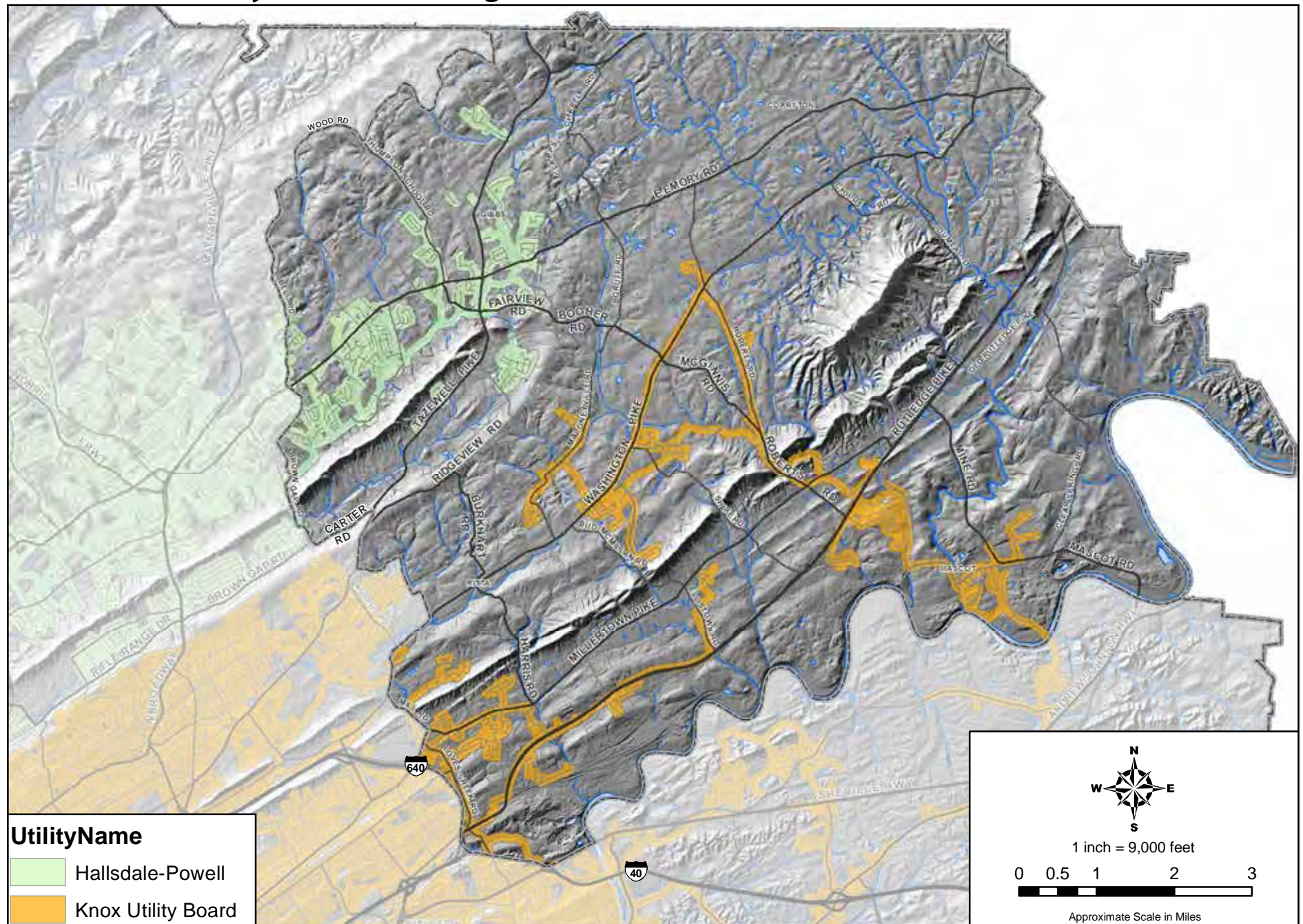
Public Safety

Police protection is primarily provided by Knox County Sheriff's Department, except areas within the City of Knoxville are served by the Knoxville Police Department. Fire protection services are primarily provided by Rural/Metro Fire Department (RMFD). Stations within the Northeast County are RMFD station #25 (8414 Old Rutledge Pike), RMFD station #33 (9337 Davis Road) in Corryton, and RMFD station #34 (7309 Tazewell Pike) in Gibbs. Areas of the sector within Knoxville's city limits are served by the City of Knoxville Fire Department.

Northeast County Sector: Existing Water Service



Northeast County Sector: Existing Wastewater Service



Transportation

The 2040 Long Range Mobility Plan for the Knoxville Region was adopted by the Transportation Planning Organization's Executive Board in 2013. The Mobility Plan lays out the vision for transportation in our region for the next 26+ years. All transportation projects that receive federal funding or are regional in nature must first be included in this plan.

The Major Road Plan for the City of Knoxville and Knox County was adopted by MPC, City Council, and County Commission in 2004 and updated in 2011. It views each road as part of the overall transportation system and identifies its functional classification (such as freeways and arterial roads) (Road Classification and Traffic Congestion map). It assigns right-of-way requirements based on the purpose and function of the road, future road improvements, future pedestrian improvements, traffic counts, and anticipated development. The recommendations contained in the Major Road Plan are brought forward into the sector plan.

Transit and Sidewalks

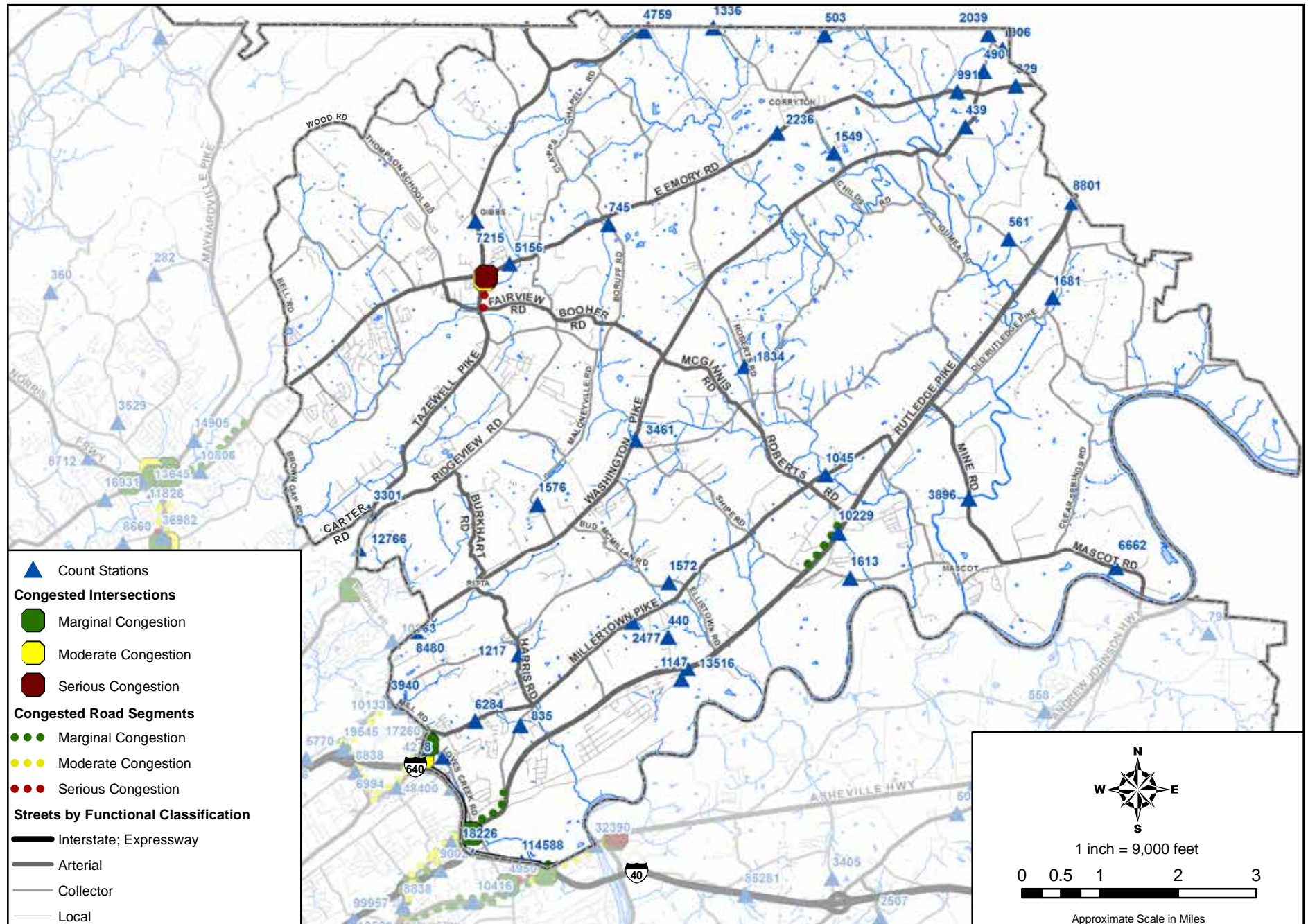
Knoxville Area Transit provides fixed route bus service within the Knoxville city limits. A small segment of the Millertown Pike route enters the Northeast County Sector, serving Walmart (2920 Knoxville Center Drive). In Knox County, the Knoxville/Knox County Community Action Committee provides demand response transportation to all residents in Knox County that live outside the city limits and have no other means of transportation.

The vast majority of streets in the Northeast County do not contain any sidewalks, while the few that do are primarily in neighborhoods with missing sections and no connectivity (Sidewalks, Greenways, and Transit Routes map). The rural nature and topography create an environment that is often difficult and costly to provide sidewalks. Currently, no general requirements mandate sidewalks with new development. MPC may require sidewalks, and often does in Parental Responsibility Zones (PRZ). The PRZ is an area of one (1) mile from elementary and an area of one and a half (1.5) miles from middle and high schools. Within those areas parents are responsible for providing transportation to and from school, as these zones are not served by school buses. The PRZ is determined by the roadway system from the front door of a school to households that will not have bus service. These areas are typically targeted for sidewalk creation or improvement.

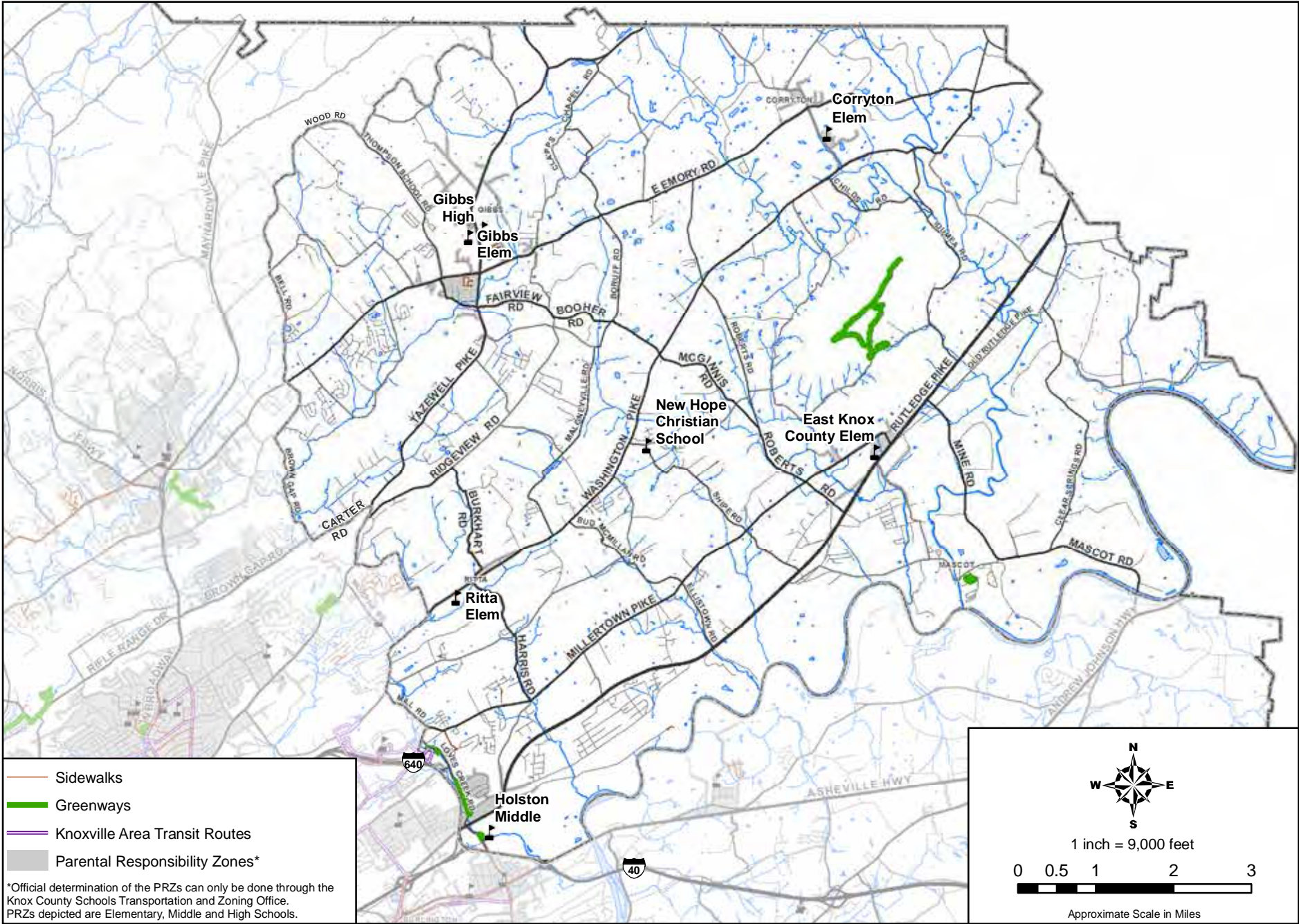


Rutledge Pike

Northeast County Sector: Road Classification and Traffic Congestion



Northeast County Sector: Sidewalks, Greenways and Transit Routes



Environmental Constraints

Topography

The *Knoxville Knox County Hillside and Ridgetop Protection Plan* is the result of the joint City/County Task Force on Ridge, Slope and Hillside Development and Protection. The plan was adopted in 2011 and 2012 by the Knoxville City Council and Knox County Commission, respectively. It defines a Hillside and Ridgetop Protection Area (HRPA) as having slopes of 15 percent or greater, restricting the density of development to preserve and protect ridges and hillsides within Knox County. By protecting these areas, stormwater runoff is reduced and riparian areas are maintained. Sloped areas have greater susceptibility for soil slippage and failure. Many of the soils along slopes are considered unstable, and removal of vegetation that secures the soil promotes further slope failure. Public safety is also a concern in relocating the intensity of development.

The *Knoxville Knox County Hillside and Ridgetop Protection Plan* recommendations (as of 2012) regarding steep slopes and hillsides is to restrict development on slopes greater than 15 percent and along streams and rivers.

The Northeast County has two major ridgelines running southwest to northeast across portions of the sector and shaping how development has taken place over time. Beaver Ridge is located in the northwest portion of the sector between Emory Road and Tazewell Pike. McAnnally Ridge is located just north of Millertown Pike and Rutledge Pike and extends the length of the sector. House Mountain is also located in the sector at 2,100 feet above sea level, making it the highest elevation in Knox County. Slopes steeper than 25 percent primarily occur along these three prominent geographical features, while some smaller areas and pockets are also prevalent (Environmental Constraints map).

Flood Prone Areas

Most of the runoff from this sector flows south to the Holston River, carried primarily by Big Flat, Little Flat, Loves and Roseberry Creeks. Beaver Creek runs southwest to Melton Hill Lake. The Federal Emergency

Table 7. Hillside and Ridgetop Protection Plan Policies*

<p>Low Density Residential density limits within the Hillside and Ridgetop Protection Area (HRPA) :</p> <ul style="list-style-type: none"> • 15 - 25 percent slope = two houses per acre in the low density residential areas; one house per acre in agricultural and rural residential areas • 25 - 40 percent slope = one house per two acres • 40+ percent slope = one house per four acres • Ridgetops are generally the more level areas on the highest elevations of a ridge. Because the shapes of Knox County ridges are so varied, the ridgetop area should be determined on a case-by-case basis with each rezoning and related development proposal.
<p>Medium Density Residential and Office development within the HRPA that extends into the 15 to 25 percent slopes should only be considered :</p> <ul style="list-style-type: none"> • If the slope is closer to 15 percent and the building footprint does not exceed 5,000 square feet per one acre • If the slope is closer to 25 percent and the building footprint does not exceed 5,000 square feet per two acres • All proposals should be subject to the approval of a use on review and site plan by the Metropolitan Planning Commission.
<p>Commercial development within the HRPA that extends into the 15 to 25 percent slopes:</p> <ul style="list-style-type: none"> • Slope restoration and reforestation of cut-and-fill areas should be accomplished to minimize the long term impact to water quality and lessen forest canopy loss.
<p>Height of new buildings within the HRPA:</p> <ul style="list-style-type: none"> • Limit to 35 feet.

* Please note that this is not a complete list of the policies from the Knoxville-Knox County Hillside and Ridgetop Protection Plan, as adopted by County Commission Resolution RZ-12-1-101 on January 23, 2012.

Management Agency's Flood Insurance Study - Knox County, Tennessee and Incorporated Areas (2007) identified Beaver Creek, Flat Creek, Little Flat Creek, and Roseberry Creek as principal flood sources. These waterways are subject to continuing suburban development and hydrology modification, which increase storm water runoff and limit soil infiltration.

Water Quality

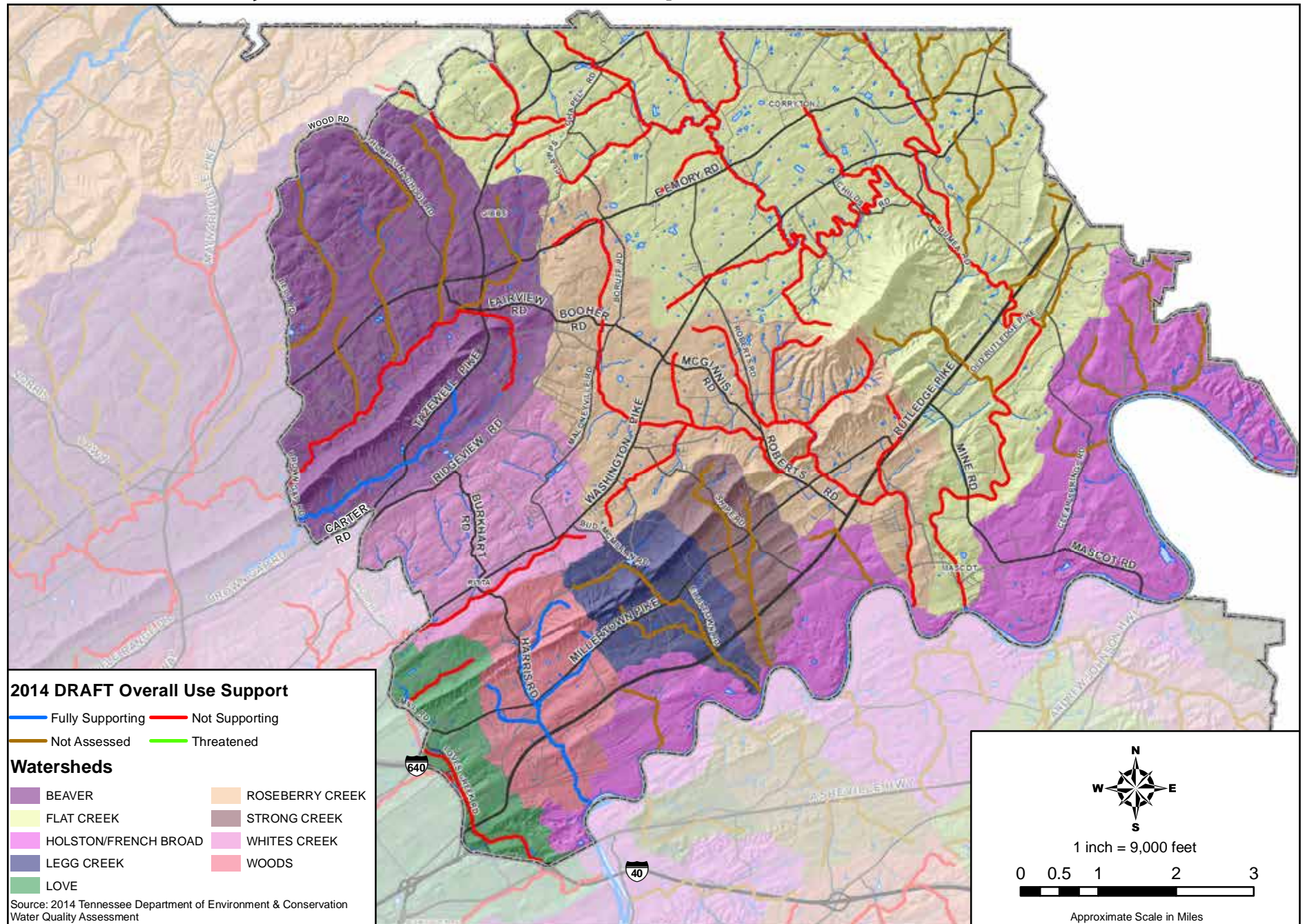
There are nine sub-watersheds intersecting the Northeast County sector. These watersheds include Beaver, Whites Creek, Love, Woods, Holston and French Broad, Legg Creek, Strong Creek, Roseberry Creek, and Flat Creek. The sub-watersheds are part of the larger watershed of the

Holston River Basin. The health of the sub-watersheds and their respective drainage areas vary across the sector.

The largest sub-watershed in the Northeast County sector is Flat Creek (Watershed and Impaired Streams map) containing both Flat Creek and Little Flat Creek. According to the 2014 Tennessee Department of Environment and Conservation (TDEC) 303(d) list (which is a list of impaired streams), Flat Creek is impaired due to animal feeding operations, pasture grazing, septic tanks, and municipal point source. These sources of impairment are found in many other streams in the sector as well.

[illegible]

Northeast County Sector: Watersheds and Impaired Streams





Stoffell Farm: John Reynolds Stoffell standing in a field at Stoffell Farm, Washington Pike, circa 1910.

Courtesy of the Knox County Two Centuries Photograph Collection, McClung Historical Collection

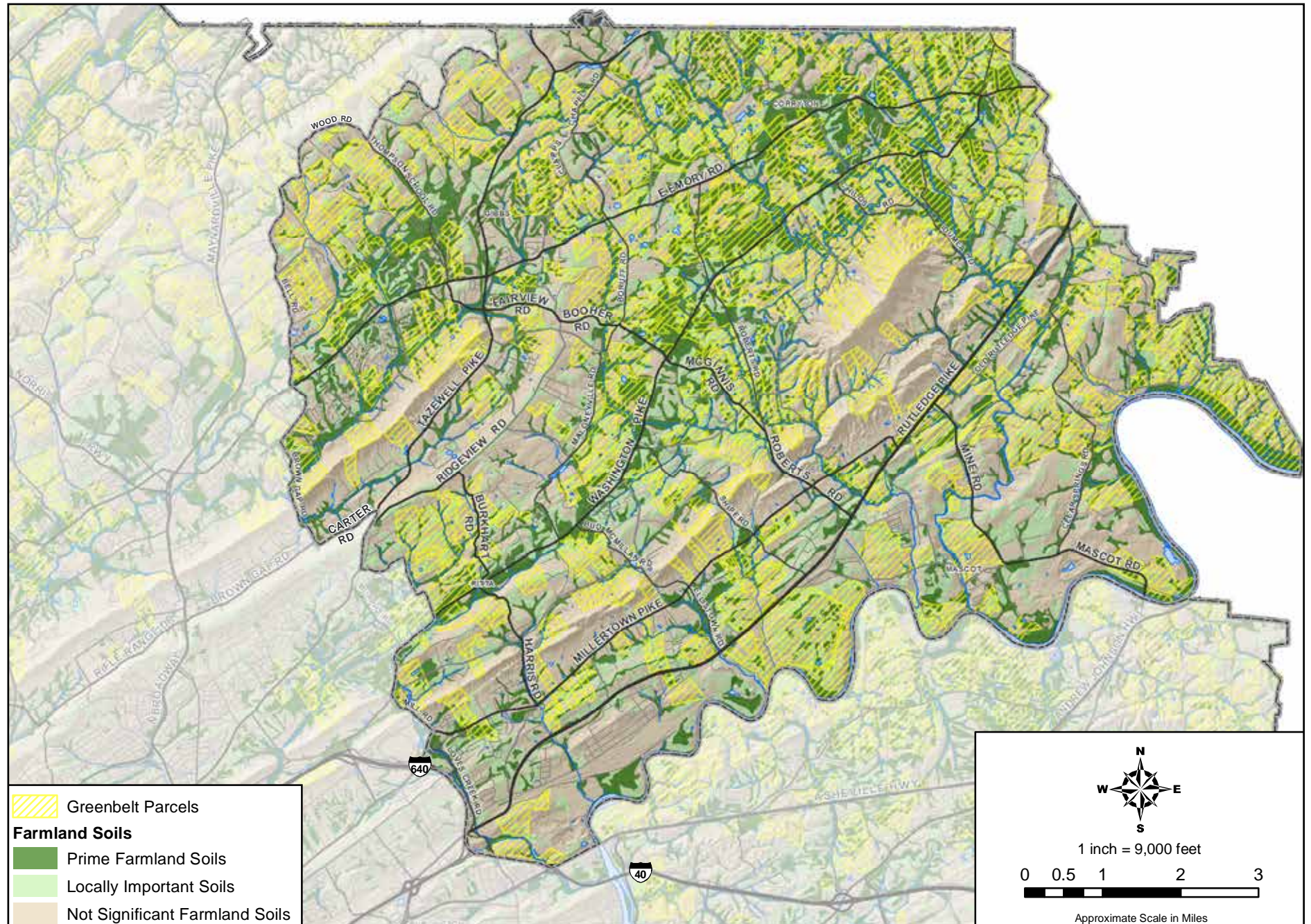
Agricultural Soils and Greenbelt Program Parcels

Knox County is home to the Food Policy Council, which was created in 1982 and includes appointees made by the Knoxville and Knox County mayors. Along with the appointed members, there are associate members; together they work to address issues regarding food systems planning such as the cost, availability, distribution, access and health of the local food supply in Knoxville-Knox County.

The Northeast County Sector is rural in nature with over 65 percent of the existing land use designated Agricultural/Forestry/Vacant Land. One of the ways to retain and develop the local agricultural economy is by preserving prime soils for farms and farming. Currently, around 50 percent of land (28,191 acres) in the Northeast County is considered prime farmland or locally important soils (Agricultural Soils and Greenbelt Program Parcels map).

Another option for landowners is to use agricultural conservation easements and/or conservation subdivision development to preserve local farmland. The State of Tennessee's Greenbelt Program applies to parcels where the property owner has elected to limit the use of land to agriculture or forest production practices. By doing so, a land owner's property tax is based on the value as farm or forest land and not on market value for residential or commercial purposes. The Greenbelt program does not guarantee permanent farmland protection; owners can opt out and redevelop after paying rollback taxes. In the Northeast County sector, 40 percent of land is protected under the Greenbelt program.

Northeast County Sector: Agricultural Soils and Greenbelt Program Parcels



LAND USE AND DEVELOPMENT TRENDS

Existing Land Use

Existing Land Use refers to the actual use of land based on its observable characteristics. It describes the predominant use that takes place in physical or observable terms (e.g., farming, shopping, manufacturing, vehicular movement, etc.). The existing land use classification definitions ONLY apply to this existing land use section.

Agriculture/Forestry/Vacant:

Includes land that is used for agricultural or forestry purposes. This classification also incorporates vacant land that is not used in conjunction with adjacent parcels, and includes single family residential on ten or more acre lots.

Commercial:

This classification includes land uses that have sales and services, not including personal services such as real estate and banking services, which are classified under office.

Industrial/Manufacturing:

Includes all manufacturing and assembly uses. This category is used as a catch-all for uses commonly found in industrial areas, excluding wholesale/warehousing.

Multifamily:

Includes residential developments commonly associated with development that is denser than single family development, including condominiums, planned unit development, mobile home parks, group quarters, and multifamily housing.

Office:

Typical office uses should be categorized here including those that are primarily office-use in character. The use includes some uses that may sometimes be considered commercial uses, such as banks and real estate offices. Use this category as a catch-all designation for all office-type uses.

Private Recreation:

Includes cultural or natural exhibition, amusement, recreation activities (ex. private golf courses), resorts, and camps.

Public Parks:

Includes public parks, public golf courses, and public nature preserves (ex. Forks of the River Wildlife Management Area, House Mountain State Natural Area and Seven Island State Birding Park).

Public/Quasi Public Land:

Includes government owned land, religious institutions, public gathering places, educational services, cemeteries, and museums.

Right of Way/Open Space:

Includes public rights of way that have no major structures.

Rural Residential:

Includes residential uses that are located on two to ten acre parcels.

Single Family Residential:

Includes residential uses that are located on two or less acre parcels.

Transportation/Communication/Utilities:

This is a catch-all category comprising transportation, communication, and utilities for essential facilities.

Under Construction/Other Uses:

Includes uses under construction, contract construction, and other uses that cannot be categorized.

Water:

Includes permanently watered areas such as lakes, rivers, large sink holes, and creeks.

Wholesale and Warehousing:

Wholesaling is an intermediate step in the distribution of merchandise. Wholesalers either sell or arrange the purchase of goods to other businesses and normally operate from a warehouse or office. They may be located in an office building or a warehouse. Unlike retailers, their warehouses and offices have little or no display of merchandise.

Warehousing includes storage facilities for general merchandise, refrigerated goods, and other warehouse products. They provide the facilities to store goods but do not sell the goods they handle. They may also provide a range of services related to the distribution of goods, such as labeling, breaking bulk, inventory control and management, light assembly, order entry and fulfillment, packaging, pick and pack, price marking and ticketing, and transportation arrangement.

Mining and Landfills:

These establishments extract natural mineral solids (coal and ores), liquid minerals (crude petroleum), and gases (natural gas). Mining includes quarrying, well operations, beneficiating (e.g., crushing, screening, washing, and flotation), and other preparations customarily performed at the mine site, or as a part of mining activity. Also classified in this category are landfills and resource recovery facilities.

Existing Land Use Observations

In 2014, Agriculture/Forestry/Vacant Land comprised two-thirds of all existing land use in the Northeast County Sector with over 37,100 acres, while Rural Residential was the second largest with 7,500 acres, or a 13.2 percent share. These two combined for 78 percent of all existing land use in the Northeast County and denote the rural nature of the sector (Existing Land Use map).

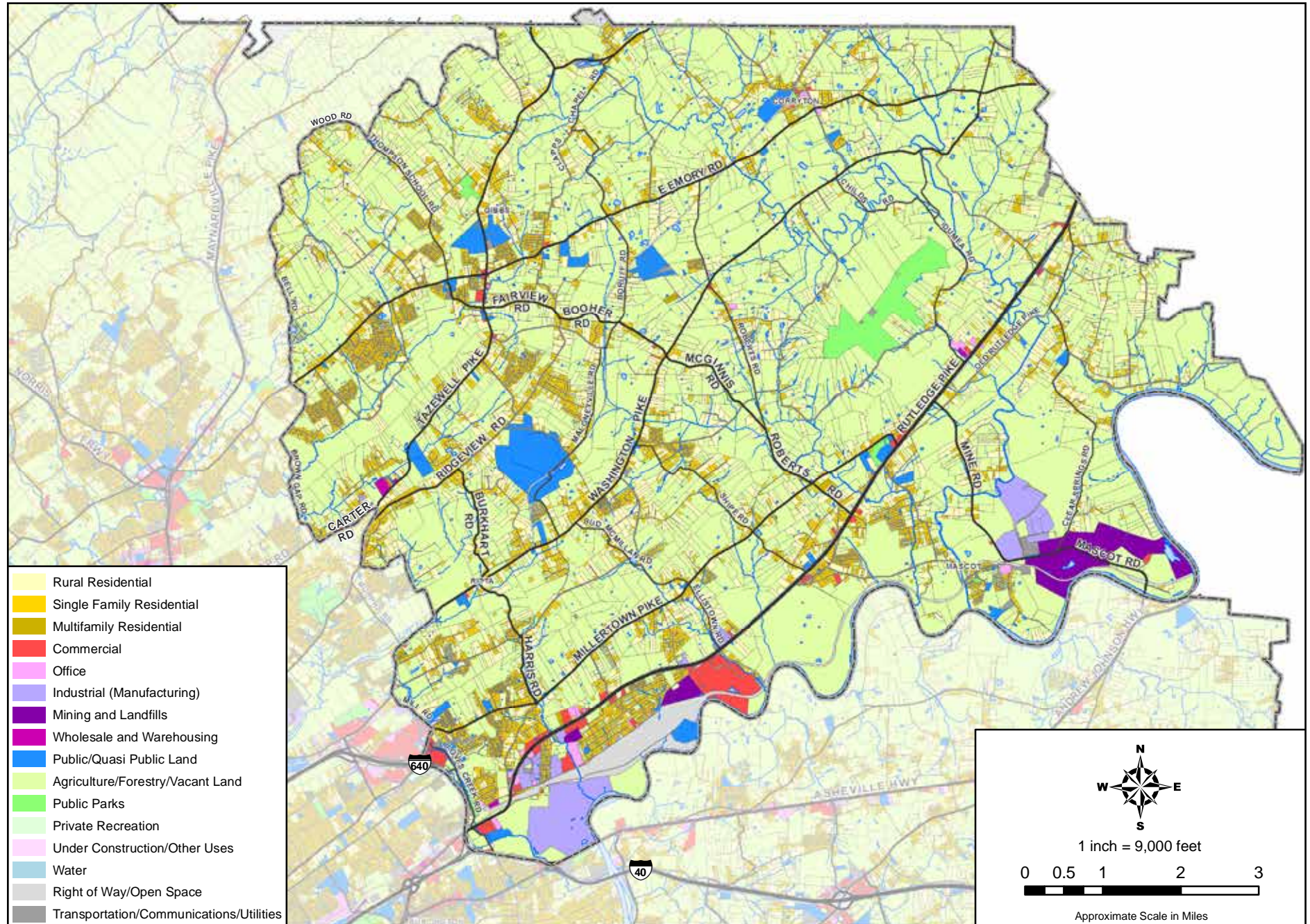
Notable existing land uses in the sector are:

- House Mountain accounts for 498 acres, or 86 percent of the total Public Parks land use acreage.
- Three Ridges Golf Course and Knox County Sheriff's Detention Facility (388 acres) and Gibbs Elementary and Middle Schools (116 acres) combine for 47 percent of the Public/Quasi Public land use acreage.
- Dixie Cement (430 acres) and portion of East Bridge Business Park (254 acres) comprise 85 percent of Industrial (Manufacturing) land use acreage.
- Approximately 66 acres, or 53 percent of all Multifamily Residential land use in the Northeast County is located within two miles from Knoxville Center Mall.
- Rutledge Pike accounts for 41 percent of all existing Commercial land use acreage in the Northeast County.

Table 8. Northeast County Sector Existing Land Use, 2014

Land Use Categories	Acres	% Share
Agriculture/Forestry/Vacant Land	37,167	65.1
Commercial	274	0.5
Industrial (Manufacturing)	802	1.4
Multifamily Residential	126	0.2
Office	65	0.1
Private Recreation	13	0.0
Public Parks	576	1.0
Public/Quasi Public Land	1,075	1.9
Right of Way/Open Space	2,968	5.3
Rural Residential	7,509	13.2
Single Family Residential	5,339	9.3
Transportation/Communications/Utilities	162	0.3
Under Construction/Other Uses	35	0.1
Water	452	0.8
Wholesale	5	0.0
Mining and Landfills	501	0.9
TOTAL	57,068	100.0

Northeast County Sector: Existing Land Use



Residential Building Permits

The Northeast County added 2,083 residential units between 2004 and 2014 (Residential Buildings Permits New Construction map). Single dwellings account for 81 percent, or the bulk of all new residential with 1,669 units. Mobile homes were second with 290 units. Compared to all new residential development across Knox County by sector, the number of residential units in the Northeast County accounted for seven percent of all sectors combined.

<i>Residential Type</i>	<i>Number</i>	<i>% Share of NE County Sector</i>	<i>% Share of All Sectors</i>
Detached Dwelling	1,669	80.1	10.6
Multi-Dwelling	2	0.0	0.0
Mobile Home	290	14.0	20.9
Attached Dwelling	122	5.9	3.0
TOTAL	2,083	100.0	7.2

Non-Residential Building Permits

Northeast County registered only 53 non-residential permits, or a four percent share of all sectors combined.

<i>Non-Residential Type</i>	<i>Number</i>	<i>% Share of All Sectors</i>
Commercial	44	3.2
Industrial	9	7.4
TOTAL	53	3.6

Residential Subdivisions

From 2004 to 2014, Northeast County converted 2,022 acres into 263 new residential subdivisions and 2,358 lots. The average subdivision was 7.7 acres in size and comprised of 9 lots averaging 0.85 acre in size.

<i>Residential Subdivisions</i>	<i>Northeast County Sector</i>	<i>All County Sectors</i>	<i>% Share</i>
Subdivision acreage	2,022	11,954	17.0
Subdivisions	263	2,681	9.8
Number of Lots	2,358	17,171	13.7

Housing

Since 1990, the total number of residential dwellings in the Northeast County grew 53 percent by adding 3,767 units. Single dwellings comprise the largest share of all housing unit types with 82 percent or 8,927 units. From 1990 to 2000, the Northeast County averaged approximately 168 new units a month. In the subsequent decade (2000 to 2010), numbers dropped for an average of 145 units a month.

<i>Unit Type</i>	<i>1990</i>	<i>2000</i>	<i>Net Change 1990 to 2000</i>	<i>2010</i>	<i>Net Change 2000 to 2010</i>
Detached Dwelling	5,759	7,422	1,663	8,927	1,505
Multi-Dwelling	195	226	31	277	51
Mobile Home	1,161	1,437	276	1,516	79
Attached Dwelling	31	82	51	193	111
TOTAL	7,146	9,167	2,021	10,913	1,746

Note: 2010 data is based on the U.S. Census Bureau's 2008 to 2012 *American Community Survey*, 5-Year Estimates.

Building Conditions

The source of the following information is compiled from the 2013 Knox County Tax Assessor's data. MPC tabulated the total number of buildings by building conditions in the sector to show general patterns and percentages regarding existing stock.

Commercial – Industrial – Office Buildings:

The patterns of conditions are depicted on the following "Commercial and Industrial Building and Conditions" map. The majority of commercial and industrial buildings are rated as "fair/average" or "good/very good/excellent." There are 20 parcels that contain buildings rated as "very poor/poor" (Commercial & Industrial Building Conditions map).

<i>Building Conditions</i>	<i>Number of Structures</i>	<i>Total Square Feet</i>
Poor	20	120,291
Fair/Average	176	2,322,716
Good/Very Good/Excellent	42	354,019
TOTAL	238	2,797,026

Residential Buildings:

The patterns of conditions are depicted on the (Residential Building Conditions map). The majority of residential structures are rated as "good/very good/excellent" or "fair/average." Less than five percent (401 units) are on parcels that are rated "unsound/very poor/poor."

<i>Building Conditions</i>	<i>Dwelling Units</i>	<i>Apartment Bldgs</i>	<i>Mobile Homes</i>
Unsound/Very Poor/Poor	401	0	117
Fair/Average	2,937	0	1,142
Good/Very Good/Excellent	4,879	0	114
TOTAL	8,217	0	1,373

Growth Policy Plan

Three percent of the Northeast County Sector is located in the City of Knoxville. This incorporated area is in the southwest corner of the sector and extends along a portion of Rutledge Pike. The city designated the Urban Growth Boundary as expected growth over the next 20 years and has the right to request annexation within the Urban Growth Boundary under the following guidelines:

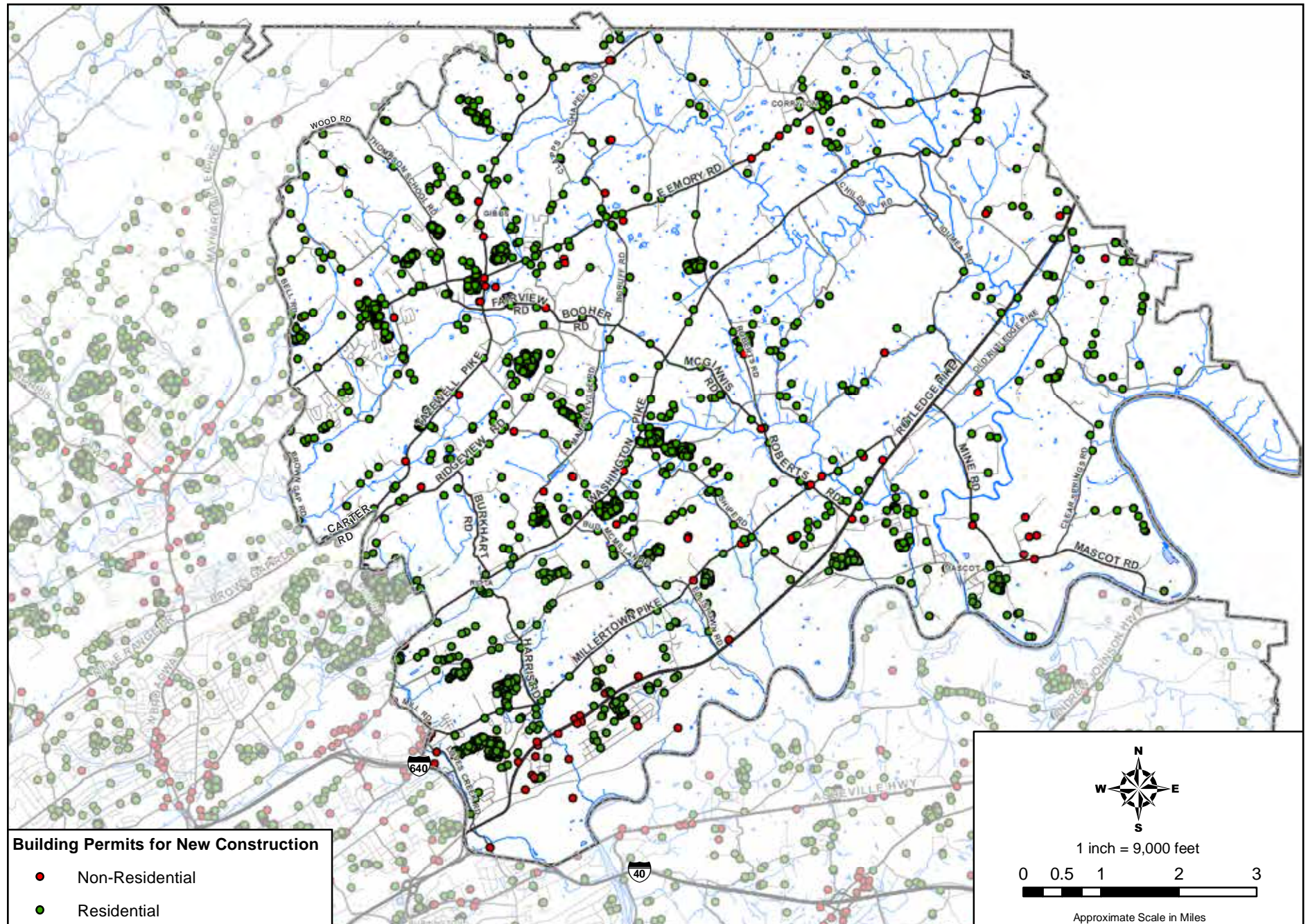
- The city will annex parcels contiguous to an existing city boundary if such parcels are developed or likely to develop in the near future, and
- The city will annex parcels surrounded by at least 50 percent of existing parcels presently in the City if such parcels are developed or likely to develop in the near future.

The remaining unincorporated area in the Northeast County Sector is located in the 20-year Growth Plan. The Planned Growth Area designation accounts for 22 percent and is to foster low to moderate forms of development, while the remaining nine percent is located in the Urban Growth Boundary. The Rural Area designation comprises 69 percent of the sector and is land to be preserved for farming, recreation and other non-urban uses.

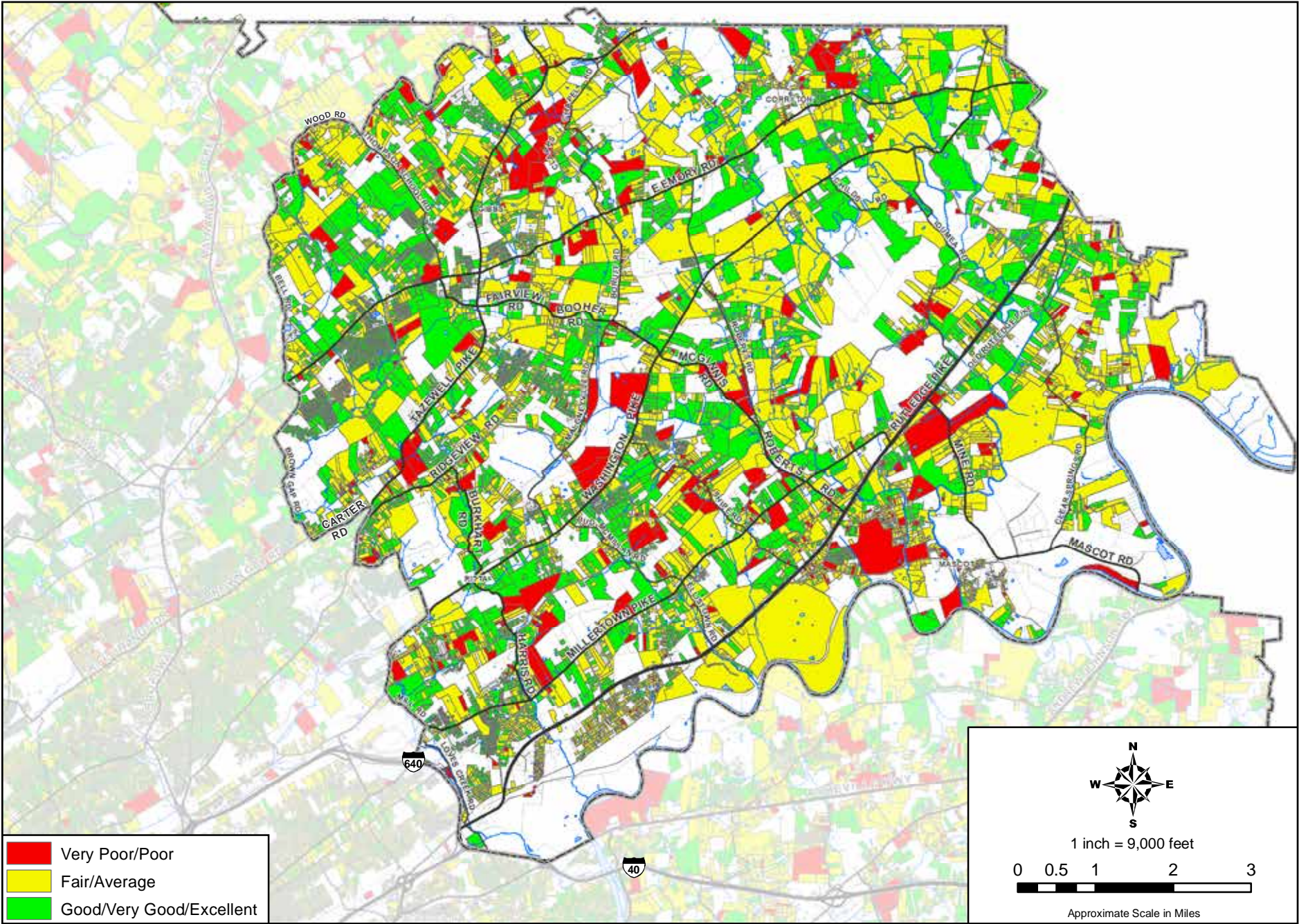
Almost 50 percent of residential building activity between 2004 and 2014 occurred in the Rural Growth Area.

<i>Permit Type</i>	<i>Urban Growth</i>	<i>Planned Growth</i>	<i>Rural Growth</i>
Detached Dwelling	23.8%	27.7%	48.5%
Multi-Dwelling	0	50.0%	50.0%
Mobile Home	15.9%	20.7%	63.4%
Attached Dwelling	42.7%	49.5%	7.8%
TOTAL	23.6%	27.8%	48.6%

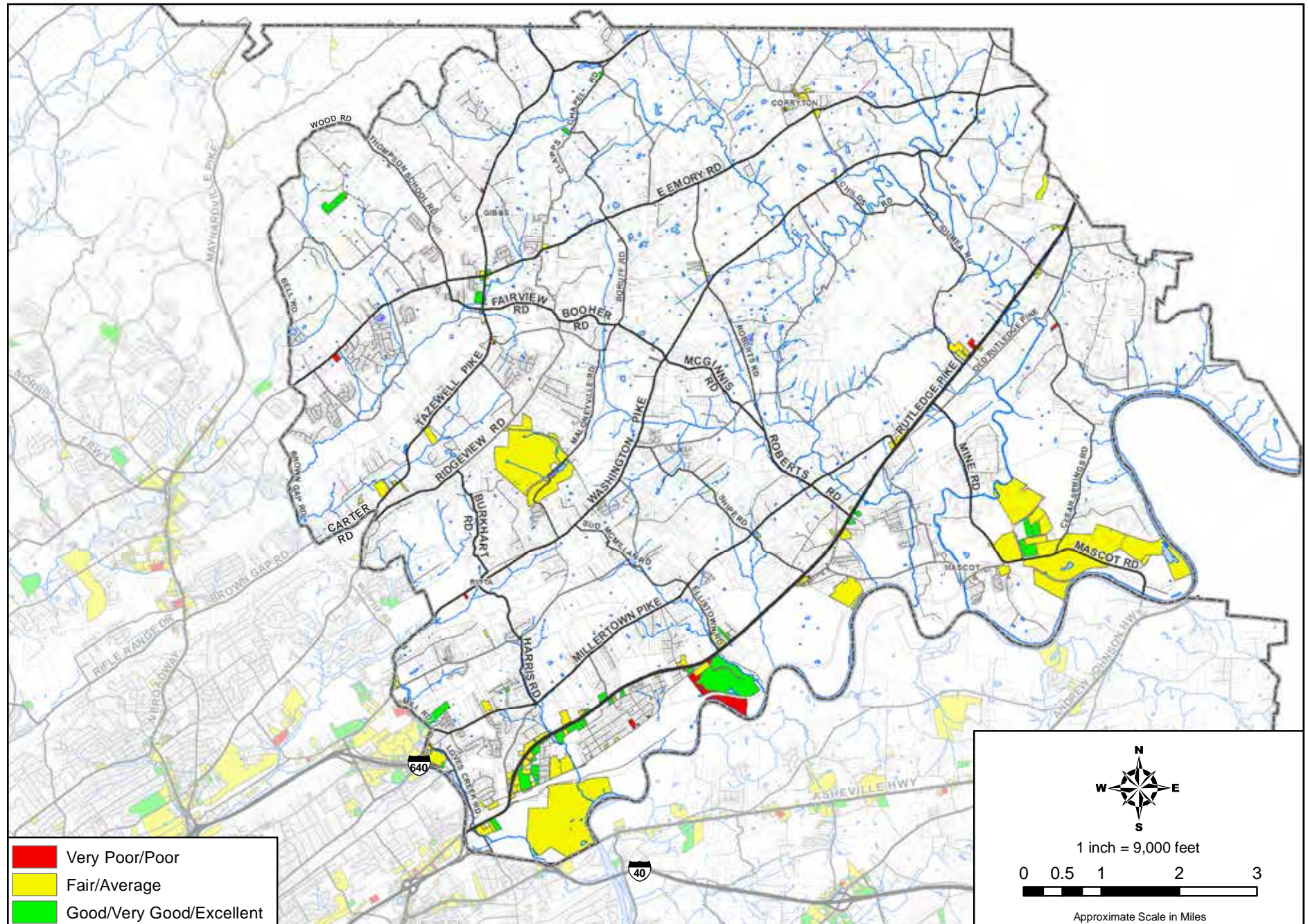
Northeast County Sector: Building Permits for New Construction (January 2004 - December 2014)



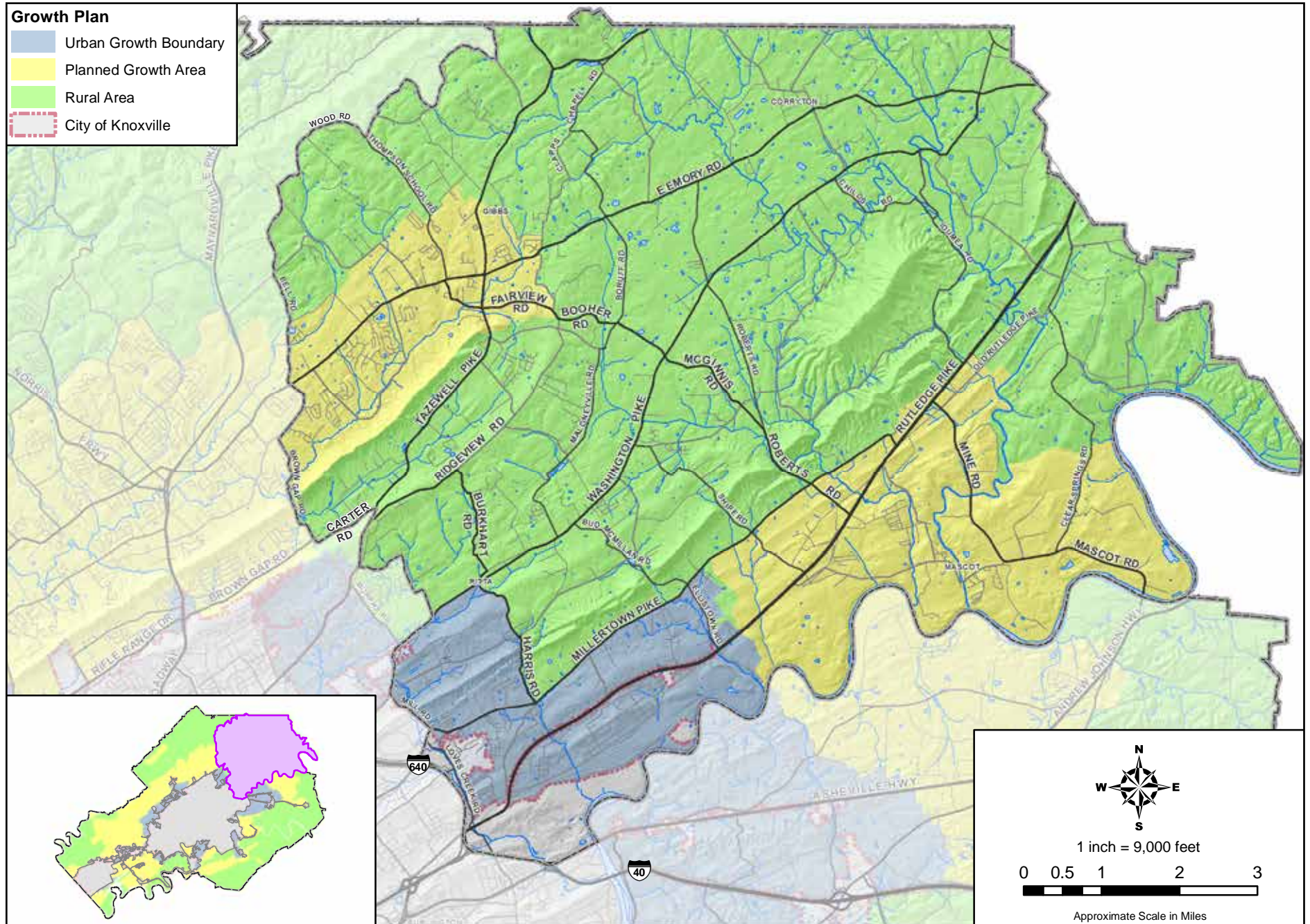
Northeast County Sector: Residential Building Conditions



Northeast County Sector: Commercial and Industrial Building Conditions



Northeast County Sector: Growth Policy Plan



Section 2:

Land Use, Community Facilities, Green Infrastructure, Historic Resources, and Transportation Plans

LAND USE PLAN

The 15-Year Land Use Plan is a basis for growth and conservation in the Northeast County Sector. The land use recommendations and policies put forth in this plan are used by the Metropolitan Planning Commission, City Council and County Commission for decision making with regards to development and land use.

LAND USE PLANNING METHODOLOGY

Six steps were used to develop the proposed land use and are described below:

1. Standard Land Use Classifications Conversion:

In 2007, MPC developed a standard land use classification table to use in all 12 sectors. The table includes descriptions, location criteria, and recommended zoning for each proposed land use classification (See Appendix B). In developing the proposed land use map, the older land use classification used in 2003 was converted to the new standardized land use classification being used in all sector plans.

2. Slope Protection and Stream Protection Areas:

Slope Protection Areas and Stream Protection Areas were previously designated as land use categories with no underlying land use beneath them. In the past, this often created difficulty and confusion in the rezoning and review process. As a result, MPC now identifies slope protection and stream protection areas as new environmental overlays atop underlying land use designations.

3. Knoxville/Knox County 2033 General Plan:

Adopted in 2003, the plan serves as the official 30-year comprehensive plan for Knoxville and Knox County, providing a vision and framework for sector

plan development. Several policies set forth in the General Plan are used to guide Northeast County Sector Plan recommendations. An example is General Plan Development Policy #6: Respect and Nurture Our Heritage Areas. The sector plan recommendations emphasize the concept of heritage areas by focusing on natural resources in the Northeast County such as the protection of agriculture farmland, preservation, and the conservation of rural landscapes and character.

4. Citizen Input:

Through the community input process, citizens voiced concern about the loss of farmland to residential development, increased traffic volume on rural roads, and the desire for a new middle school in the Gibbs community. Residents shared about how density allowed in the Agricultural zone works against preserving and maintaining the rural character. Sidewalks, greenway, and bicycle lanes were also desired where connectivity is feasible and makes sense (See Appendix A).

5. 2003 Northeast County Sector Plan:

The 2003 plan recommendations were evaluated for relevancy, with those determined to be still valid incorporated into this sector plan.

6. Growth Policy Plan:

Adopted in 2001, this plan required city and county governments in Knox County to prepare a 20-year Growth Plan in accordance with the Tennessee growth management law Public Chapter 1101. Growth is guided by three classifications of land designated in the plan which are Rural, Urban Growth, and Planned Growth areas. Each classification is defined by policies that determine the extent development may occur.

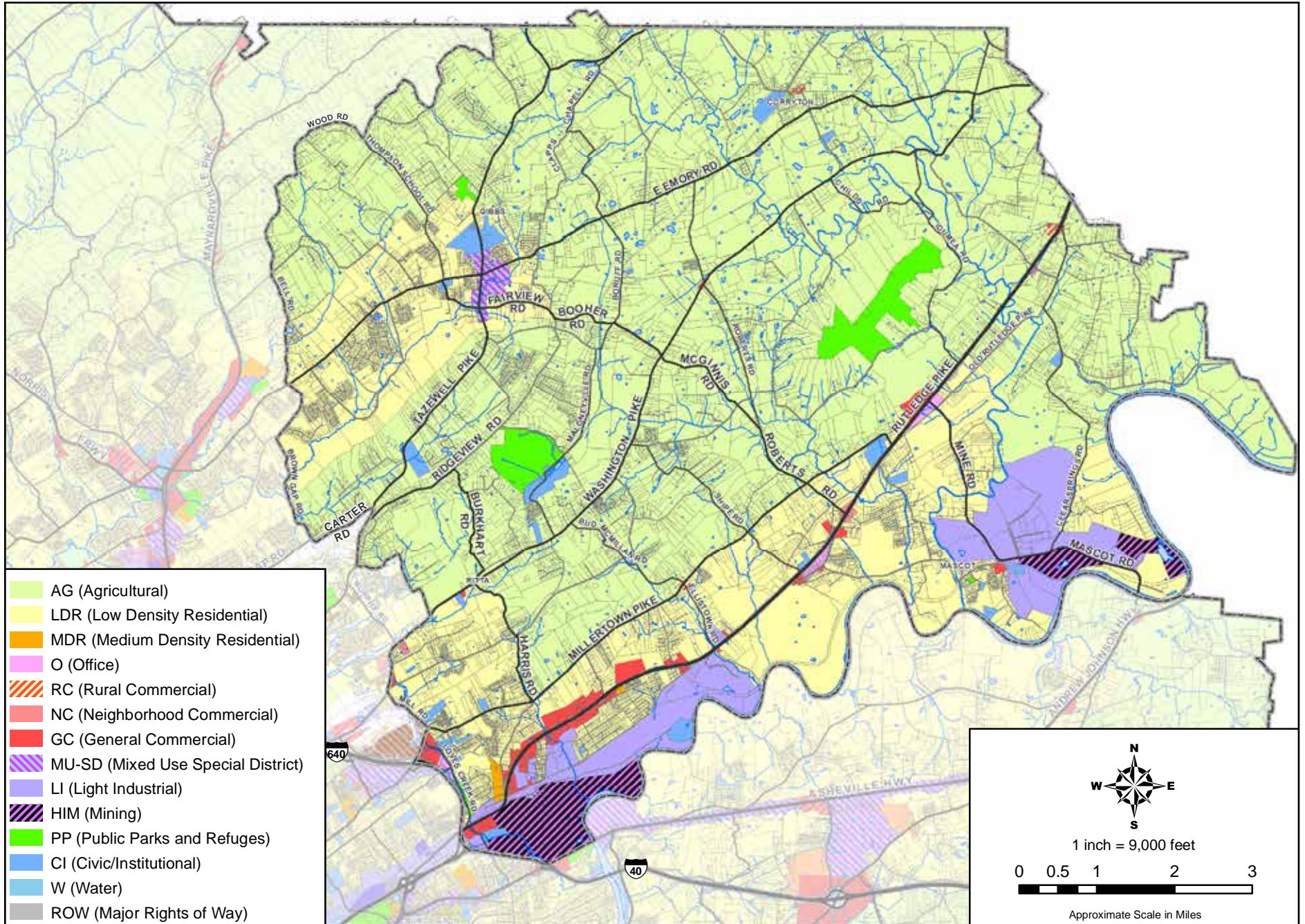
PROPOSED LAND USE CLASSIFICATIONS

Table 16 compares the standardized land use classifications by acreage from 2003, to the proposed land use acreage in 2015. The largest conversion resulted from reassigning almost 11,000 acres of Slope Protection Area and Stream Protection Area in 2003, to another land use classification in 2015.

Table 16. Proposed Land Use Acreage Comparison		
Land Use Classification	2003 Sector Plan	2015 Sector Plan
Slope Protection Area*	8,850	0
Stream Protection Area*	2,137	0
Agricultural	27,459	37,057
Low Density Residential	10,804	13,116
Medium Density Residential	52	52
Office	96	83
General Commercial	523	488
Neighborhood Commercial	67	32
Rural Commercial	2	48
Light Industrial	4,034	2,613
Heavy Industrial Mining	0	1,028
Civic Institutional	258	678
Public Parks and Refuges	869	876
Mixed Use	1,043	0
Mixed Use Special District	73	170

**Slope Protection Areas and Stream Protection Areas are now environmental overlay areas with underlying land uses.*

Northeast County Sector: Land Use Plan



Each land use classification in the Northeast County Sector is listed below with proposed and specific changes. The 'proposed changes' provide a total acreage from 2003, compared to the proposed land use in 2015. 'Specific changes' provide information about where changes occurred in the Northeast County and what prior land use recommendations were in 2003.

Agricultural (A)

This classification includes farmland in the county's Rural area as designated in the Growth Policy Plan. The 2003 sector plan included Agricultural/Rural Residential that no longer exists as one classification, but is now two separate classifications.

Proposed Changes

- The 2003 land use plan designated 27,459 acres as Agriculture/Rural Residential.
- The proposed land use plan recommends 37,057 acres as Agricultural (A).

Specific Changes

- 7,163 acres of slope protection and stream protection areas were reassigned as Agricultural (A).
- In 2003, almost all parcels, beginning at Harris Road on north side of Rutledge Pike, were designated Low Density Residential (LDR) in the sector plan. These parcels comprised 1,519 acres and are in the Rural area of the Growth Policy Plan. The proposed land use changed them to Agricultural (A).

Low Density Residential (LDR)

This classification includes primarily residential uses at densities of less than six dwelling units per acre (city) and less than five dwelling units per acre (county).

Proposed Changes

- The 2003 land use plan designated 10,804 acres as Low Density Residential (LDR).
- The proposed land use plan recommends 13,116 acres as Low Density Residential (LDR).

Specific Changes

- The reassigned slope protection and stream protection areas accounted for slightly over 1,000 acres of additional land added to the proposed Low Density Residential (LDR) land use from 2003 to 2015.

- In 2003, approximately 1,116 acres along the Holston River and Rutledge Pike were designated Mixed Use, including the 900 acre Strong/Stock estate. The proposed land use plan changed these parcels to Low Density Residential (LDR).

Medium Density Residential (MDR)

This classification includes primarily residential uses at densities from six to 24 dwelling units per acre (city) and five to 12 dwelling units (county).

Proposed Changes

- The 2003 land use plan designated 52 acres as Medium Density Residential (MDR).
- The proposed land use plan recommends no changes.

Office (O)

This land use classification includes business and professional offices and office parks.

Proposed Changes

- The 2003 land use plan designated 96 acres as Office (O).
- The proposed land use plan recommends 83 acres Office (O).

Specific Changes

- In 2003, the proposed land use plan designated approximately seven acres of Office along portions of Tazewell Pike, immediately south of Harbison Crossroads. The proposed land use changed these parcels to Mixed Use Special District, which permits Office (O).

General Commercial (GC)

This classification includes previously developed strip commercial corridors providing a wide range of retail and service-oriented uses. Such a land use classification and related zoning should not be extended because of the adverse effects on traffic-carrying capacity, safety and environmental impacts. Redevelopment of commercial corridors, including mixed use development, should be accommodated under planned or design-oriented zones.

Proposed Changes

- The 2003 land use plan designated 523 acres as General Commercial (GC).
- The proposed land use plan recommends 488 acres as General Commercial (GC).

Neighborhood Commercial (NC)

This classification includes retail and service-oriented commercial uses intended to provide goods and services that serve the day-to-day needs of households, within a walking or short driving distance. Neighborhood commercial uses may also be accommodated within neighborhood centers.

Proposed Changes

- The 2003 land use plan designated 67 acres as Neighborhood Commercial (NC).
- The proposed land use plan recommends 32 acres as Neighborhood Commercial (NC).

Specific Changes

- In 2003, the proposed land use in Corryton Village was designated Neighborhood Commercial and changed to Rural Commercial (RC).
- The intersection of Rutledge Pike and Shipe Road was designated Neighborhood Commercial (NC) in 2003 and changed to Low Density Residential (LDR).

Rural Commercial (RC)

This classification includes retail and service oriented commercial intended to provide rural communities with goods and services that meet day-to-day and agricultural related needs.

Proposed Changes

- The 2003 land use plan designated two acres as Rural Commercial (RC).
- The proposed land use plan recommends 48 acres as Rural Commercial (RC).

Specific Changes

- The intersection at Rutledge Pike and Old Rutledge Pike/Hidden Haven Way was Commercial (C) in 2003 and changed to Rural Commercial (RC).
- The intersection at Washington Pike and Roberts Road was Neighborhood Commercial (NC) in 2003 and changed to Rural Commercial (RC).
- The proposed land use in "Corryton Village" was Neighborhood Commercial (NC) in 2003 and changed to Rural Commercial (RC).
- The intersection at Millertown Pike and Ellistown Road was Low Density Residential (LDR) and Commercial (C) in 2003 and changed to Rural Commercial (RC).

Light Industrial (LI)

This classification includes manufacturing such as assembly of electronic goods and packaging of beverage or food products.

Proposed Changes

- The 2003 land use plan designated 4,034 acres as Light Industrial (LI).
- The proposed land use plan recommends 2,613 acres as Light Industrial (LI).

Specific Changes

- The reassigned slope protection and stream protection areas accounted for 90 acres of the additional land added to the proposed Light Industrial (LI) land use from 2003 to 2015.
- The northeast corner of Rutledge Pike and Ellistown Road was changed to Light Industrial (LI).
- Dixie Cement, Aggregates USA, and East Tennessee Zinc combine for 1,028 acres of active asphalt and cement production plants designated as Light Industrial in 2003 and changed to Heavy Industrial Mining (HIM).

Heavy Industrial Mining (HIM)

This classification includes such processes used in the production of steel, automobiles, chemicals, cement, and animal by-products and are not compatible with areas designated for residential, institutional, office and retail uses. Quarry operations and asphalt plants are a particular form of heavy industrial, generally located in rural areas.

Proposed Changes

- The 2003 land use plan designated 0 acres as Heavy Industrial (HIM).
- The proposed land use plan recommends 1,028 acres as Heavy Industrial (HIM).

Specific Changes

- Dixie Cement (743 acres), Aggregates USA (149 acres), and East Tennessee Zinc (136 acres) account for the proposed land use changes to Heavy Industrial Mining (HIM).

Civic Institutional (CI)

This classification includes major public and quasi-public institutions, including schools, colleges, the university, churches, correctional facilities, hospitals, utilities and similar uses.

Proposed Changes

- The 2003 land use plan designated 258 acres as Civic Institutional (CI).
- The proposed land use plan recommends 678 acres.

Specific Changes

- The reassigned slope protection and stream protection areas accounted for 120 acres of the additional land added to the proposed Civic Institutional (CI) land use.
- Places of worship (170 acres), utility facilities (48 acres), Gibbs Elementary School (70 acres) and the City of Knoxville's Police Firing Range (50 acres) comprised 338 additional acres changed to Civic Institutional (CI).

Public Parks and Refuges (PP)

This land use classification contains existing parks, wildlife refuges or similar public or quasi-public parks, open spaces and greenways. It also contains quasi-public spaces, which are owned by civic or related organizations. Location criteria is not needed relative to large components of the park system, like community, district and regional parks and refuges; these areas are generally established through capital expenditures or land transfers from state or federal governments.

Proposed Changes

- The 2003 land use plan designated 869 acres as Public Parks and Refuges (PP).
- The proposed land use plan recommends 876 acres.

Mixed Use (MU)

This land use classification is now divided up into Mixed Use Regional Centers, Community Center, Neighborhood Centers, Urban Corridors, Special Corridors and Special Districts (see Appendix B).

Proposed Changes

- The 2003 land use plan designated 1,043 acres as Mixed Use (MU)
- The proposed land use plan recommends 0 acres.

Specific Changes

- In 2003, over 1,041 acres along the Holston River and Rutledge Pike were designated Mixed Use (MU), including the 900 acre Strong/Stock estate. The proposed land use changed the parcels to Low Density Residential (LDR).

Mixed Use Special District (MU-SD)

This classification includes designations to address urban design, pedestrian and transit-oriented development and vertical mixed use in designated areas. The areas may include older portions of the city or county where redevelopment and/or preservation programs are needed for revitalization purposes.

Proposed Changes

- The 2003 land use plan designated 73 acres as Mixed Use Special District (MU-SD).
- The proposed land use plan recommends 170 acres.

Specific Changes

- At Harbison Crossroads, parcels along Tazewell Pike and east on Emory Road were changed to Mixed Use Special District (MU-SD).

SPECIAL LAND USE RECOMMENDATIONS

The following are special land use recommendations that deal with a specific area or location in the Northeast County Sector.

Mixed Use Special District NECO-1

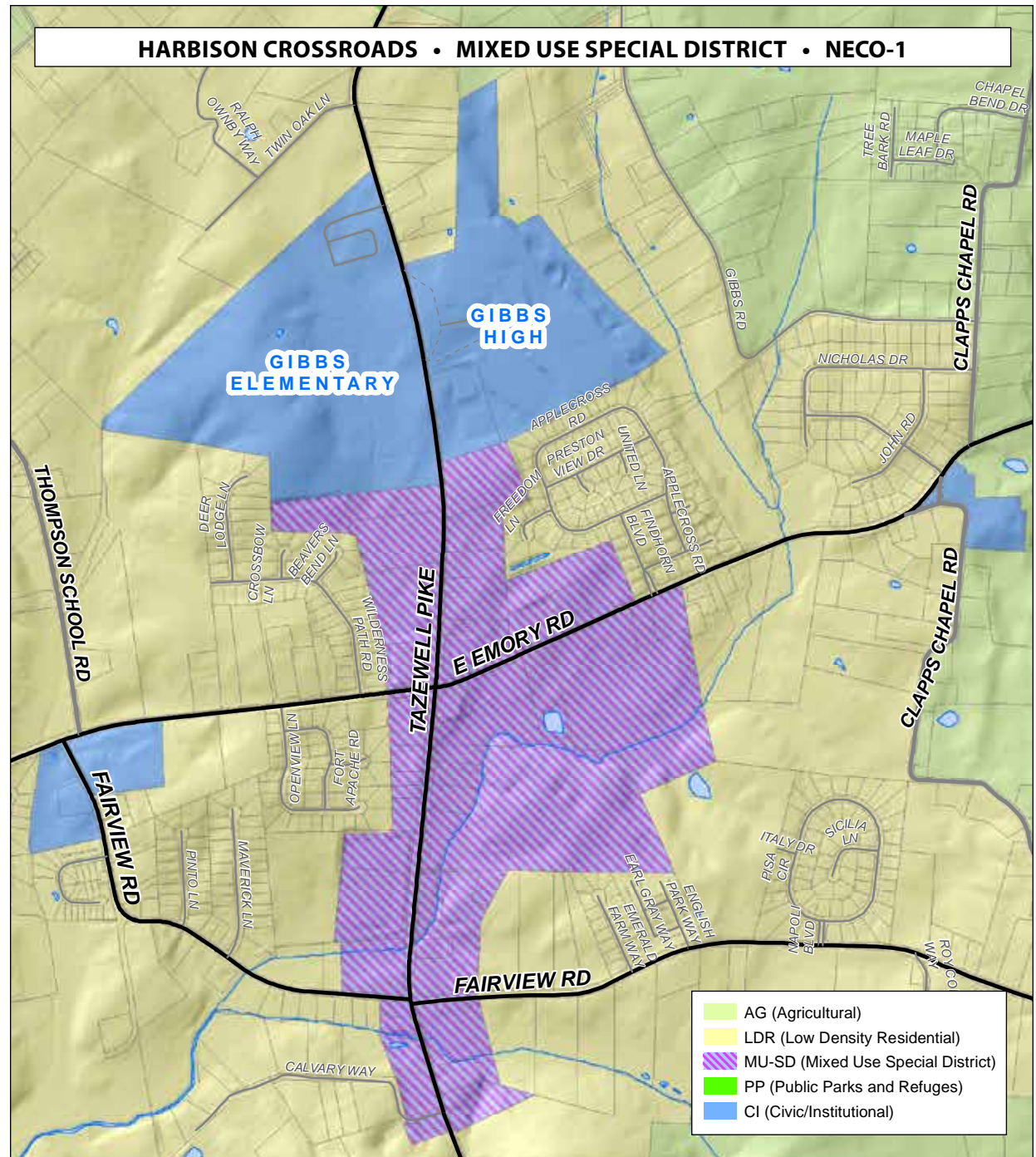
HARBISON CROSSROADS

Harbison Crossroads, located at the intersection of Tazewell Pike and Emory Road, is the primary commercial area for the greater Gibbs community. The zoning surrounding Harbison Crossroads is predominately commercial (CA – General Business) with the largest portions extending along Tazewell Pike. In the last twenty years, retail and service oriented businesses have developed along Tazewell Pike leading up to the intersection.

There are three transportation improvements to the Harbison Crossroads intersection. The current installation of a traffic light/turning lanes is scheduled to be complete in 2016. Future improvements propose to widen Emory Road and Tazewell Pike from two lanes to four lanes around years 2024 and 2029. These transportation improvements, coupled with steady residential activity will likely foster additional commercial development or redevelopment around Harbison Crossroads, similar to intersections along Emory Road in Halls (Emory Road and Maynardville Pike) and Powell (Emory Road and Brickyard Road).

In June 2015, the Knox County Mayor and School Superintendent agreed to fund the building of a new middle school in the Gibbs community. While a location has not been announced, the existing county owned property surrounding Gibbs Elementary is a candidate. A new middle school in this area will also foster additional residential and commercial development. Planning and connectivity will play an important role as Harbison Crossroads continues to develop and redevelop in the coming years.

The mixed use special district is located at Harbison Crossroads and extends north along Tazewell Pike to Gibbs Elementary and High Schools, south to Beaver Ridge and east along Emory Road. The district boundary encompasses the parcels containing the current CA zoning, along with adjacent tracts likely to be developed with similar uses in the future. The current form and function of this special district is strip commercial with future development and redevelopment likely to occur in the same manner.



Recommendations

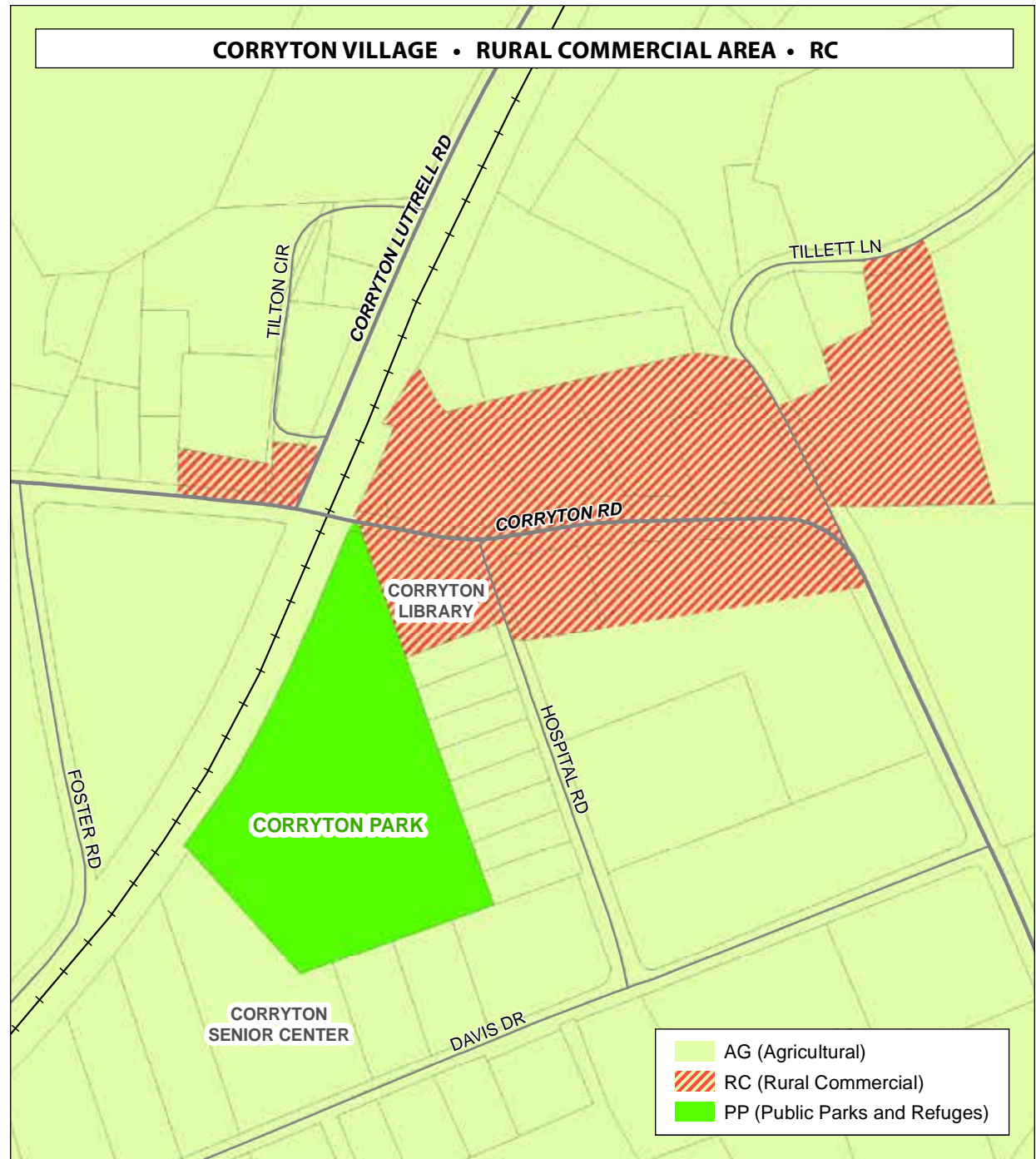
- Commercial and office uses are recommended along Tazewell Pike, while parcels along Emory Road should be restricted to medium density residential or office as a transition to the established residential neighborhoods adjacent to the mixed use district.
- Development of the parcel at the northeast corner of Fairview Road and Tazewell Pike intersection should incorporate the realignment of Fairview Road.
- Sidewalks and/or greenways should be constructed on parcels in the special district boundaries with connectivity to surrounding residential land uses and Gibbs Elementary and High Schools to the north.
- Once a new middle school site is confirmed, MPC recommends residents, property and business owners pursue a small area plan to guide future development and redevelopment in the Gibbs community.

Rural Commercial Areas

The proposed rural commercial land use is intended to provide limited retail and services in a manner convenient to outlying rural areas. Rural commercial is to be located at and near intersections of arterial and/or collector streets in order to maximize accessibility from surrounding rural areas. Recommended zoning for the proposed areas is intended for uses patronized on a frequent basis by area residents. The zoning district requires development performance standards and administrative site plan review to ensure compatibility between commercial and residential uses to maintain the rural character.

CORRYTON VILLAGE

Corryton Village is located along Corryton Road, near Corryton Luttrell Road and Hospital Road. Early development was built around the Norfolk Southern rail line. Existing land uses in Corryton Village are commercial with a post office, branch library, tire dealer, and small medical clinic, while the surrounding area is rural in character with residential, places of worship, Corryton Park and Corryton Community and Senior Center. The land use classification is Rural Commercial, which includes retail and service oriented commercial uses intended to provide rural communities with goods and services that meet day-to-day and agricultural needs. Corryton Village is located in the Rural area of the Growth Policy Plan.



Recommendations

- New development or redevelopment in the Rural Commercial land use designation should be compatible and consistent with the established building setbacks of parcels located on Corryton Road, directly adjacent to the rail line. This will provide continuity with the existing buildings and help foster a pedestrian friendly environment.
- Rezoning of parcels located in the Rural Commercial land use designation should be to the Rural Commercial Zone (CR).
- Sidewalks and/or greenways should be constructed on proposed development and redevelopment of parcels in the Rural Commercial land use designation with connectivity to Corryton Park.
- The existing post office at 7713 Corryton Road is included in the Rural Commercial land use designation. If the post office vacates the building, a compatible land use with Rural Commercial designation should be sought.

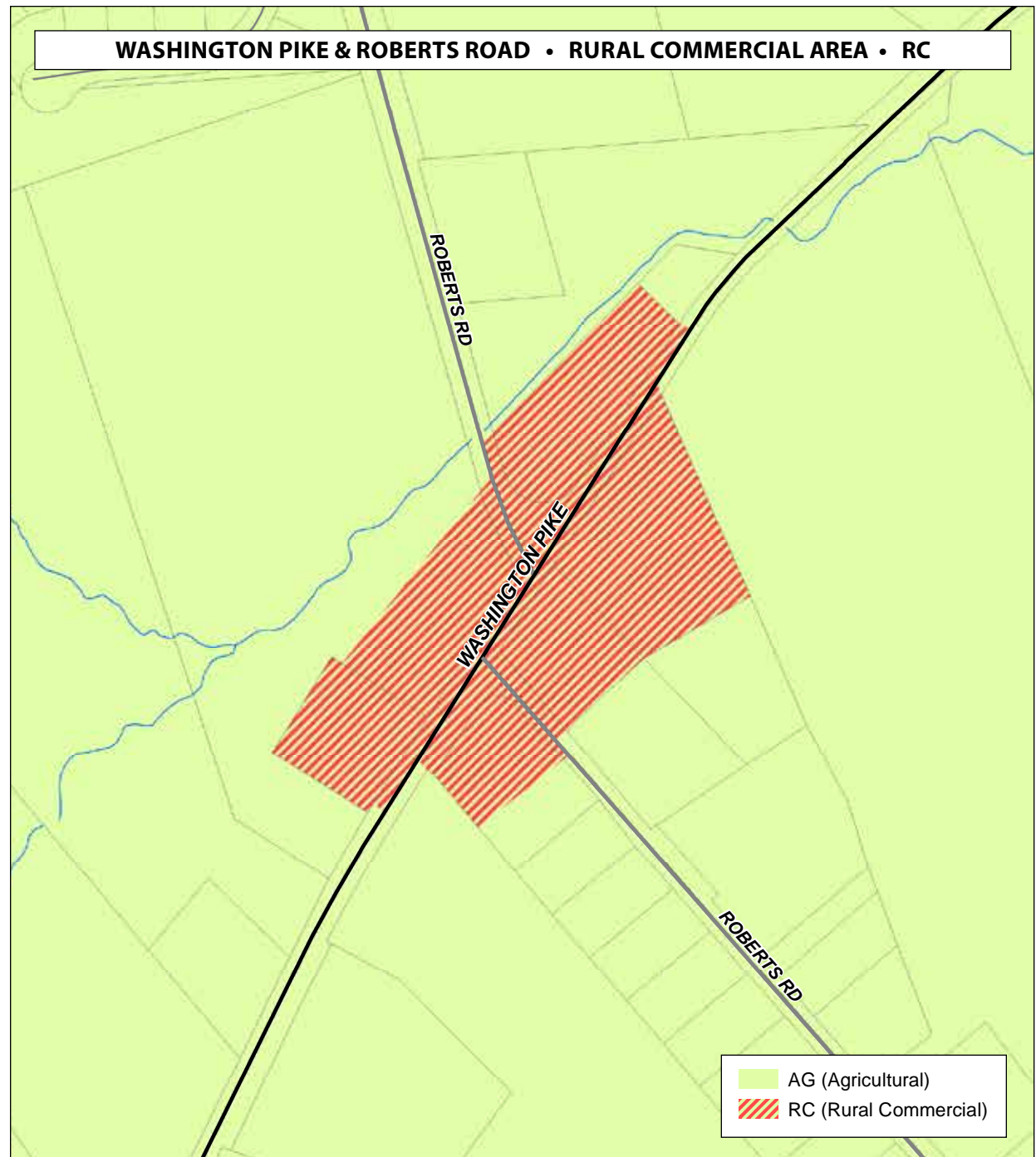
WASHINGTON PIKE AND ROBERTS ROAD

Roberts Road runs north to south, connecting Rutledge Pike to Emory Road. The road is frequently used by residents of Gibbs and Corryton as an alternative to Emory Road and Tazewell Pike in order to access Rutledge Pike. As residential development continues, this north to south connector will see increased traffic in the future.

Existing land uses at the intersection of Washington Pike and Roberts Road are an automotive repair and gas station on the south side of Washington Pike and vacant agricultural land on the north side. A medical office is located about 600 feet north of Washington Pike on Roberts Road. The recommended land use classification is Rural Commercial for retail and service oriented commercial uses intended to provide rural communities with goods and services that meet day-to-day and agricultural needs. The Washington Pike and Roberts Road intersection is located in the Rural area of the Growth Policy Plan.

Recommendations

- Rezoning of parcels located in the Rural Commercial land use designation should be to the Rural Commercial Zone (CR).
- The development of the parcel at the northwest corner of the intersection should incorporate the realignment of Roberts Road.



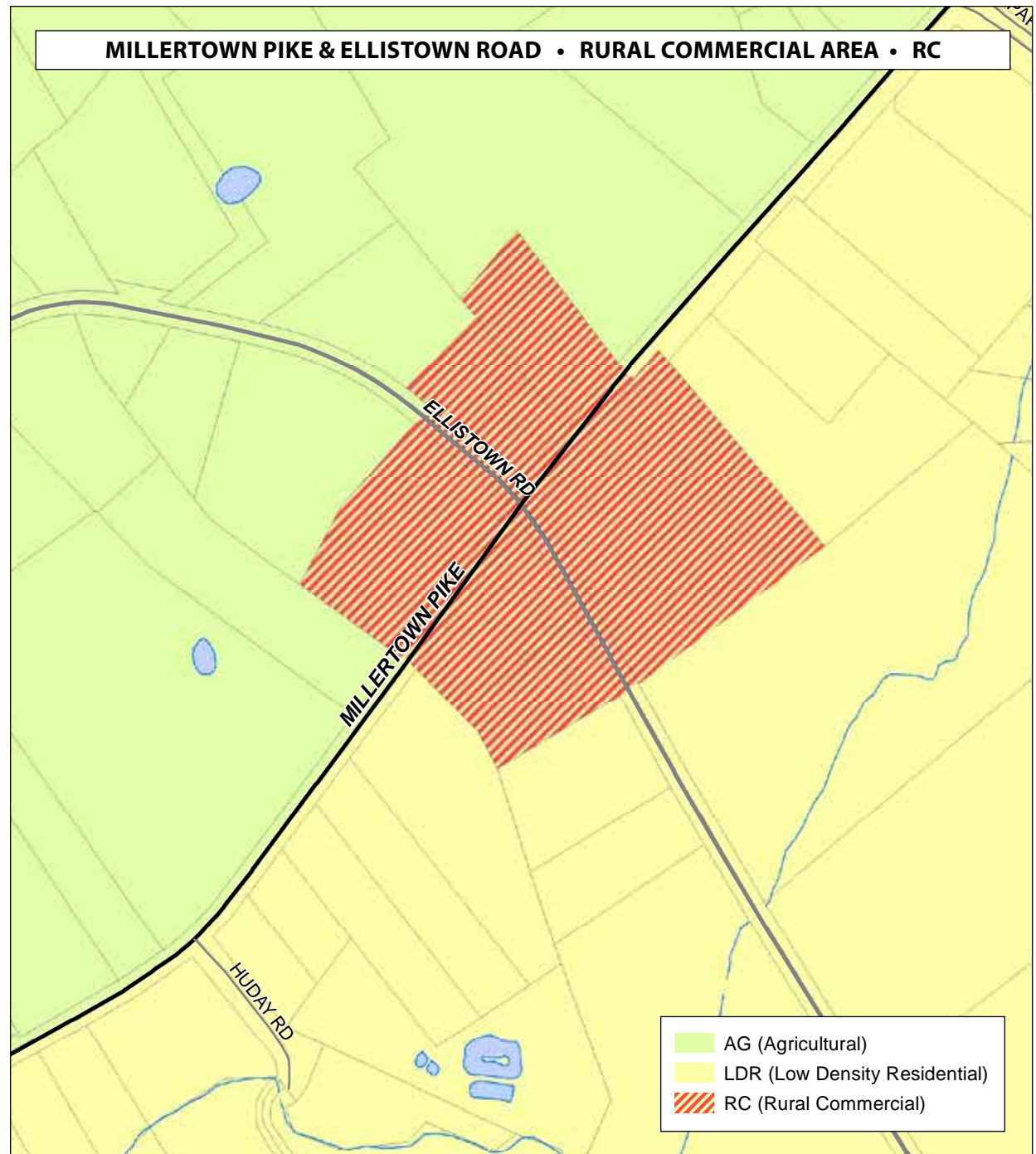
MILLERTOWN PIKE AND ELLISTOWN ROAD

Ellistown Road runs north to south, connecting Washington Pike to Millertown Pike and Rutledge Pike. The road provides another alternative to Emory Road and Tazewell Pike for Northeast County residents traveling north and south in the sector.

Existing land uses at the intersection of Millertown Pike and Ellistown Road are a place of worship and vacant business on the north side of Millertown Pike and single-family residence and undeveloped land on the south side. The recommended land use classification is Rural Commercial for retail and service oriented commercial uses intended to provide rural communities with goods and services that meet day-to-day and agricultural needs. The south side of Millertown Pike is located in the Urban Area, while the north side is in the Rural area of the Growth Policy Plan.

Recommendation

- Rezoning of parcels located in the Rural Commercial land use designation should be to the Rural Commercial Zone (CR).



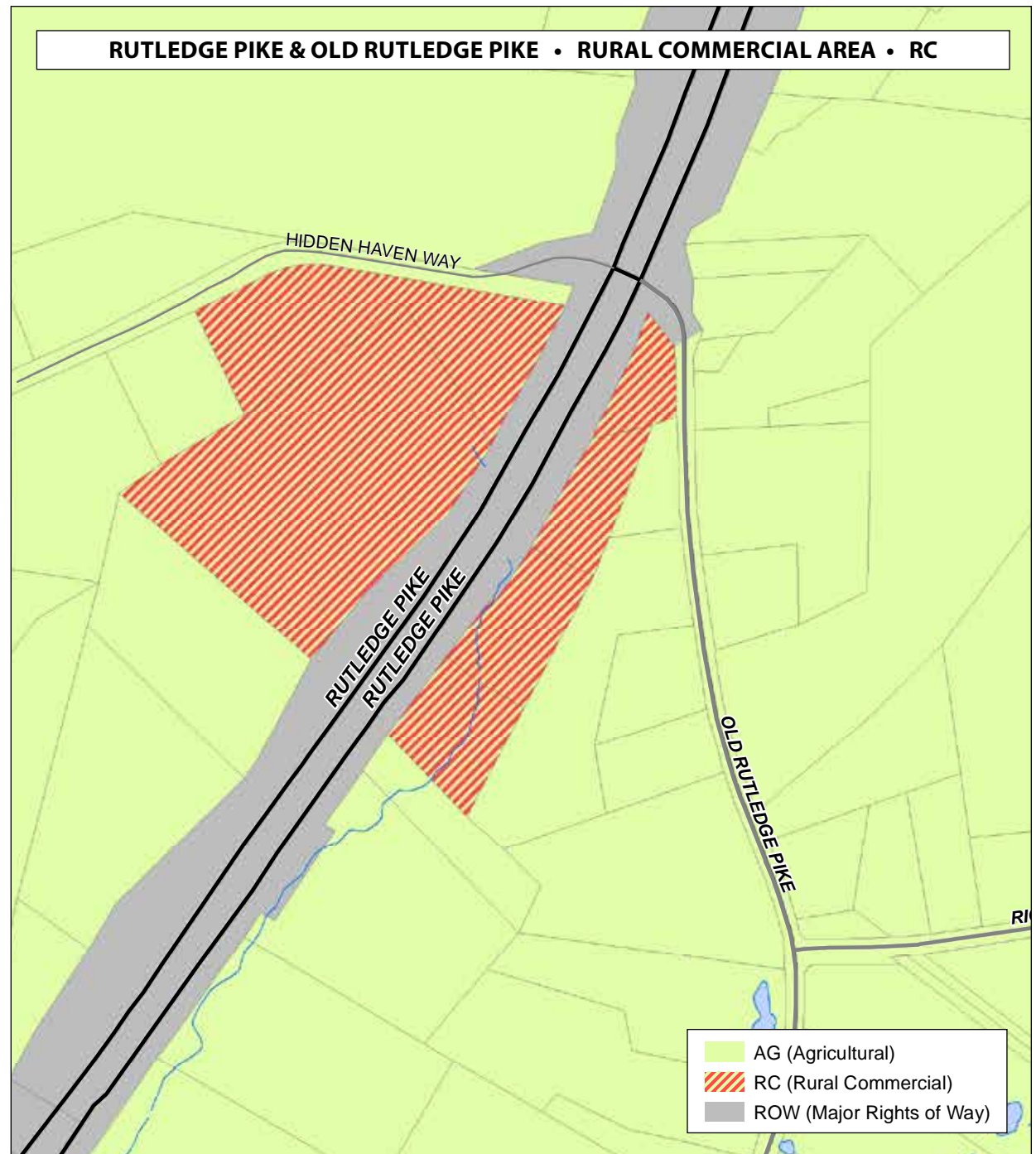
RUTLEDGE PIKE AND OLD RUTLEDGE PIKE

Rutledge Pike runs primarily east to west through the lower portion of the Northeast County Sector. It is a four lane divided arterial that extends into the neighboring community of Blaine in Grainger County. Rutledge Pike and Old Rutledge Pike is the last intersection before leaving Knox County.

Existing land uses at the intersection of Rutledge Pike and Old Rutledge Pike are a gas station, small business, vacant land, and rural residential homes. The recommended land use classification is Rural Commercial for retail and service oriented commercial uses intended to provide rural communities with goods and services that meet day-to-day and agricultural needs. The intersection is located in the Rural area of the Growth Policy Plan.

Recommendation

- Rezoning of parcels located in the Rural Commercial land use designation should be to the Rural Commercial Zone (CR).



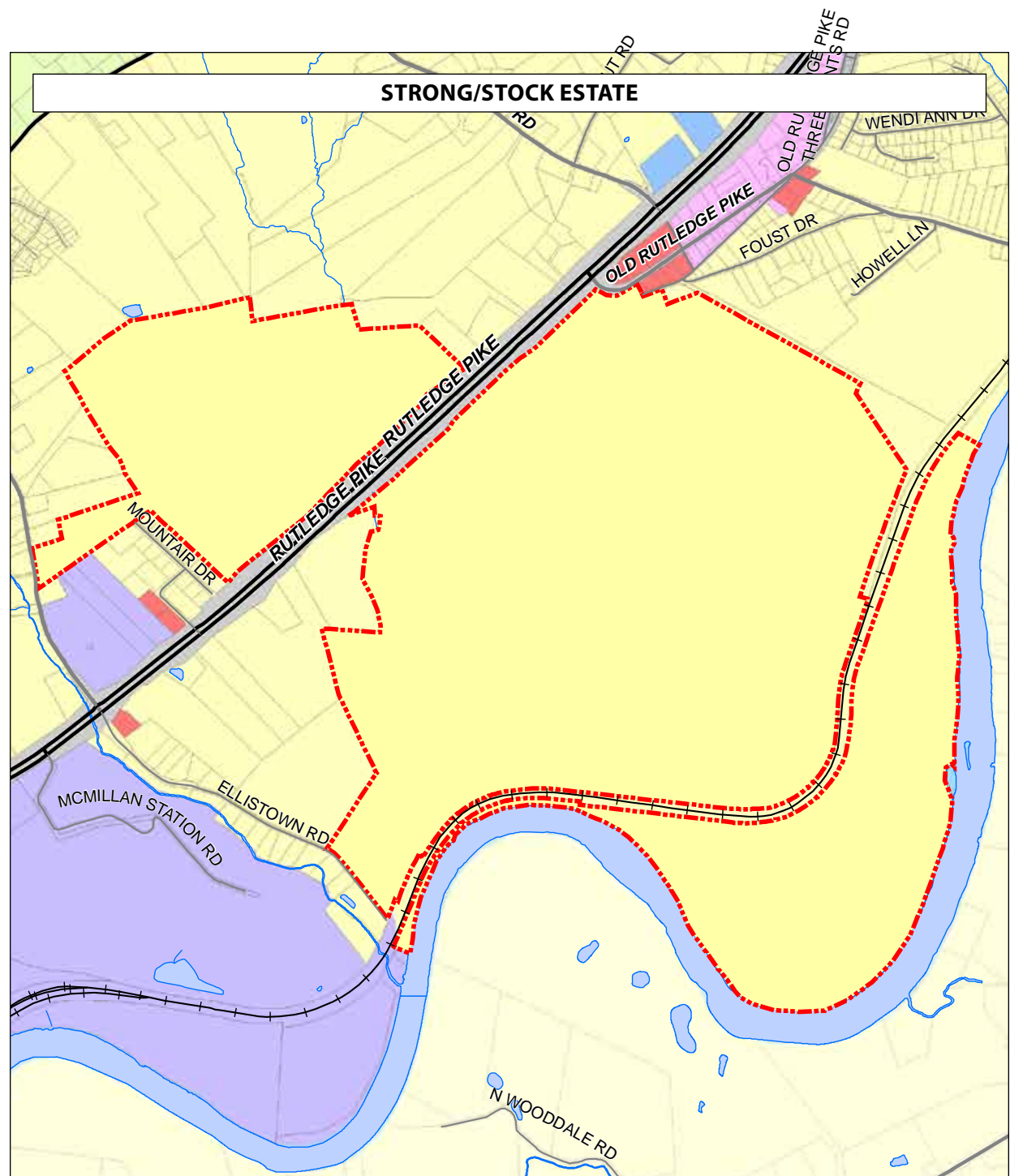
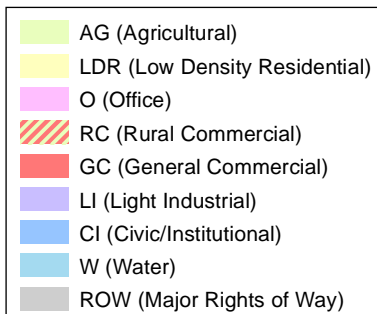
Strong/Stock Estate

The Strong/Stock Estate comprises approximately 733 acres of undivided land on the south side of Rutledge Pike, along the Holston River. It remains one of the largest tracts of land in Knox County, presently operating as a beef cattle and horse farm. Immediately north on Rutledge Pike is an additional tract of land associated with the Strong/Stock Estate totaling 170 acres. These two parcels combine for one of the largest remaining farms in Knox County.

The two parcels are located in the Planned Growth area of the Growth Policy Plan, which designates land to accommodate growth occurring in the unincorporated parts of Knox County. Current zoning is Agricultural on the parcel north of Rutledge Pike, while portions of the property south of Rutledge Pike are Agricultural and Industrial closer to the railroad and Holston River.

If the existing land use on the property changes from an agricultural use, the sector plan recommends a rezoning of the property to Planned Residential Zone and a master plan be developed for any future residential and non-residential uses on either parcel.

However, the sector plan recognizes the history of farming associated with the property and would like to see the land continue to be used for agriculture purposes. The land owners have expressed interest in placing the property in a land trust, or conservation easement. Once this occurs, at the request of the property owner, the Metropolitan Planning Commission will amend the sector plan for those parcels to Agriculture Conservation (AGC) and rezone the Industrial portion of the property along the Holston River to Agricultural. The AGC land use designation is for properties with conservation easements.



Scenic Corridor Overlay District

There are three major arterial roads that run across the Northeast County Sector. These corridors are Emory Road, Tazewell Pike, and Washington Pike. A corridor design overlay will help ensure new development and redevelopment protects the scenic character located along these roads.

Major road improvements to widen Emory Road and Tazewell Pike to a four-lane are proposed by Knox County sometime between 2024 and 2029. These corridors are primarily in the Rural Area of the Growth Policy Plan and do not have extensive commercial development. The scenic corridor overlay proposal can include designations to address design and environmental concerns along rural roads.

Recommendations

- Work with citizens and city/county officials to create a new corridor overlay zoning code that will guide new development while conserving scenic resources.
- Establish guidelines that could cover some or all areas such as new development location, architectural design, sign regulations, parking requirements, screening and related elements that would protect the scenic or rural settings.

Holston River Conservation Corridor

The Northeast County Sector's southern boundary is defined by the Holston River. Land in the sector bordering the river is primarily zoned Industrial, stemming from the historical mining activity in Mascot and Southern Railway line that parallels the river.

Dixie Cement, Aggregates USA, and East Tennessee Zinc Company are active industrial and mining businesses located along the Holston River with many of these sites operating for over 25 years. The sector plan acknowledges these existing uses as important to the local/regional industry and is supportive in their present locations. Aside from these three industries, much of the remaining industrial zoned property along the Holston River are large tracts of undeveloped pasture or farmland. The sector plan recommends against the rezoning of parcels between Rutledge Pike and the Holston River to Industrial. A Holston River Conservation Corridor should be conducted to guide a transition from further industrial uses along the river. The corridor plan will help to create opportunities for public access and new development appropriate for the conservation of this scenic corridor.

Recommendations

- Develop a Holston River Conservation Corridor Plan.

GENERAL LAND USE RECOMMENDATIONS

The Northeast County's rural landscape is characterized by farmland, wooded ridges, scenic views and historic sites. Residents voiced concern at public meetings regarding the current Agricultural (A) zone and how the permitted density of one dwelling unit per acre works against sustaining and protecting these rural landscapes. The following is a list of recommendations to help further the General Plan's Development Policy No. 6: Respect and Nurture Our Heritage Areas.

New Agricultural Zone Districts

The following are brief descriptions of new zoning districts that should be considered to sustain and protect farmland/rural landscapes in the Northeast County.

Large Lot Agricultural Zone:

The County has one agricultural zoning classification that permits both residential and farm uses. Some community's separate these uses into two distinct zones to accommodate the unique differences between residential uses and farm uses. By increasing the minimum lot size for agricultural uses, farmland could be preserved.

Small Lot and Cluster Rural Residential Zone:

A new zone should be created that encourages rural residential uses, while still conserving such assets as hillsides and farms. Housing in new subdivisions could be clustered to conserve land.

Conservation Subdivisions

Conservation subdivisions are characterized by clustering residences on smaller lots that would not otherwise be allowed in order to protect open space, agriculture, or sensitive natural resources. Conservation subdivisions allow for the same number of residents under current zoning with the potential offer of a greater density (density bonus) to encourage this type residential development.

Savings typically are seen in development costs due to less road surface, shorter utility runs, less grading and other site preparation costs. Municipalities also experience lower long-term maintenance costs for some of the same reasons. The preserved land may be owned and managed by a homeowners association, a land trust or the municipality.

Transfer of Development Rights Program

Transfer of Development Rights (TDR) allows a community to transfer the development potential in an area where growth is restricted to a separate receiving area where roads, utilities, and other infrastructure already exist, making it appropriate for growth. Farmland and open space is preserved and growth is targeted to areas where infrastructure such as higher capacity roads and sewers are in place. Through the program, developers purchase development rights to build in a "receiving area," which is an area(s) that is targeted for growth, and those funds are used to permanently preserve land in the "sending area" (for example farmland). This allows a community to accommodate growth, while preserving open space and farmland in a manner that is fair and equitable for all landowners.

Private, Federal and State Agricultural and Conservation Programs

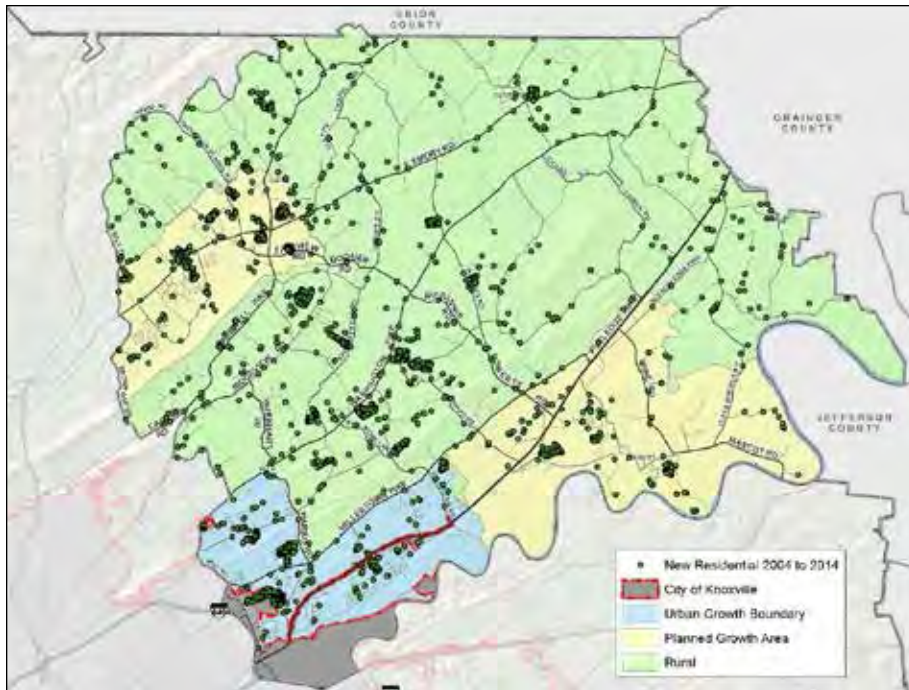
Work with land trusts and agricultural officials, to assist property owners with programs to conserve land within the Northeast County. Examples vary from programs such as Legacy Parks (local program), Foothills Land Conservancy (regional program), The Land Trust for Tennessee (state program), American Farmland Trust (national program), and U.S. Department of Agriculture's Farm and Ranchland Protection Program (national program).

Growth Policy Plan Update

One of the recommendations in the Growth Policy Plan is to review the plan every three years and amend as necessary. It has been 14 years since the plan was formally adopted with no review or changes to the boundaries. As a result, development continues to encroach into the Rural designation. From 2004 to 2014, almost 50 percent of residential building activity occurred in the Rural area. According to the Growth Policy Plan, these areas should be reclassified "Planned Growth" when the plan is revised and amended.

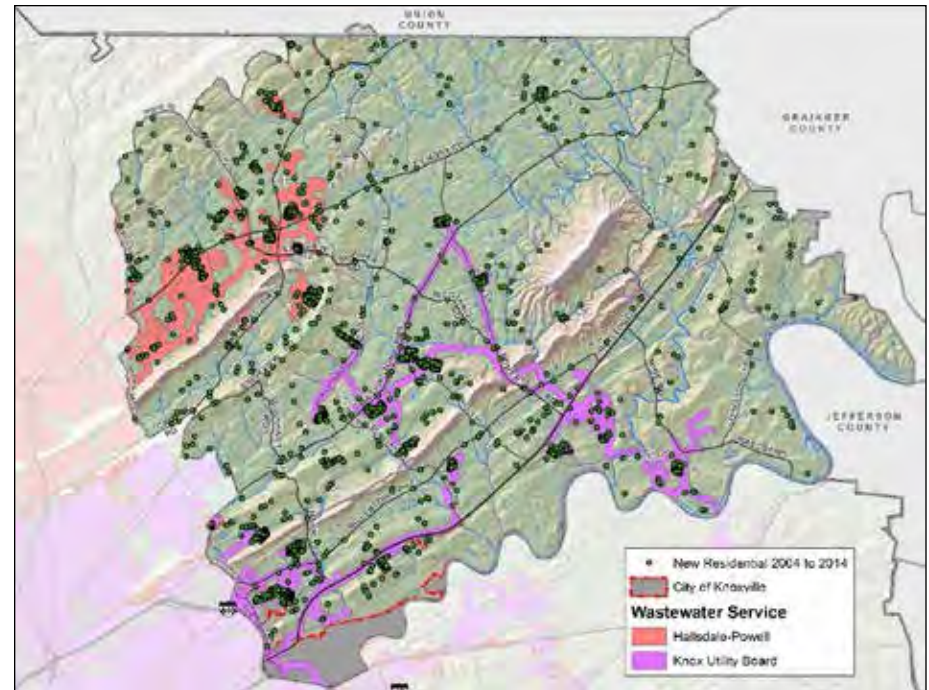
Wastewater service is the driver for new construction in the Northeast County as 70 percent of all residential development was within 300 feet of a service line.

Northeast County Sector: Residential Building Permits by Growth Plan Area, 2004 - 2014



When the *Growth Policy Plan* is updated, land west of Roberts Road in the Northeast County needs to be reevaluated based on residential development over the last 10 years and current wastewater service offered along Roberts Road and Washington Pike. This area is largely classified Rural.

Northeast County Sector: Residential Building Permits and Wastewater Service, 2004 - 2014



Recommendations

- Create new Agricultural zone in county to protect farmland and rural landscapes.
- Update the subdivision ordinance to include conservation subdivisions as a development alternative.
- Update the *Growth Policy Plan*.

COMMUNITY FACILITIES PLAN

This section is directed to public facilities that are needed for community growth and provided in a manner relative to the conservation of scenic, historical, and environmental assets.

The community facilities plan incorporates recommendations from the following sources:

- Community input
- Knox County Parks and Recreation Department staff interviews
- *Northeast County Sector Plan* (2003)
- *Knoxville Knox County Park, Recreation, and Greenways Plan* (2011)
- *Long Range Regional Mobility Plan 2040* (2013)

Schools and Libraries

A new middle school in the Gibbs Community was a primary concern expressed by many participants during public input. Students living in the Gibbs and Corryton area travel to Holston Middle School, which is located in the bottom southwest portion of the sector. In June 2015, the Knox County Mayor and School Superintendent announced a memorandum of agreement to build a new middle school in the Gibbs Community. The new middle school will likely be built on land surrounding the Gibbs Elementary School to the rear and south of the school.

The Knox County Library Board does not anticipate adding additional libraries to Knox County at present. Plans are to focus on facility maintenance programs for the foreseeable future.

Recommendations

- Flashing lights are needed in school zones to alert drivers to the presence of children and other pedestrians during school hours.
- If Corryton Elementary is underutilized, pursue the possibility of returning to a K-8.
- Corryton library hours are currently 1:30 p.m. to 5:30 p.m., Monday through Friday. Consider later hours for a couple of week nights and/or opening on Saturday.

Parks, Greenways and Recreation Facilities

Parks and greenways have not kept pace with subdivision development in the Northeast County. The rural character makes it difficult to locate neighborhood and small parks within walking distance of families, while the pastoral setting also makes establishing greenways and connectivity challenging. The following recommendations are taken from the Knoxville/Knox County Park, Recreation and Greenways Plan that was done in 2011.

Recommendations for Parks

Neighborhood Parks – Acquire space for new neighborhood parks in the general vicinity indicated on the plan map such as Rutledge Park, Beeler Road Park, Fairview Road Park, Sentertown Park, Trout Road Park, and Ellistown Park.

Brookfield Community Park – Use existing county acreage along Tazewell Pike to create a community park.

McBee Community Park – Create a 20 to 40 acre park on the Holston River, which includes playing fields and non-motorized boating access.

Luttrell Lane Community Park – Acquire acreage associated with the flood prone sinkhole area and conserve them as open space and multi-purpose fields, leading to the Murphy Creek greenway.

East Knox Elementary/Park Expansion – Acquire 10 to 20 acres to increase community serving recreation at the school and existing park.

Ritta Elementary School/Park Expansion – Expand existing facilities by 10 to 20 acres to provide for community park use.

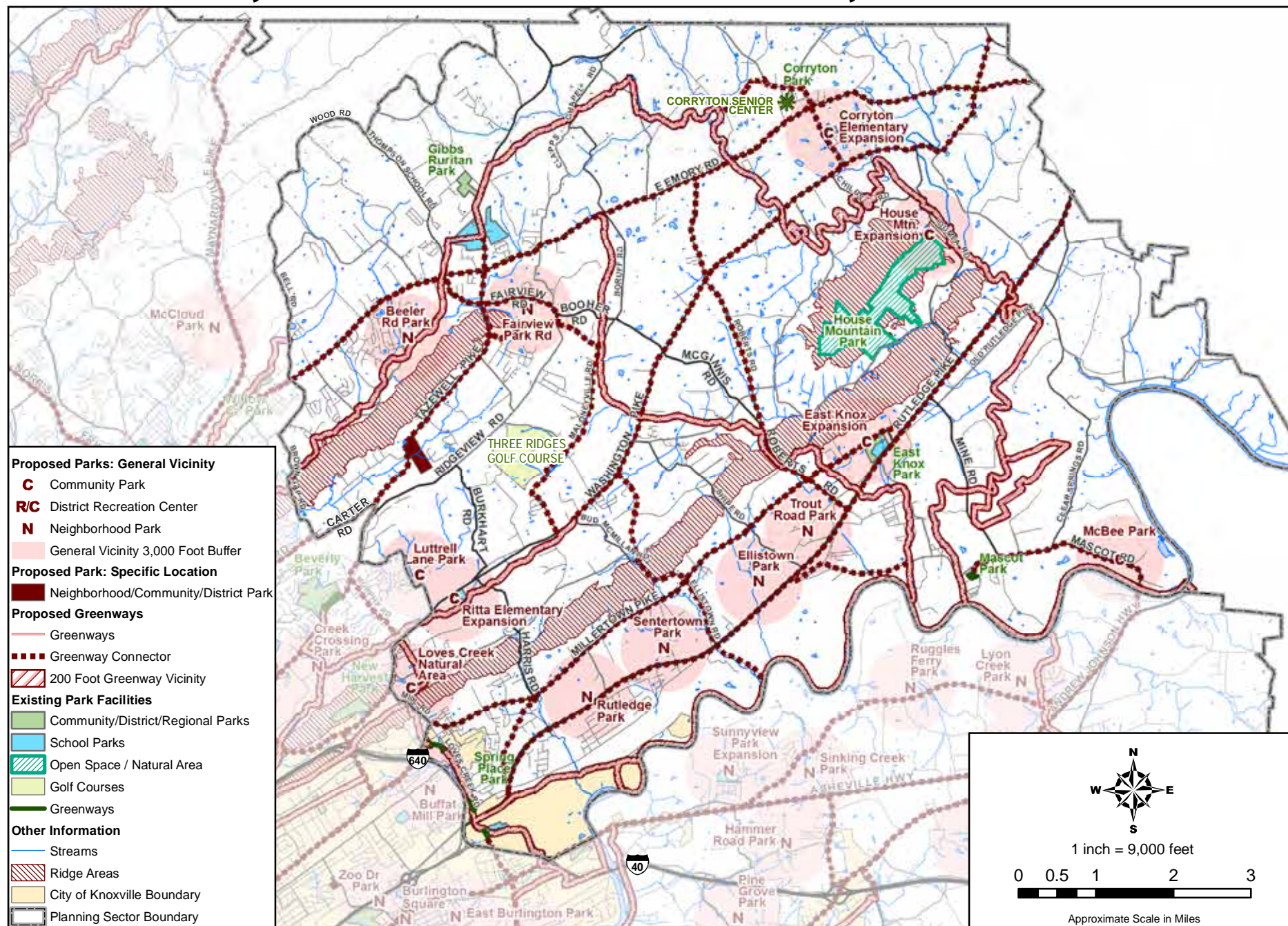
Love Creek Natural Area – Acquire 10 to 20 acres for a passive park and open space to protect water quality.

House Mountain Park and Natural Area – Acquire 20 plus acres at the toe of House Mountain to accommodate a community park for playfields and picnicking and as an additional trail head to the mountain. Parking is currently inadequate for cars and should be expanded.

Recommendations for Greenways/Greenway Connectors

- Beaver Creek Greenway – Provide trail connections from the existing and future neighborhoods to the Gibbs schools and Gibbs Ruritan Park.
- Eastbridge Greenway – The Knox County Parks and Recreation Department and Knox County Development Corporation are in discussion to develop the Eastbridge Business Park Trail System with five miles of trails located in the Eastbridge Business Park.
- Flat Creek Greenway – Connecting to the proposed Beaver Creek Greenway, it would preserve the floodplain and connect to Eastbridge Park and Mascot Park.
- Murphy Creek Greenway – This extension leads to Whites Creek.
- Holston River Greenway – Acquire land and easements to create a trail that follows the river from the county line to Asheville Highway.
- Roseberry Creek Greenway – This greenway should connect existing and future neighborhoods to the Gibbs schools and Holston River Greenway.
- Cemex Greenway – This link should be made between Love Creek and Holston River Greenway.
- Greenway Connectors – Emory Road, Maloneyville Road, Millertown Pike, Rutledge Pike, and Tazewell Pike are the most significant roads that should be improved to safely accommodate pedestrians and bicyclists.

Northeast County Sector: Parks, Recreation and Greenways Plan



GREEN INFRASTRUCTURE PLAN

Green infrastructure represents the natural resources to promote environmental, social, and economic well-being. These elements include streams, wetlands, forests, parks, greenways, along with the recommended incorporation of low impact development techniques. Benefits include clean air and water, increased property values, and healthier citizens.

The goals set forth in this section are:

- To connect residential areas to natural areas and community facilities such as schools or parks
- Balance development and conservation
- Foster the use of development practices that reduce stormwater runoff and protect water quality
- Preserve open space and natural areas

The Green Infrastructure Plan incorporates recommendations from the following:

- Community Input
- *Knoxville/Knox County Parks, Recreation and Greenways Plan* (2010/2011)
- *Northeast County Sector Plan* (2003)
- *Knoxville/Knox County Hillside and Ridgetop Protection Plan* (2011/2012)
- *Knoxville/Knox County Tree Conservation and Planting Plan* (2007)

Existing Policies Related to Green Infrastructure

Floodways and Floodplains

The Federal Emergency Management Agency (FEMA) Flood Insurance Study maps that designate boundaries for floodways (100-year and 500-year floodplains), streams and rivers were adopted by the City and County as part of their flood prevention ordinances. “Open-type” uses (such as parks, parking lots, and golf driving ranges) are allowed within the floodway, however, the clearing of vegetation is limited within water quality (riparian) buffer zones around streams. Structures are only allowed in the floodway if extensive stormwater modeling proves that there is no effect to the 500-year floodplain. The “no-fill line”, which established halfway between the FEMA floodway and 100-year floodplain, does not allow any type of fill or new construction that reduces flood storage capacity (for example, a parking lot can be constructed but the asphalt

cannot be higher than the current ground elevation). New structures are allowed within the FEMA 100-year and 500-year floodplain but they must be approved by the City or County engineering department and certified that all habitable floors are one foot above the 500-year flood elevation and the foundation is designed to ensure the unimpeded movement of floodwaters.

Stormwater Best Management Practices

Stormwater Best Management Practices (BMP's) address the need to manage water quality sources that include bio-retention areas, wetland enhancement and porous paving systems. BMP's help to control stormwater pollution and reduce soil erosion and sedimentation in streams and other waterways. These practices are found in *Knox County's Stormwater Management Manual* and the *City of Knoxville Best Management Practices Manual*. These manuals were included as part of the National Pollutant Discharge Elimination System (NPDES) which requires large and medium-sized cities/counties to obtain a NPDES permit for municipal storm water systems. In order to be compliant with federal and state regulations, both the City and County need to incorporate best management practices to ensure that growth is accommodated in an environmentally responsible manner.

Hillsides and Ridgetops

The *Knoxville/Knox County Hillside and Ridgetop Protection Plan* contains development policies to encourage low density residential development on steeper slopes and recommends minimizing clearing and grading.

Agricultural Areas

The *Growth Policy Plan* has a rural designation to conserve agricultural resources. Additionally, under the Tennessee Greenbelt Law, farmers may elect to request a property tax reduction. Finally, Tennessee has a right-to-farm law, which allows farmers the opportunity to farm even though development may be encroaching nearby.

Schools, Parks, and Greenways

The *Knoxville/Knox County Park, Recreation and Greenways Plan* identifies existing and proposed greenways and parks. Proposed parks are generally located in areas that are currently underserved. The proposed greenways make connections to parks, schools, libraries, and other points of interest. *The*

Knoxville/Knox County Minimum Subdivision Regulations also allow MPC to consider dedication of up to ten percent of the subdivision's acreage to education or park land.

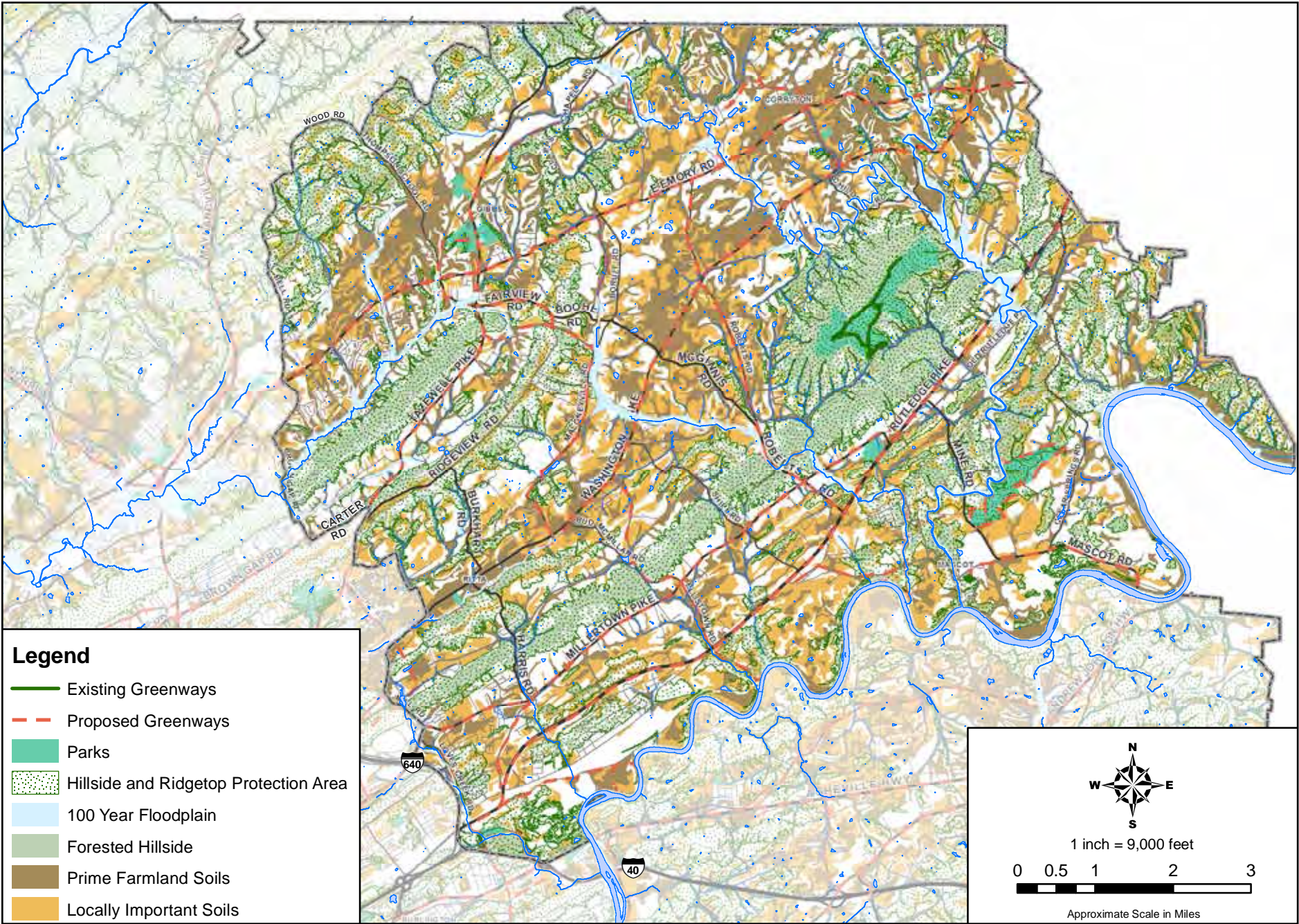
Streets and Highways

The *Knoxville/Knox County Tree Conservation and Planting Plan* recommends various transportation corridor strategies to designate scenic routes in rural settings, along with changes to arterials such as Rutledge Pike by creating public and private planting programs for roadside trees and parking lot landscaping.

Recommendations

- Promote the conservation of farmland and the continuation of farming by working with the U.S. Natural Resource Conservation Service's Farm and Ranchland Protection Program, allowing farmers to create a legacy of farming while being compensated for their development rights.
- Work with public land owners, county parks and recreation, and other non-profit organizations to help establish equestrian trails in the Northeast County Sector.
- Identify the most productive soils for personal and community gardening by working with home owners and community groups. The Green Infrastructure map shows that there are many areas within the rural area that have good agricultural soils; additional information can be found through UT Extension Service and the U.S. Department of Agriculture (USDA).
- Work with the City and County Department of Parks and Recreation and State of Tennessee to pursue that portion of real estate transfer taxes dedicated to wetland and park purchases.
- Enact conservation subdivision regulations to foster green infrastructure protection while allowing clustered residential development.
- As part of the new EPA regulations related to water quality, new city and county ordinances should include incentives to encourage infiltration and allow for flexibility in design of stormwater management facilities along streets, greenways, and on the grounds of school and parks. This information should also be provided to private homeowners wishing to reduce their impact on their watershed. Demonstration projects by city and county stormwater divisions can be used as both test sites and teaching aids for property owners to learn about installation, benefits and costs for using green infrastructure best management practices.

Northeast County Sector: Green Infrastructure



HISTORIC RESOURCES PLAN

The Knox County Historic Zoning Commission is responsible for reviewing applications to alter, demolish or relocate properties protected by historic overlay. The Commission also reviews proposed new construction in historic districts, recommends the designation of historic properties and reviews proposed National Register of Historic Places nominations.

The proposed historic resource plan methodology incorporates recommendations from these sources:

- Historic Resources Inventory
- MPC Historic Preservation files
- Community input

The goals for historic preservation program are fourfold:

- Encourage preservation of all buildings that are on the National Register of Historic Places.
- Support additional National Register nominations for historically significant properties.
- Collaborate with non-profits and property owners to develop strategies to stabilize and restore historic resources.
- Update the historic resources inventory for the county.

Following is a description of four historic resources in the Northeast County Sector that are listed on the National Register of Historic Places.



Alfred Buffat Homestead (The Maples) c. 1867
1717 Loves Creek Road

This Italianate house illustrates the significance of Swiss migration to Knox County, while also being a significant architectural landmark. It is one of the few antebellum farmsteads remaining in Knox County. The property, known as “The Maples,” features a gristmill and was the center of community life until the turn of the century.

Recommendation: Encourage continued preservation.



Chesterfield c. 1838
9625 Old Rutledge Pike

The antebellum Georgian-style mansion is located in the Skaggstown community of northeastern Knox County. Built by G.W. Arnold, a physician from Roanoke, Virginia, it is located along a former stagecoach route (roughly what is now US 11) that began in Washington, D.C., passed through Knoxville, and continued further south. Many stagecoaches made stops at Chesterfield.

Recommendation: Encourage continued preservation.



Nicholas Gibbs House c. 1790
7633 E. Emory Road

Nicholas Gibbs was a revolutionary war hero who moved to East Tennessee from North Carolina in the late 1790s with his wife, the former Mary Efland. The log cabin he built in what is now the Gibbs community has been in the same family for over 200 years. Nicholas and Mary Gibbs are buried in the Gibbs family cemetery on Emory Road.

Recommendation: Encourage continued preservation.



Nicholas Gibbs House, 1910
Courtesy of the Knox County Two Centuries Photograph Collection, McClung Historical Collection, Knox County Public Library System

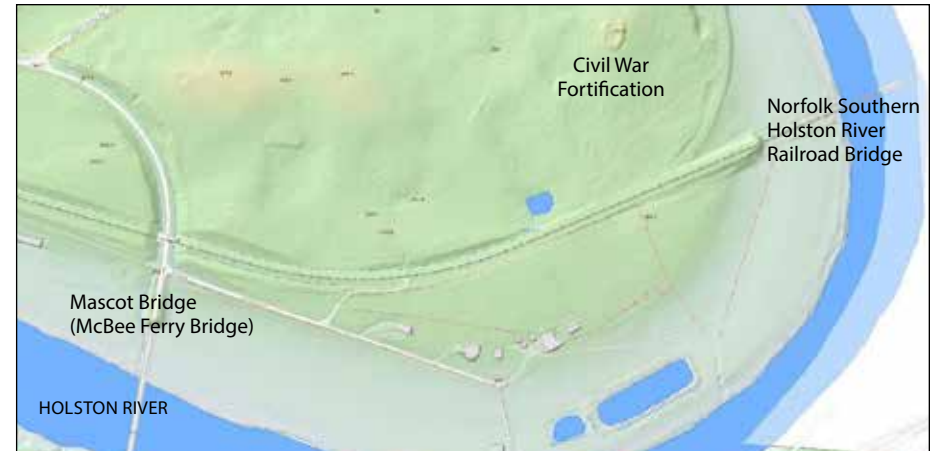
Strawberry Plains Fortification

Knox-Jefferson County border at the Holston River

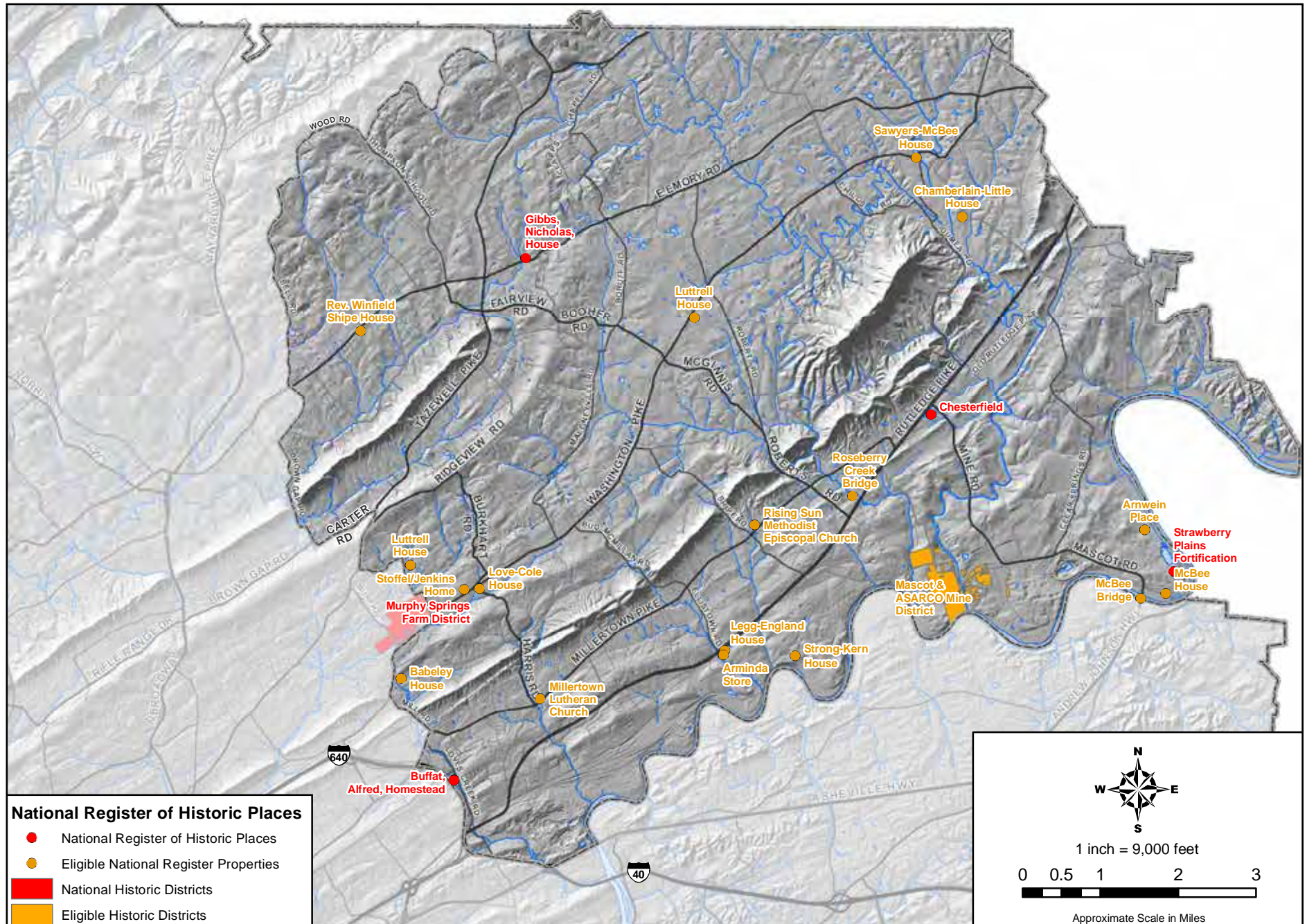
This area is listed on the National Register of Historic Places for significance during the Civil War.

Recommendation: Encourage continued preservation. Tennessee is one of eighteen congressionally-designated Civil War Heritage Areas. This federal, state and local partnership works to create opportunities for education, interpretation, preservation, and economic development.

Photographs from the Civil War of a military bridge at Strawberry Plains and a fort in the distance, seen from the north bank of the Holston River. They are from the Siege of Knoxville, November-December 1863. George N. Barnard was photographer in the chief engineer's office.



Northeast County Sector: Historic Resources



Following is a description of properties in the Northeast County Sector that were last surveyed in 1992 and 1993 for the historic resources inventory. An updated field survey will be necessary to determine the condition and status of these properties.

Arminda Store

1728 Ellistown Road (intersection of Rutledge Pike and the former Arminda Road)

The first Arminda Store was operated by Dr. Westerfield. The present store is of later construction.



Arnwein Place c. 1830

10541 Arnold Lane

This two-story frame house with brick end-chimneys is near the Holston River and is an example of early settlement patterns while also being a good illustration of antebellum architecture.

Babeley House c. 1902

5740 Washington Pike

This Queen Anne two-and-one half-story frame house has a wrap-around porch and Victorian detailing. The house depicts Swiss settlement in Knox County and the nursery industry at the turn of the century.

Chamberlain-Little House c. 1816

6109 Circle Road

This large Vernacular-style farm house was built by Ninian Chamberlain, son of Jeremiah Chamberlain, who received his 1786 land grant from the state of North Carolina. The house is representative of early settlement patterns.



Vincent Babelay house and greenhouse (c. 1913), Washington Pike at Babelay Road, Ritta Community
Courtesy of the Knox County Two Centuries Photograph Collection, McClung Historical Collection, Knox County Public Library System



Legg-England House c. 1846

8010 Rutledge Pike

The Legg-England house was built by John Wesley Legg and inherited by his daughter Mary Jane, who married Payne England. The house was built to serve as a tavern and early stage stop. Rutledge Pike was on the early stage route to Washington, D.C., and entertained prominent politicians such as James K. Polk. Civil War battles were reportedly fought in the immediate area, with the house serving as a command post and hospital.



Love-Cole House c. 1810
4320 Harris Road

This two story brick with raised basement has Southern Colonial and Georgian Styling. Unique in Knox County, the house illustrates early settlement patterns. It was built by Samuel Love, Sr. from bricks fired on the property. Farmer and saddler Sampson David Cole purchased the house in 1846. Interior features include pegged wainscoting of two wide pine boards and a brick floored basement originally used as a kitchen.

Luttrell House c.1830
5100 Luttrell Road

This two-story brick, Federal house which has had recent additions in the rear, but is still relatively intact, is an important indication of early settlement patterns and architecture.

Luttrell House c. 1908
8300 Washington Pike

This is an elaborately detailed Eastlake designed, one-and-one-half story frame house with turreted circular porch and elaborate sawn-wood detailing that is significant for its architecture.

Mascot & ASARCO Mine Area c. 1915

This community was established in 1796 when John Erwin bought 150 acres of land from the government. It was many years later, during the early twentieth century that the historic mining town was developed. Housing depicts class and income distinctions among workers and management along with providing insight on the history of industrial development. The railroad enabled the zinc mining industry to grow in and around Mascot.



Mascot: Shows Southern Railroad tracks over Flat Creek, McMillan house (in center, with chimney), and McMillan Cemetery in right foreground in trees. *Courtesy of the Knox County Two Centuries Photograph Collection, McClung Historical Collection, Knox County Public Library System*



Mascot (McBee) Bridge c. 1931

Holston River on Mascot Road at Knox County line
In 1929, Knox County approved construction of this bridge near Mascot to replace a ferry that crossed the Holston River. The plans were completed by the Freeland-Roberts and Company of Nashville in January 1930 and the county soon granted a construction contract for \$250,000 to the Southern Company of Birmingham, Alabama. Dedication ceremonies for this bridge were held on October 12, 1931.

The bridge is 785 feet long and contains three concrete arches and five concrete deck girder approaches. This bridge is the only example of an open-spandrel, through-arch, entirely concrete bridge in Tennessee and is commonly referred to as a “rainbow bridge.”

Recommendation: Support application to the Tennessee Department of Transportation for a historical marker to commemorate the significance of the bridge.



McBee House

c. 1880

1231 McBee Lane

This is a ferryman's house on the Holston River. Colonial Revival in style with a gambrel roof, the structure illustrates settlement and transportation patterns.

McBee ferry in foreground, house and outbuildings across the Holston River in the distance.

Courtesy of the Knox County Two Centuries Photograph Collection, McClung Historical Collection, Knox County Public Library System



Millers Lutheran Church

c. 1850

6515 Millertown Pike

This Gothic Revival frame church with Eastlake influence as seen in the cornice and sawn wood bracket at the recessed entry is architecturally distinctive. A balcony with sawn wood balustrade above the central entry and below the bell tower add to its architectural significance.



Rising Sun Methodist Episcopal Church

c. 1891

8504 Sunrise Road

This is an elaborately detailed, one-story frame Victorian Gothic church with Eastlake influence. Weatherboard and imbricated shingle wall covering with stained glass windows, applied sawn wood trim and other details add to its architectural significance.



Courtesy of Bob Davis

Roseberry Creek Bridge

c. 1913

Three Points Road over Roseberry Creek

This is a twin-arch bridge with rectangular imprints in the railing and octagonal depressions in the concrete posts. There are two plaques on the bridge, one with the Luten Bridge Company of Knoxville listed as the designer and builder, and another listing the members of the Good Roads Commission.



Sawyers-McBee House

1832

9882 Washington Pike

A two-story timber-framed structure, the Sawyers-McBee House was one of the earliest Greek Revival houses in Knox County and is significant for its representation of early settlement patterns. The house was built by William Sawyers in 1832 and has remained in the same family for over 180 years. William Sawyers built the house on part of his father's (John Sawyers) original land grant. Sawyers was one of the first settlers in Tennessee, coming to the area in 1768 and moving to Knox County in 1785. The grist mill, located across Washington Pike from the house, and since destroyed, was one of the most important in the county. William Sawyers was married to Elizabeth Cassady in 1827 and was a Justice of the Peace and a leader in the Washington Presbyterian church. His daughter Nancy married Ganum McBee and inherited the farm from her father.



Rev. Winfield Shipe House

c. 1900

6510 E. Emory Road

A two-story frame, Victorian Vernacular which is significant because the Shipe family contributed to the settlement of this area.

Skaggstown Houses

c. 1900

9235 & 9255 Millertown Pike

These Eastlake houses, unique because of setting, are representative of an early Knox County community.



Stoffel-Jenkins Home

c. 1904

6243 Washington Pike

This house is a two-and-one-half-story frame Queen Anne with elaborate details and a wrap-around porch.



Strong-Kern House and Outbuildings

c. 1904, 1880, 1830

8220 Rutledge Pike

Located along the Holston River, this intact two-and-one-half story frame house along with numerous outbuildings represents styles and building methods that range from c. 1800s log construction to early twentieth-century construction. The significance of this property lies in its representation of early settlement patterns, building materials, and construction techniques.



Tarver-Cassady House

c. 1800

8511 Bud Hawkins Road

The Tarver-Cassady house is built of hewn logs with v-notching and includes a stone chimney. The property, is significant for its representation of early settlement.

TRANSPORTATION PLAN

Transportation recommendations are based on previously adopted plans and studies, including the *Long Range Regional Mobility Plan 2040*. Roadway and sidewalk recommendations from the mobility plan and public input are presented below. The recommendations from the mobility plan include the horizon year (proposed year project would be completed).

Prior to implementation of any proposed projects, there should be opportunities for additional public input to address issues of impacts related to adjacent land use, neighborhood protection, and environmental and cultural resource protection. These are principles that are important in the development of a transportation system. It is vital to develop and maintain a transportation network that is accessible, provides mobility to all residents, and does not adversely impact the environment.

Roadways

The table below lists currently under construction or proposed roadway projects in the Northeast County Sector by the Tennessee Department of Transportation (TDOT), City of Knoxville, and Knox County. These projects are from the *Long Range Regional Mobility Plan 2040*.

In 2014, Knox County Engineering completed the *Strategic Transportation Plan Needs Assessment Report*, identifying roads in need of improvement based on the number of crashes, road width and average daily traffic. The report identified 60 segments across Knox County, with the top 25 having recommendations and cost estimates provided.

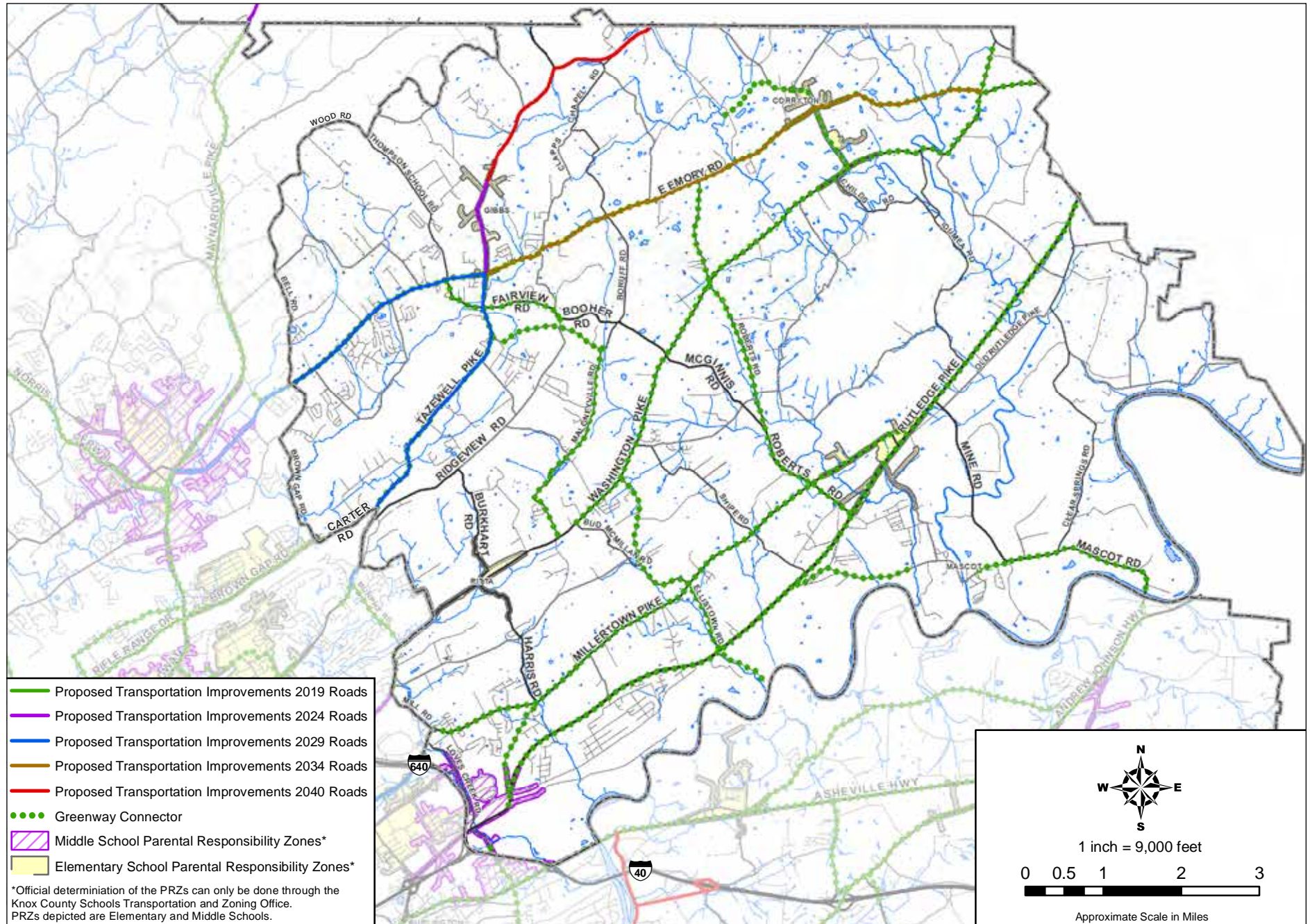
Seven road segments in the Northeast County were identified in the report, with two making the top 25. The first in the top 25 is a recommendation to widen Brown Gap Road to an improved 2-lane section from Crippen Road to Rouse Lane. The second project called for a road safety audit of Old Rutledge Pike from Rutledge Pike just west of Shipe Road to Mascot Road.

Table 17. NORTHEAST COUNTY SECTOR ROADWAY PROJECTS

Project Name	Project Location	Length (miles)	Project Description	Horizon Year
Loves Creek Greenway Phase I	Spring Place Park to Knoxville Center Mall/Millertown Pike		Construct greenway trail	2014
Millertown Pike at Mill Road	Intersection of Millertown Pike and Mill Road	0.0	Intersection improvements	2015
Tazewell Pike and Emory Road	Intersection of Tazewell Pike and Emory Road	0.3	Intersection improvements and bridge along Emory widened	2016
Bridge over Kerns Branch	Emory Road – 200 feet from Beeler Road		Bridge replacement	2016
Fairview Road and Thompson School Road	Intersection of Fairview Road and Thompson School Road	0.2	Realignment, intersection improvements and signal	2016
Gibbs High School	Tazewell Pike near School Access to Gibbs High School	0.1	Turn lane	2016
Washington Pike Widening	I-640 to Murphy Road	1.6	Widen 2-lane to 4-lane	2024
Tazewell Pike Widening	Emory Road to Barker Road	1.2	Widen 2-lane to 4-lane	2024
Millertown Pike Widening	I-640 to Mill Road	0.6	Widen 2-lane to 4-lane sections to 4-lane and 6-lane sections	2024
Murphy Road Extension/ New Murphy Road Construction*	Washington Pike to Millertown Pike	1.3	Construct new 4-lane road	2024
Tazewell Pike Widening	Murphy Road to Emory Road	4.7	Widen 2-lane to 4-lane with turn lanes as needed and bike lanes and sidewalks	2029
Emory Road Widening	Maynardville Highway to Tazewell Pike	4.9	Widen 2-lane to 4-lane	2029
Murphy Creek Greenway	First Creek Greenway to Washington Pike or Greenway Drive to Harvest Park and Loves Creek Greenway		Construct greenway trail	2029
Tennessee Holston River Greenway Phase II	Holston River Park to Loves Creek Greenway		Construct greenway trail	2029
Emory Road Reconstruction	Tazewell Pike to Grainger County line	7.8	Reconstruct 2-lane section	2034
Loves Creek Greenway Phase II	Spring Place Park to Holston Middle School/Holston Hills		Construct greenway trail	2034
Tazewell Pike Reconstruction	Barker Road to Union County line	3.1	Reconstruct 2-lane section	2040

* This project is under the Wish Listed Roadway Projects that are not financially constrained in the *Long Range Regional Mobility Plan 2040*.

Northeast County Sector: Planned Roadway Improvements



Recommendations

In addition to the projects listed in the table and transportation plan above, the following are additional transportation projects to consider based on community input:

- Realignment of Fairview Road at the intersection of Tazewell Pike
- Realignment of Roberts Road at the intersection of Washington Pike
- The project to widen Emory Road from Maynardville Highway to Tazewell Pike should incorporate road vertical realignment to improve visibility of eastbound traffic on Emory Road from Majors Road.
- Parking accommodations at House Mountain State Natural Area are inadequate and need to be expanded.
- Wider shoulders should be incorporated with the widening of Emory Road.

Complete Streets

Complete streets are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists and transit riders of all ages and abilities are able to safely move along and across a complete street.

The greenway connectors, sidewalks, sidepaths, and bicycle lanes form types of complete streets. Future bicycle and pedestrian systems, as represented in the Knoxville/Knox County Parks, Greenway and Community Facilities Plan, could be implemented to bring a more complete street approach to the sector. As roads are improved, those bicycle and pedestrian systems should be constructed.

Considerations for more detailed road designs regarding complete streets should include:

- Washington Pike
- Emory Road
- Tazewell Pike
- Millertown Pike

Sidewalks

Priority areas include Parental Responsibility Zones (PRZ) where students do not have bus service to and

from school. In 1993, the Knox County Board of Education established guidelines for PRZ's in Knox County. These guidelines state that for elementary schools, students within an area of one mile from the school by the shortest route will not be provided transportation services by Knox County Schools. For middle and high schools, PRZ's are one and 1.5 miles, respectively.

The rural nature, topographic constraints, and dispersed development patterns in the Northeast County create difficulty when trying to provide sidewalk and pedestrian path connectivity. Residents and citizens voiced concern at public meetings over the lack of sidewalks. Participants in the online survey listed 'more sidewalks and pedestrian paths' as the third highest transportation priority, behind more vehicle capacity on major streets and improved safety near schools. Harbison Crossroads and Washington Pike were the two major road segments identified in the survey with the largest number of respondents believing better sidewalks/crosswalks should be implemented. The sector plan recommends sidewalks and pedestrian paths be made where placement and connectivity are feasible.

Section 3:

Five- and Fifteen-Year Improvement Plan

The improvement plans recommend projects and programs to be implemented for the first five and the next ten years following plan adoption. The 5-year plan should be reviewed annually in preparing the capital improvements program (CIP).

<i>Project or Program</i>	<i>5-Year</i>	<i>15-Year</i>	<i>Responsible Agency</i>
LAND USE			
Develop a small area plan for Harbison Crossroads and Gibbs Community to plan for the future addition of a Middle School, Emory Road and Tazewell Pike widening, and future residential growth	X		County/MPC
Develop a scenic corridor overlay district for commercial corridors – Emory Rd., Tazewell Pk., and Washington Pk.	X	X	City/County/MPC
Create new Agricultural zone in county to protect farmland and rural landscapes	X		City/County/MPC
Update the subdivision ordinance to include conservation subdivisions as a development alternative	X		City/County/MPC
Develop the Holston River Conservation Corridor plan		X	County/MPC
Update the Growth Policy Plan	X		City/County/MPC
COMMUNITY FACILITIES			
Work with Knox County Schools on site planning for the proposed Gibbs Middle School	X		Knox County Schools/MPC
Install flashing lights in school zone (particularly around Gibbs Elementary, High, and proposed Middle Schools	X		Knox County Schools
Extend the hours of operation for Corryton Library	X		County
Murphy Creek Greenway		X	City
Tennessee Holston River Greenway Phase II		X	City
Loves Creek Greenway Phase II from Spring Place Park to Holston Middle School/Holston Hills		X	City
Parking lot for House Mountain State Natural Area is inadequate and should be expanded		X	County/State
GREEN INFRASTRUCTURE			
Adopt conservation subdivision development ordinance for the preservation of farmland and/or open space	X		City/County
HISTORIC PRESERVATION			
Update the inventory of historic resources in the Northeast County Sector	X		County/MPC
TRANSPORTATION			
Fairview Road needs to be aligned where it intersects with Tazewell Pike	X		County
Fairview Road and Thompson School Road realignment	X		County
Roberts Road needs to be aligned where it intersects with Washington Pike		X	County
Turn lane added on Tazewell Pike before School Access to Gibbs High	X		County
Widening of Emory Road and Tazewell Pike from two lanes to four lanes		X	County
Tazewell Pike and Emory Road reconstruction of 2-lane sections		X	County
Widening of Washington Pike from I-640 to Murphy Road		X	City
Widening of Millertown Pike from I-640 to Mill Road		X	City

APPENDIX A: Public Participation

The following is a summary of community input for the Northeast County Sector Plan update from an online survey and public meetings.

ONLINE SURVEY SUMMARY

The survey contains 15 questions that deal primarily with land use, community facilities, and transportation in the Northeast County. A total of forty-six surveys were completed. The majority of participants (78 percent) believe the quality of life is good or excellent in the Northeast County, while mixed responses were submitted about growth with 26 percent feeling ‘too much’ occurred, versus 26 percent believe ‘too little.’

Land Use

The survey showed Harbison Crossroad (Tazewell Pike and Emory Road intersection) and Rutledge Pike as the two primary areas that respondents most supported new commercial land use. New office was also a supported land use along these two areas as well as Tazewell Pike. New multi-family (apartments) land use was supported along Tazewell Pike, Emory Road, and Millertown Pike, while Rutledge Pike garnered the largest support for new industrial land use.

Proposed land use projects from the *2003 Northeast County Sector Plan* were included in the survey. Participants were asked if the recommendations are still valid. Responses are provided below:

Washington Pike: A Rural Heritage Corridor

- 76 percent feel shoulders along Washington Pike should be widened and intersection improvements with turning lanes added
- 67 percent believe new residential development along Washington Pike should consist of conservation subdivisions

Millertown Pike: A Growing Residential Corridor

- 72 percent feel surface mining should not be expanded beyond present operating locations and reclamation should occur quickly
- 69 percent believe developing subdivisions should include recreational amenities
- 60 percent feel the north side of Millertown Pike should be included in the planned growth area when the Growth Policy Plan is updated

Rutledge Pike: A Development Corridor

- 78 percent believe historic sites located along the river should be preserved with any new development
- 69 percent feel large parcels developed as residential should be encouraged to use traditional neighborhood design concepts
- 63 percent believe transportation related highway-commercial and scattered light industrial uses along Rutledge Pike should be contained to areas shown on the 2003 Future Land Use Plan
- 62 percent feel intersections connecting Millertown Pike with Rutledge Pike are good locations for neighborhood or community retail
- 59 percent believe community-serving retail, residential homes, including condos and apartments should be encouraged

Murphy Road: An Attractive Gateway into Northeast Knox County

- 75 percent feel floodplain protection areas around Loves Creek should be acquired by Knox County and used for recreational purposes
- 63 percent believe neighborhood commercial services at Washington Pike should connect by sidewalk to existing and future residential areas
- 55 percent agree with the extension of Murphy Road (through Babelay farm) to Mill Road, near Millertown Pike
- 39 percent agree with the general location of Murphy Road as proposed in the Murphy Road Concept Plan

Tazewell Pike: Future School Sites

- 90 percent believe opportunities for park and recreation facilities to compliment the school grounds should be pursued
- 85 percent feel safe pedestrian connections need to be identified from Gibbs Elementary and High School complexes
- 77 percent believe traditional neighborhood development style should be considered for residential development around school
- 76 percent feel sidewalks should be built in all new subdivisions approved around existing school sites
- 75 percent believe there should be a branch library on Tazewell Pike in the Gibbs community
- 69 percent feel civic components of a village center should be created at Harbison Crossroads

Transportation

The survey revealed the top three general transportation priorities are:

1. More vehicle capacity on major streets,
2. Improved safety near schools, and
3. More sidewalks and pedestrian paths/bike trails where they do not exist today.

The top priorities along specific roads and intersections in the Northeast County are:

- Harbison Crossroad (Tazewell Pike and Emory Road intersection) – less congestion (78 percent)
- Corryton Crossroad (Corryton Road and Corryton Luttrell Road intersection) – wider shoulders (62 percent)
- Emory Road – wider shoulders (59 percent)
- Rutledge Pike – street trees and landscaping (33 percent)
- Millertown Pike – wider shoulders (59 percent)
- Washington Pike – wider shoulders (61 percent)
- Tazewell Pike – less congestion (57 percent)

Community Facilities

The survey yielded the following responses regarding parks and greenways in the Northeast County.

- Corryton Park was the only park where respondents reported daily use
- Gibbs Ruritan Park reported the largest number of weekly usage
- House Mountain Park was the park most frequented a couple times a year
- Mascot Park had the highest number of respondents who did not use the park with 92 percent

PUBLIC MEETINGS SUMMARY

Round One: The Knoxville Knox County Metropolitan Planning Commission held three public meetings for the Northeast County Sector Plan update on April 21st (New Harvest Park), April 23rd (Corryton Senior Center), and April 29th (Gibbs Ruritan Club). At each meeting, a presentation was given on the sector planning process, background report, and three major components of a sector plan (land use, transportation, and community facilities). Attendees were encouraged to provide comments with opportunities for public discussion. Below is a summary of comments and major themes received during the three meetings.

Land Use

- Concerns surrounding Knoxville Center Mall (located just outside the Northeast County) and the amount of vacant space (How will this space be reused or redeveloped)
- The commercial area surrounding Harbison Crossroads and how it will grow
- The loss of farmland to residential development
- Density allowed in the Agricultural zoning works against preservation
- Maintaining the rural character within the Northeast County, particularly in the Corryton area
- An update of the historic resources inventory in the Northeast County
- The desire for a new Gibbs Middle School in the Gibbs community and the concern it will bring more development
- Further expansion of wastewater and residential into the Rural Area of the Growth Policy Plan

Transportation

- How growing residential development will increase traffic volume and capacity on narrow roads
- Many of the roads in the Northeast County are narrow and should incorporate shoulders where possible
- Bridges along Emory Road and Washington Pike are narrow and should be widened
- Sidewalks and greenways were routinely mentioned with connectivity to Gibbs Elementary and High Schools, to the surrounding Ruritan Park and Harbison Crossroad
- Bicycle lanes and how to accommodate cyclists on Washington Pike, Millertown Pike, and Tazewell Pike

Community Facilities

- Corryton Community Center, Park and Library could be better utilized from extended library hours, to summer programs and events at the park.
- Corryton Elementary School should remain open and potentially return to a K-8.
- The road (Hogskin Road) leading to House Mountain and parking lot are inadequate.
- Greenway extension should be made connecting the existing Loves Creek greenway to Walmart and other retail in the vicinity
- Requiring right of way along edge of future development for connectivity with greenways and sidewalks
- Equestrian trails on farms
- Access to the Holston River for non-motorized and park activity

Round Two: The Knoxville Knox County Metropolitan Planning Commission held a second round of public meetings for the Northeast County Sector Plan update on September 17, 2015 (Corryton Senior Center), September 21, 2015 (Gibbs Ruritan Club), and September 22, 2015 (East Knox Elementary). At each meeting, a presentation was given providing a brief overview of sector planning, results from the online survey and first round of public meetings, as well as highlights of the proposed land use recommendations for the Northeast County. Attendees were encouraged to provide feedback on the draft land use recommendations through public discussion. Below is a summary of comments received during the three meetings.

- The lack of parks and greenway usage in the online survey result more from the limited number of opportunities in the Northeast County
- All references to PlanET need to be removed from the background report and draft plan.
- With the tentative construction of a new Gibbs middle school, greenways and/or sidewalks need to be added in front of school and along adjacent properties for connectivity to the south (Harbison Crossroads) and to the north (Gibbs Ruritan Club)
- Corryton Park has no activities, leagues, etc.
- Concerns about updating the Growth Policy Plan regarding how the current land classifications will change, who are the people needed to initiate this update process, and if it will really happen (Political reality of update to this plan is bleak)
- Concern over proposed land use of Low Density Residential (LDR) for Strong Stock farm. This is not the Agriculture land use property owners originally asked for. The LDR will only encourage adjacent properties to develop.
- Concern over language in draft plan regarding how land west of Roberts Road should be evaluated for Planned Growth designation
- Participants were interested in having a third public meeting.

Round Three: Public Meeting Summary: The Knoxville Knox County Metropolitan Planning Commission held a third public meeting for the Northeast County Sector Plan update on October 20, 2015 (East Knox Elementary) at the request of participants. A brief presentation was given providing changes to the draft recommendations based on the second round of public meetings.

APPENDIX B: Land Use Classifications

AGRICULTURAL and RURAL RESIDENTIAL LAND USE CLASSIFICATIONS		
Agricultural (AG) and Agricultural Conservation (AGC) This includes farmland in the county's Rural Area as designated in the Growth Policy Plan. Undeveloped tracts with the best soils for agriculture are considered as the primary areas for agricultural conservation (AGC). Agricultural land uses are not generally recommended in the City of Knoxville, nor in the County's Planned Growth Area.		
Location Criteria: <ul style="list-style-type: none"> Farmland in the Rural Area as designated in the Growth Policy Plan Land where soils are designated as prime or locally important by the U.S. Department of Agriculture are considered for agricultural conservation (AGC) 	Recommended Zoning and Programs: County's Rural Area: A new zone AC (Agricultural Conservation) is proposed for Agricultural Conservation (AGC) areas, allowing agriculture and one dwelling unit per 30 acres, minimum. (Note: This density will require a change to the zoning ordinance.) Additionally, conservation easement and related programs should be considered to preserve prime farmland.	Other Zoning to Consider: A or PR @ densities of one dwelling unit per acre where dwellings are clustered in one portion of a subdivision.
Rural Residential (RR) Very low density residential and conservation/cluster housing subdivisions are typical land uses.		
Location Criteria: <ul style="list-style-type: none"> Rural areas characterized as forested (tree covered), especially on moderate and steep slopes Sites adjacent to agricultural areas (AG or AGC) where conservation/cluster housing subdivisions may be appropriate 	Recommended Zoning and Programs: County's Rural Area: OS, E, RR (Rural Residential, a new zone with densities of one dwelling unit per acre or less), or PR @ densities of one dwelling unit per acre where dwellings may be clustered in one portion of a subdivision	Other Zoning to Consider: A in the Growth Plan's Rural Area
RESIDENTIAL LAND USE CLASSIFICATIONS		
Traditional Neighborhood Residential (TDR) This land use is primarily residential and is characterized by neighborhoods where a mix of detached and attached houses, sidewalks, smaller lots and alleys have typically been or are to be created. Densities in the range of 4 to 8 dwelling units per acre are typical.		
Location Criteria: <ul style="list-style-type: none"> Neighborhoods like those in the 'Heart of Knoxville' where lots are typically less than 50 feet wide, and usually have sidewalks and alleys. This area is essentially the 19th and early 20th century grid street neighborhoods, mostly located within the I-640 beltway. City's Urban Growth Area or county's Planned Growth Areas where neighborhood or community mixed use development is identified (see Mixed Use and Special Districts section) 	Recommended Zoning and Programs: City: R-1A or RP-1 [with an Infill Housing (IH-1), Neighborhood Conservation (NC-1) or Historic (H-1) Overlay]; TND-1; and new residential zone(s), based on lot sizes less than 7,500 square feet County's Planned Growth Area: PR and new TND zoning.	Other Zoning to Consider: City: R-1, R-1A and RP-1 (without overlays), R-2 County's Planned Growth Area: RA, RB and PR (with conditions for sidewalks, common open spaces and alleys)

RESIDENTIAL LAND USE CLASSIFICATIONS . . . continued

Low Density Residential (LDR)

This type of land use is primarily residential in character at densities of less than 6 dwelling units per acre (dus/ac). Conventional post-1950 residential development (i.e. large-lot, low-density subdivisions) and attached condominiums are typical.

Location Criteria: <ul style="list-style-type: none"> • Land served by water and sewer utilities and collector roads • Slopes less than 25 percent 	Recommended Zoning and Programs: City: R-1, R-1E and RP-1 at less than 6 dus/ac and new residential zones based on lot sizes greater than 7,500 square feet and 75 feet or greater frontage. County's Planned Growth Area: RA, RAE and PR at less than 6 dus/ac.	Other Zoning to Consider: City: R-1A and A-1 County: A and RB
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Medium Density Residential (MDR)

Such land uses are primarily residential at densities from 6 to 24 dwelling units per acre (city) and 6 to 12 (county). Attached houses, including townhouses and apartments are typical. Mobile home parks are another form of this land use.

Location Criteria: <ul style="list-style-type: none"> • As transitional areas between commercial development and low density residential neighborhoods • On land with less than 15 percent slopes • Along corridors that are served by or proposed to be served by transit, with densities proposed to be above 12 dwelling units per acre and to be served by sidewalks 	Recommended Zoning and Programs: City: R-2, R-3 and R-4 (within the 'Heart of Knoxville' area such zoning should be accompanied by an IH-1, NC-1 or H-1 overlay); otherwise, R-1A, RP-1, RP-2 or RP-3. Densities above 12 dus/ac should be within ¼ mile of transit service with sidewalk connections to transit service. County's Planned Growth Area: PR, densities above 12 dus/ac should be within ¼ mile of transit service with sidewalk connections to transit service; RB at 6 or more dus/ac may be considered with use on review. (Note: This proposed 6 dus/ac threshold for use on review will require a zoning ordinance change.)	Other Zoning to Consider: City's Urban Growth Boundary: R-2, R-3 and R-4
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High Density Residential (HDR)

This land use is primarily characterized by apartment development at densities greater than 24 dwelling units per acre.

Location Criteria: <ul style="list-style-type: none"> • On major collector and arterial streets, adjacent to regional shopping and major office districts (office sites allowing four or more stories); these sites must be identified in sector or small area plans • Within the CBD or its adjacent areas, such as portions of the Morningside community • On relatively flat sites (slopes less than 10 percent) • Along corridors with transit and sidewalks 	Recommended Zoning and Programs: City: C-2, RP-2 and RP-3, and new form-based codes (e.g. South Waterfront). R-3 and R-4 (with an IH-1, NC-1 or H-1 overlay in the 'Heart of Knoxville' area)	Other Zoning to Consider: TC-1 and TC (where higher density residential is part or a mixed-use project)
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RESIDENTIAL LAND USE CLASSIFICATIONS . . . continued

Medium Density Residential/Office (MDR/O)

Office and medium residential uses typically have similar development characteristics: scale of buildings, areas devoted to parking, yard spaces and location requirements (on thoroughfares). In areas designated MU-MDR/O, either use can be created. These uses provide a buffer to low density residential areas, particularly when located adjacent to a thoroughfare or as a transition between commercial uses and a neighborhood.

Location Criteria:	Recommended Zoning and Programs:	Other Zoning to Consider:
<ul style="list-style-type: none"> See Medium Density Residential (MDR) criteria 	City: RP-1, RP-2, RP-3 County: PR	City: O-1, O-2 County: OB

OFFICE and BUSINESS/TECHNOLOGY LAND USE CLASSIFICATIONS

Office (O)

This land use includes business and professional offices and office parks.

Location Criteria:	Recommended Zoning and Programs:	Other Zoning to Consider:
<ul style="list-style-type: none"> Low intensity business and professional offices (less than three stories) may be transitional uses from commercial or industrial uses to neighborhoods Generally level sites (slopes less than 15 percent) Access to major collector or arterial streets, particularly within one-quarter mile of such thoroughfares Highest intensity office uses (development that is four or more stories), should be located in close proximity to arterial/freeway interchanges or be served by transit 	City: O-1, O-2, O-3, or a new office zone that requires site plan review County's Planned Growth Area: OA, OC, PC (with covenants) or a new office park zone that requires site plan review	In areas that are identified in sector plans exclusively as office land uses, OB.

Technology Park (TP)

This land use primarily includes offices and research and development facilities. The target area for such development has been the Pellissippi Technology Corridor. Additional districts could be created in other areas of the city or county. The development standards that are adopted by the Tennessee Technology Corridor Development Authority should be used for such districts.

Location Criteria:	Recommended Zoning and Programs:	Other Zoning to Consider:
<ul style="list-style-type: none"> Within the Technology Corridor or subsequent areas designated for Technology Park development Sites near freeway interchanges or along major arterials Water, sewer and natural gas utilities available 	City: BP-1 County's Planned Growth Area: BP and PC (with covenants limiting uses to research/development)	EC (with limitations to require office and research/development uses)

RETAIL and RELATED SERVICES LAND USE CLASSIFICATIONS

Rural Commercial (RC)

This classification includes retail and service-oriented commercial uses intended to provide rural communities with goods and services that meet day-to-day and agricultural-related needs.

Location Criteria:	Recommended Zoning and Programs:	Other Zoning to Consider:
<ul style="list-style-type: none"> At the intersection of two thoroughfares (arterial or collector roads) Rural commercial nodes should generally not exceed more than 300 feet in depth and lots and not extend more than 300 feet away from the intersection 	County's Rural Area: CR PC as provided in Growth Policy Plan	CN

RETAIL and RELATED SERVICES LAND USE CLASSIFICATIONS . . . continued

Neighborhood Commercial (NC)

This classification includes retail and service-oriented commercial uses intended to provide goods and services that serve the day-to-day needs of households, within a walking or short driving distance. Neighborhood commercial uses may also be accommodated within neighborhood centers (see Mixed Use and Special Districts).

Location Criteria: <ul style="list-style-type: none"> • Generally located at intersections of collectors or arterial streets at the edge of or central to a neighborhood • New NC should not be zoned for or developed within ½ mile of existing commercial that features sales of day-to-day goods and services • Automobile-oriented uses (e.g. gas stations or convenience stores) should be located on arterial street at the edge of neighborhood • Should not exceed the depth of the nearby residential lots and not extend more than a block (typically no more than 300 feet) away from the intersection 	Recommended Zoning and Programs: City: C-1 County's Planned Growth Area: CN	Other Zoning to Consider: SC-1
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Community Commercial (CC)

This land use includes retail and service-oriented development, including shops, restaurants, and what has come to be known as "big box" retail stores; typical service area includes 20,000 to 30,000 residents. Community commercial uses may also be considered within community centers (see Mixed Use and Special Districts).

Location Criteria: <ul style="list-style-type: none"> • Locate at intersection of arterial streets • Sites should be relatively flat (under 10 percent slope) and with enough depth to support shopping center and ancillary development. • Vehicular and pedestrian connections should be accommodated between different components of the district (e.g. between stores, parking areas and out-parcel development) • Infrastructure should include adequate water and sewer services, and major arterial highway access • Community commercial centers should be distributed across the city and county in accordance with recommended standards of the Urban Land Institute 	Recommended Zoning and Programs: Because of traffic and lighting impacts (potential glare) and buffering needs of surrounding interests, 'planned zones' should be used. City: SC-2, PC-1 and PC-2. County's Planned Growth Boundary: PC or SC	Other Zoning to Consider: As infill development within areas already zoned C-3, C-4, C-5 and C-6 (City), and CA, CB and T (County)
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RETAIL and RELATED SERVICES LAND USE CLASSIFICATIONS . . . continued

Regional Commercial (RS)

This land use includes retail and service-oriented development that meets the needs of residents across Knox County and surrounding areas. Development typically exceeds 400,000 square feet; malls have been a typical form and 'life-style centers' (e.g. Turkey Creek) are examples of regional-oriented commercial uses. Regional commercial uses may also be considered in Regional Centers (see Mixed Use and Special Districts).

Location Criteria: <ul style="list-style-type: none"> • Flat sites (under 10 percent slope) • Locate near interstate interchanges with major arterial highway access • Water, sewer, gas and stormwater systems should be capable of handling the development • Vehicular and pedestrian connections should be accommodated between components of the development 	Recommended Zoning and Programs: Because of the magnitude of the traffic and environmental impacts, planned zones should be used. City: SC-3, PC-1 and PC-2 County's Planned Growth Boundary: PC	Other Zoning to Consider: As infill development within areas already zoned C-3, C-4, C-5 in the City CA, CB and SC in the County
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General Commercial (GC)

This category includes previously developed strip commercial corridors providing a wide range of retail and service-oriented uses. Such land use classification and related zoning should not be extended because of the adverse effects on traffic-carrying capacity, safety and environmental impacts. Redevelopment of commercial corridors, including mixed use development, should be accommodated under planned or design-oriented zones.

Location Criteria: <ul style="list-style-type: none"> • Existing commercial areas 	Recommended Zoning and Programs: City: C-6 and PC-1 County's Planned Growth Area: PC New corridor design overlays when designated as special districts (see Mixed Use and Special Districts)	C-3, C-4, C-5, SC-1, SC, CA and CB for infill commercial development in areas previously zoned for commercial uses
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MIXED USE and SPECIAL DISTRICTS

There are several types of mixed-use areas: neighborhood, community and regionally-scaled districts and urban corridors. Mixed Use areas can be developed with higher intensity uses because of infrastructure and ability to sustain alternative modes of transportation. Development plan review is crucial. These areas should typically be created with sidewalks. Shared parking may be considered. Automobile and truck-dependent uses, such as heavy industrial, distribution and highway-oriented commercial uses should not be located in neighborhood, community and regional mixed-use centers. There are likely to be several distinctions between types of mixed use designations. Each Sector Plan and the One Year Plan will have a separate section which outlines the intent of each mixed use district and the development criteria for the district.

Neighborhood Mixed Use Center (MU-NC)

These are the least intense of the proposed mixed use districts. Residential densities of 5 to 12 dus/ac are appropriate within the area. Locations at the intersection of a local street and thoroughfare are generally most appropriate. The surrounding land uses should primarily be planned for low or medium density residential. The buildings of these centers should be designed with a residential character and scale to serve as a complement to the surrounding neighborhoods.

Location Criteria: <ul style="list-style-type: none"> • Flat terrain (slopes generally less than 10 percent) • Currently served by or planned to be served by sidewalks • The location does not include auto and truck-oriented uses such as industrial, strip commercial and warehouse/distribution uses unless the proposal calls for a redevelopment of such areas • At the intersection of a local street and throughfare • Next to low or medium density residential 	Recommended Zoning and Programs: TND-1	Other Zoning to Consider: Other form- or design-based codes
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MIXED USE and SPECIAL DISTRICTS . . . continued

Community Mixed Use Center (MU-CC)

These centers are envisioned to be developed at a moderate intensity with a variety of housing types (8 to 24 dus/ac). The core of the district, with its predominant commercial and office uses, should be within ¼ mile of the higher intensity residential uses (such as townhouses and apartments). The district should be located within a ¼-mile radius of an intersection of the thoroughfare system (a collector/arterial or arterial/arterial intersection). In addition to sidewalks, the district should be served by transit. Redevelopment of vacant or largely vacant shopping centers are considerations for these centers.

Location Criteria: <ul style="list-style-type: none"> • Flat terrain (slopes generally less than 10 percent) • Areas currently served by or planned to be served by sidewalks • The location does not include auto and truck-oriented uses such as industrial, strip commercial and warehouse/distribution uses unless the proposal calls for a redevelopment of such areas • Within a ¼-mile radius of an intersection of the thoroughfare system (a collector/arterial or arterial/arterial intersection) • Commercial/office core should be within ¼ mile of the higher intensity residential uses (e.g. townhouses and apartments) • Areas currently served by or planned to be served by sidewalks and transit services 	Recommended Zoning and Programs: TC-1, TC	Other Zoning to Consider: Other form- or design-based codes
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Regional Mixed Use Center (MU-RC)

These are envisioned to be highest intensity mixed use centers. These districts should be served by sidewalk and transit systems and be located on a major arterial, adjacent to an Interstate highway or adjacent to downtown. Housing densities in the core of such districts can be 24 or more dus/ac. Downtown Knoxville's Central Business District is a regional mixed use center.

Location Criteria: <ul style="list-style-type: none"> • Flat terrain (slopes generally less than 10 percent) • Currently served by or planned to be served by sidewalks • The location does not include auto and truck-oriented uses such as industrial, strip commercial and warehouse/distribution uses unless the proposal calls for a redevelopment of such areas • On a major arterial, adjacent to an interstate highway or adjacent to downtown 	Recommended Zoning and Programs: C-2 in the Central Business District (Downtown); an adaptation of C-2 for the 'Downtown North' area (Central City Sector); TC-1, TC or new form-based codes (and regulating plans) for other community and regional centers	Other Zoning to Consider: Other form- or design-based codes
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Urban Corridor Mixed Use (MU-UC)

Several street corridors within the city have potential for redevelopment with a mix of retail, restaurants, office and residential uses. Commercial cores should be created at points (nodes) along these corridors, allowing a vertical mix of uses (for example, shops at ground level and apartments above); such nodes should not be more than four blocks long.

Location Criteria: <ul style="list-style-type: none"> • Corridors should have sidewalks, transit services, street trees and related beautification • Capable of sustaining on-street parking along corridor or along side streets 	Recommended Zoning and Programs: City: form-based or design-based codes (e.g. South Waterfront)
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MIXED USE and SPECIAL DISTRICTS . . . continued

Mixed Use Special District (MU-SD)

These can include designations to address urban design, pedestrian and transit-oriented development and vertical mixed use in designated areas. The areas may include older portions of the city or county where redevelopment and/or preservation programs are needed for revitalization purposes.

Location Criteria:

- Case-by-case analysis is recommended

Recommended Zoning and Programs:

TND-1, TC-1, TC, especially in greenfield areas, or form-based or designed-based codes as noted in the Sector Plan and One Year Plan for each of these districts.

Mixed Use Special Corridors (MU-CD)

These can include designations to address urban design and environmental concerns along commercial or industrial corridors (where overlays for aesthetic reasons or sidewalks may be recommended, like the Chapman Highway corridor). Other potential corridor designation could include rural/farmland conservation areas.

Location Criteria:

- Case-by-case analysis is recommended

Recommended Zoning and Programs:

Should be noted in the Sector Plan and One Year Plan for each of these districts.

INDUSTRIAL AND WAREHOUSE/DISTRIBUTION LAND USE CLASSIFICATIONS

Light and Heavy Industrial (LI and HI) and Mining (HIM)

These classifications are typically used to identify older industrial areas, which were intended for manufacturing, assembling, warehousing and distribution of goods. Light industrial uses include such manufacturing as assembly of electronic goods and packaging of beverage or food products. Heavy industrial uses include such processes used in the production of steel, automobiles, chemicals, cement, and animal by-products and are viewed as clearly not compatible with areas designated for residential, institutional, office and retail uses. Quarry operations and asphalt plants are a particular form of heavy industrial, generally located in rural areas.

Location Criteria:

- Existing industrial areas
- Within one mile of an interstate interchange with access via standard major collector or arterial streets

Recommended Zoning and Programs:

City: I-1, I-2, I-3 and I-4 (infill development, using those zones, may be appropriate); C-6, PC-2 and a new planned, industrial zone, that requires site plan review, may be warranted to address environmental and transportation issues and surrounding community concerns.
County's Planned Growth Boundary: LI; EC zone should be used in future development

Other Zoning to Consider:

County: I (Industrial) zoning should be used in cases involving rezonings to accommodate mining activities and should be accompanied by buffering and other conditions to protect adjacent property owner. PC, LI, I and CB may be considered for infill industrial development.

Business Park Type 1 (BP-1)

Primary uses are light manufacturing, office and regionally-oriented warehouse/distribution services in which tractor-trailer transportation is to be a substantial portion of the operations. A zoning category which requires site plan review is expected in the development or redevelopment of such areas. Site plans shall address landscaping, lighting, signs, drainage, and other concerns that are raised in the rezoning process. Substantial landscaped buffers are expected between uses of lesser intensity, particularly residential, office and agricultural uses.

Location Criteria:

- Relatively flat sites (predominant slopes less than 6 percent) out of floodplains
- Relatively large sites (generally over 100 acres)
- Away from low and medium density areas or where truck traffic would have to go through such areas
- Areas with freeway and arterial highway access (generally within two miles of an interchange)
- Rail access is a consideration
- Can be served with sanitary sewer, water and natural gas

Recommended Zoning and Programs:

City: I-1, C-6, PC-2 or a new Planned Industrial Park zone

County's Planned Growth and Rural Areas: EC

Other Zoning to Consider:

PC

INDUSTRIAL AND WAREHOUSE/DISTRIBUTION LAND USE CLASSIFICATIONS . . . continued

Business Park Type 2 (BP-2)

Primary uses are light manufacturing, offices, and locally-oriented warehouse/distribution services. Retail and restaurant services, which are developed primarily to serve tenants and visitors to the business park can be considered. A zoning category which requires site plan review is expected in the development or redevelopment of such areas. Site plans must include provisions for landscaping, lighting and signs. Substantial landscaped buffers are necessary between uses of lesser intensity, particularly residential, office and agricultural uses.

Location Criteria: <ul style="list-style-type: none"> • Relatively flat sites (predominant slopes less than 6 percent) out of floodplains • Relatively large sites (generally over 100 acres) • Away from low and medium density areas or where truck traffic would have to go through such areas • Freeway and arterial highway access (generally within two miles of an interchange) • Rail access is a consideration • Sites that can be served with sanitary sewer, water and natural gas 	Recommended Zoning and Programs: City: I-1, C-6, PC-2 or a new Planned Industrial Park zone County's Planned Growth and Rural Areas: EC	Other Zoning to Consider: PC
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PARK, PUBLIC INSTITUTIONAL, OTHER OPEN SPACE & ENVIRONMENTAL PROTECTION LAND USE CLASSIFICATIONS

Public Parks and Refuges (PP)

This land use classification contains existing parks, wildlife refuges or similar public or quasi-public parks, open spaces and greenways. It also contains quasi-public spaces, which are owned by civic or related organizations. Location criteria is not needed relative to large components of the park system, like community, district and regional parks and refuges; these areas are generally established through capital expenditures or land transfers from state or federal governments.

Location Criteria: <ul style="list-style-type: none"> • Neighborhood parks, squares and commons should be within ¼ mile of residents in the traditional residential areas (particularly the 'Heart of Knoxville') and within ½ mile of residents within the balance of the city and county's Planned Growth area. • Greenways should be located along or within the flood plains of streams and rivers/reservoirs. Other potential locations include ridges and utility corridors. 	Recommended Zoning and Programs: City: OS-1 County's Planned Growth and Rural Area: OS, E and OC A new zone should be created to designate parks, schools and similar institutional lands for both city and county jurisdictions.	Other Zoning to Consider: Other zones that allow parks and open space as permitted uses.
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Civic/Institutional (CI)

Land used for major public and quasi-public institutions, including schools, colleges, the university, churches, correctional facilities, hospitals, utilities and similar uses.

Location Criteria: <ul style="list-style-type: none"> • Existing public uses, other than parks and greenways • Quasi-public uses of two acres or more 	Recommended Zoning and Programs: City and County: New zoning categories for such uses or continue to use conventional zones (e.g. O-1, O-2 and OC)	Other Zoning to Consider: Other zones that allow civic/institutional as permitted uses.
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Other Open Space (OS)

Land uses include cemeteries, private golf courses, and similar uses.

Location Criteria: <ul style="list-style-type: none"> • Existing cemeteries, private golf courses and private open spaces 	Recommended Zoning and Programs: City: OS-1 and a new zone created to designate parks, schools and similar institutional lands County's Planned Growth and Rural Area: OS, E and OC	Other Zoning to Consider: A-1, and A
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PARK, PUBLIC INSTITUTIONAL, OTHER OPEN SPACE & ENVIRONMENTAL PROTECTION LAND USE CLASSIFICATIONS . . . continued

Hillside/Ridge Top Protection Areas (HP)

This classification is used to identify hillsides, ridges and similar features that have a slope of 15 percent or more. Open space, recreation land or very low density housing (one dwelling unit per two acres) is recommended for slopes exceeding 25 percent. For slopes of 15 to 25 percent, housing densities should not exceed 2 dus/ac). Office uses may also be considered. Building height should not exceed 35 feet.

Location Criteria: <ul style="list-style-type: none"> Hillsides greater than 15 percent slope 	Recommended Zoning and Programs: City: RP-1, OS-1 and a new hillside protection zoning overlay, that has standards for various residential and office land uses and the amount of land disturbance that can take place relative to the degree of slope. County's Planned Growth and Rural Areas: OS, E, A (on slopes less than 15 percent) and PR; a new hillside protection zoning overlay, that has standards for various residential and office land uses and the amount of land disturbance that can take place relative to the degree of slope.	Other Zoning to Consider: Other zones that require use-on-review
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Stream Protection Areas (SP)

Typically these are areas which are subject to flooding. Such areas include both the floodway, which carries the significant portion of stormwater, and the 500-year flood fringe, which the city and county govern with various stormwater regulations.

Location Criteria: <ul style="list-style-type: none"> Floodways and flood fringes 	Recommended Zoning and Programs: City: F-1 and 'planned zones' (such as RP-1 and PC-1), which entail site plan review. County's Planned Growth Area: F and 'planned zones' (such as PR and PC), that require site plan review to address flooding and stream protection issues
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Water (W)

Typically includes the French Broad River, Holston River, Fort Loudoun Lake/Tennessee River, and Melton Hill Lake/Clinch River.

Location Criteria: <ul style="list-style-type: none"> Rivers, TVA reservoirs 	Recommended Zoning and Programs: City: F-1 County: F
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Major Rights of Way (ROW)

Generally, the rights-of-way of interstates and very wide parkways and arterial highways are depicted on the future land use map.

KNOXVILLE • KNOX COUNTY

M P C

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