



North City Sector Plan



June 2007

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page 16

Photograph of the Dummy Line street car courtesy of the
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Chapter 1:

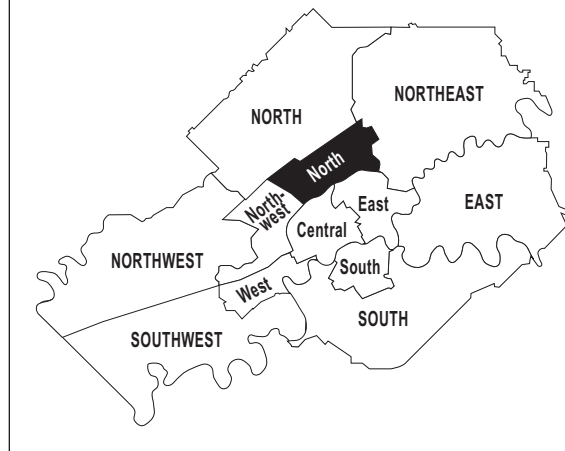
Introduction

The Knoxville-Knox County Metropolitan Planning Commission (MPC) divides Knox County into twelve planning sectors based on census tract boundaries. The North City Sector Plan is one of the twelve sector plans prepared for the City and County. The focus of a sector plan is on physical development: land use, transportation, and community facilities. The North City Sector contains an area of 10,798 acres (approximately 16.87 square miles).

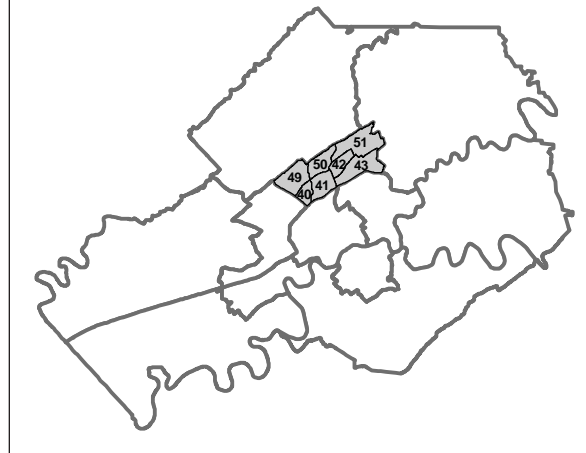
The boundaries of the North City Sector include Interstate 640 on the south and Interstate 75 to the west. The northern boundary is made up of Dante Road, Rifle Range Road, Brown Gap Road, and Carter Road. The eastern boundary follows Luttrell Road, Washington Pike, and Mill Road. The sector boundaries are consistent with census tracts 40, 41, 42, 43, 49, 50, and 51. Since the sector follows the census tract boundaries, it extends beyond the city limits and includes unincorporated portions of Knox County in the northeast corner of the sector.

This sector plan is part of the overall Knoxville-Knox County comprehensive planning program, which also includes the General Plan and the Growth Policy Plan. Each of those plans has a bearing on policies which affect the various sectors. The development policies of the General Plan are presented in Appendix A. The Growth Policy Plan outlines an area for future Knoxville growth and a Planned Growth Area with Knox County where the moderate intensities of land

Map 1: The MPC Planning Sectors



Map 2: Census Tracts of the North City Sector



development (such as suburban subdivisions and commercial projects) may take place. The growth policies also are directed to conservation of a Rural Area and such environmental resources as steep slopes and stream corridors. Those policies are contained in Appendix B.

CONTENTS

All sector plans contain a background report, a plan for community improvements, and a land use plan. The background report outlines existing conditions in the sector and contains information on environmental resources, development trends, and characteristics of the population. It serves as a tool to help the community identify development opportunities and plan for the future. Remaining sections include a comprehensive plan for future physical development of the sector. Additionally, this plan contains a Small Area Plan for Fountain City.

PURPOSE OF THE PLAN

- Identify significant environmental and historic resources
- Recognize development constraints and issues
- Explore special development opportunities, including recommendations for Fountain City
- Create land use, community facility and transportation plans proposals to guide development over the next 15 years
- Outline capital improvements and programs to implement plan proposals over the next five years



SUMMARY OF INPUT

A public workshop was held to identify what residents feel should be accomplished with future planning and development. Additionally, residents were given the opportunity to fill out a questionnaire. The following is a summary of those concerns:

Land Use & Neighborhoods

- Support for Infill Housing Overlay and protection of older neighborhoods
- RB (General Residential) Zone change to RA (Low Density Residential) Zone in the Beverly area – generally supported
- Medium Density Residential along Central Avenue Pike – some support
- Merchants Road/Shasta Drive area – create office transition to the south and require landscaping buffers
- Central Avenue Pike area – concerns were expressed about commercial encroachment into neighborhoods. Potential considerations include:
 - older homes could be renovated for office use
 - maintain medium density residential or low density residential



New commercial development along Broadway incorporates sidewalks and landscaping.



Residents support a greenway connection from Fountain City to Downtown.

Transportation Concerns

- Amount of traffic on Broadway
- Recommend replacing lane with median on Broadway and landscaping
- TDOT should landscape I-640 exit
- Code provision for sidewalks and pedestrian connectivity
- Request for sidewalks

Community Facilities

- Create and maintain historic designation sites and districts
- Sterchi Greenway should connect to Sterchi Elementary
- Create First Creek Greenway that would run through Fountain City to Downtown
- Safety at Sharps Ridge Park is a concern (this park is nearby in the Central City Sector)

SIGNIFICANT CHANGES SINCE LAST SECTOR PLAN UPDATE

Some projects, land development, and community facilities have been completed since 1998 when the previous plan was adopted. Additionally, the adopted Knoxville-Knox County General Plan 2033 and the Knoxville, Farragut and Knox County Growth Plan have a bearing on area-wide growth and transportation issues.

Land Use & Zoning Changes

- Commercial redevelopment of some parcels along Broadway
- Kohl's property
- Redevelopment of Farmer's Market Site for commercial and park use

Transportation Projects

- Washington Pike project
- Cedar Lane traffic lights and road alignment



Good interstate access allows for new commercial uses at the former Farmer's Market site.

- Callahan Drive/Dante Road at Central Avenue Pike – traffic signals and additional lanes
- Murphy Road from Washington Pike to Tazewell Pike – increased lane width/turn lanes
- Maple Drive – flooded properties were purchased and structures were removed

Community Facility Additions

- Fountain City Branch Library at Essary Road
- Art Center in old library location
- Extension of Adair Park
- Extension of Sterchi Soccer Complex
- Sue Clancy Greenway trail
- Master plan for Tommy Schumpert Park
- New Harvest Park under construction



Road improvements along Cedar Lane include turn lanes to relieve congestion.



The new library provides display space, a meeting room, a children's reading nook, as well as an outdoor reading area.



Aerial view of the predominately commercial Broadway corridor

Chapter 2:

Background Report

POPULATION AND GROWTH TRENDS

The North City sector's population slowly increased from the 1990 to 2000 census. It gained roughly 2,000 people, rising to 25,343. It has continued to grow with an estimated 2005 population of 28,402. The largest growth has occurred in Census Tract 51 (Beverly area), which contains 65 percent of the growth since 1996. The population density is relatively low, only 2.35 persons per acre.

DEMOGRAPHIC CHARACTERISTICS

(As reflected in the 2000 census)

The median age of the area, 38.6, is slightly higher than the median age of Knox County, which is 36. This increase is due to the fact that 18 percent of the sector's residents are 65 years or older. Also there have been the several new attached condominium developments constructed that are typically marketed to baby boomers and retired people.

- Table 1 shows housing characteristics from the 1990 and 2000 census.
- Table 2 shows population by sex, age and race.
- The average household income (1999) is \$35,400 which is just slightly below the County average of \$37,500.

Table 1: Housing Characteristics North City Sector		1990	2000
Total Households		10,447	11,486
Families		6,680	6,744
Married Couples		5,294	5,153
Single Parent Families with Children under 18		773	813
Male Headed		97	195
Female Headed		676	618
Non-family Households		3,767	4,742
Households with individuals under 18 years		Not available	2,942
Households with individuals 65 years and over		Not available	2,958
Average Household Size		2.23	2.16
Average Family Size		Not available	2.79
Total Housing Units		11,341	12,682
Owner Occupied		6,017	6,870
Renter Occupied		4,430	4,616
Seasonal Use		19	55
Vacant		894	1,196



New residential development has taken place in the Beverly area.

Table 2: Population Characteristics North City Sector		
	1990	2000
Sex		
Male	10,707	11,889
Female	12,637	13,454
Total	23,344	25,343
Age Group		
Under 5 years	1,398	1,504
5 to 9 years	1,215	1,306
10 to 14 years	1,124	1,280
15 to 19 years	1,323	1,359
20 to 24 years	1,866	1,856
25 to 34 years	4,237	3,867
35 to 44 years	3,416	3,892
45 to 54 years	2,301	3,499
55 to 59 years	1,071	1,259
60 to 64 years	1,360	1,061
65 to 74 years	2,366	2,110
75 to 84 years	1,266	1,730
85 years and over	401	620
Median Age	Not available	38.6
Race		
White	22,652	23,746
Black	558	933
Other	134	664



First Creek channelized near commercial development.

ENVIRONMENTAL CONSTRAINTS

Topography

Steep slopes are a development concern in the North City Sector. Steep slopes (greater than 25 percent) cover 12.8 percent of the sector and moderate slopes (16-25 percent) cover 16.8 percent of the sector.

Environmental problems such as increased runoff, soil erosion, and loss of water quality and habitat often result from grading on and deforestation of moderate to steep slopes. This sector is located in between two steep ridges. On the northern edge is the Black Oak Ridge and on the southern edge is Sharps Ridge. The rest of the area is relatively flat, consisting of rolling terrain that is under 15 percent slope.



Steep slopes have limited protection.

Hydrology

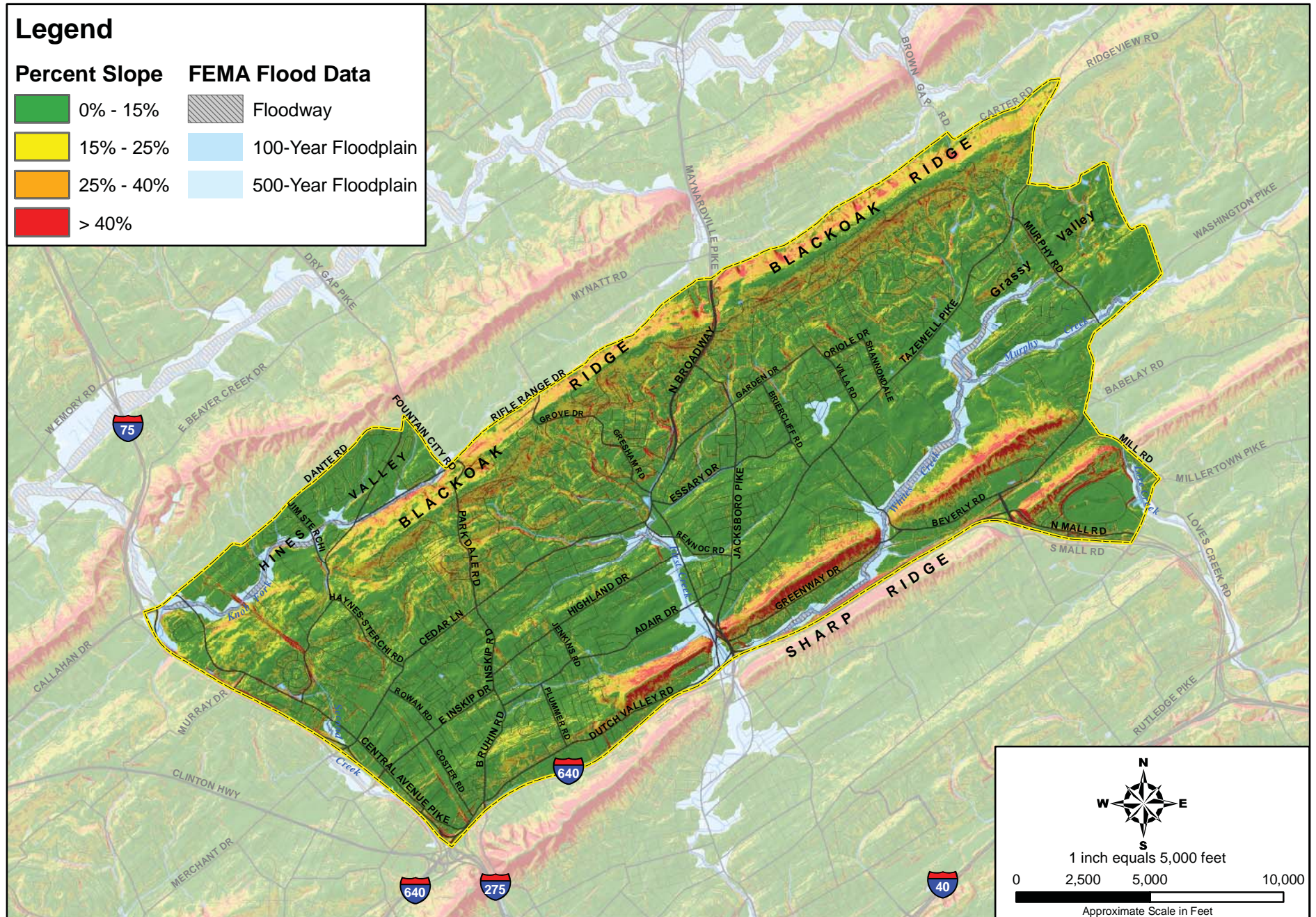
Three creeks wind their way through the sector. First Creek flows south through the heart of Fountain City, but large portions of the creek run through concrete drainage ditches. Whites Creek, a tributary of First Creek, runs parallel to the east/west railroad line and intersects with First Creek near the North Broadway/I-640 interchange. These two creeks make up the majority of the area's watersheds except for the northwestern portion of the sector, which drains into Knob Fork Creek.

According to the assessment by the Tennessee Department of Environment and Conservation (TDEC), these creeks are classified as "not supporting." Not supporting means that water quality criteria created by the EPA are not being met and wildlife is seriously impacted. The primary sources of the low rankings are pollutants in urban runoff, severe alterations of natural stream banks, the aging sanitary sewer system and high-density urbanization. As of 1984, First Creek has had a water contact advisory posted due to bacteria within the water. First Creek's problems include pathogens, nitrates, siltation, and habitat alterations. Whites Creek was listed only for pathogens and habitat alterations.

There are many areas in the sector that are prone to flooding. The area surrounding Whites Creek, which runs along McCampbell Drive, has an extensive floodplain especially between Beverly and Murphy Road. This limits the amount of development that can take place in this area. The floodplain of First Creek runs along North Broadway from Cedar Lane to Interstate 640. Future development in this area should be built with attention to water drainage problems. Significant flooding also takes place south of Dante Road due to the portion of Knob Fork that enters the sector for a short distance.

Additionally, sinkholes are present within this sector and create conditions that are unsuitable for development. A large sinkhole, which acts as a drainage basin, is located in the Harrell Hills subdivision between Clairidge Road and Gaines Road. The area was flooded so often that the city bought the surrounding lots and removed the existing structures. The area is now designated as a critical watershed in the City's Stormwater Ordinance and requires stormwater retention for development. Impervious surfaces in the neighborhood, such as asphalt roads, roofs, and driveways, increase the amount of rainwater that flows into this sink hole. This problem could increase in the future if the amount of impervious surfaces from development continues to grow.

Map 3: Environmental Constraints





EXISTING LAND USE

The North City sector is composed primarily of single family residential.

Table 3: Land Use Changes - Acreage

Land Use Category	1998	2005
Agriculture/Forestry/Vacant Land	2,916	2,394
Commercial	522	542
Industrial (Manufacturing)	81	73
Multifamily Residential	377	522
Office	145	210
Private Recreation	6	19
Public Parks	21	177
Public/Quasi Public Land	672	570
Right of Way/Open Space	1,310	1,362
Rural Residential	868	889
Single Family Residential	3,752	3,903
Transportation/Communications/Utility	23	28
Under Construction/Other Uses	31	34
Wholesale	5	5
TOTAL	10,729	10,729

Residential Trends

The majority of the new residential units have been built in the northeast section of the sector along Tazewell Pike in the form of medium-sized subdivisions (21 to 70 units). There has also been significant growth in the Jim Sterchi Road-Dry Gap Road area. Many condominiums have also been built within the sector over the past five years.



Condo development consistent with surrounding low density residential.

Table 4: Residential Building Permits, 2001-05
















	2001	2002	2003	2004	2005	Totals
Single Family	146	135	119	244	159	803
Multi-Family	6	60	56	22	0	144
Mobile Home	2	7	4	5	3	21
Condo-minium	24	83	64	187	101	459

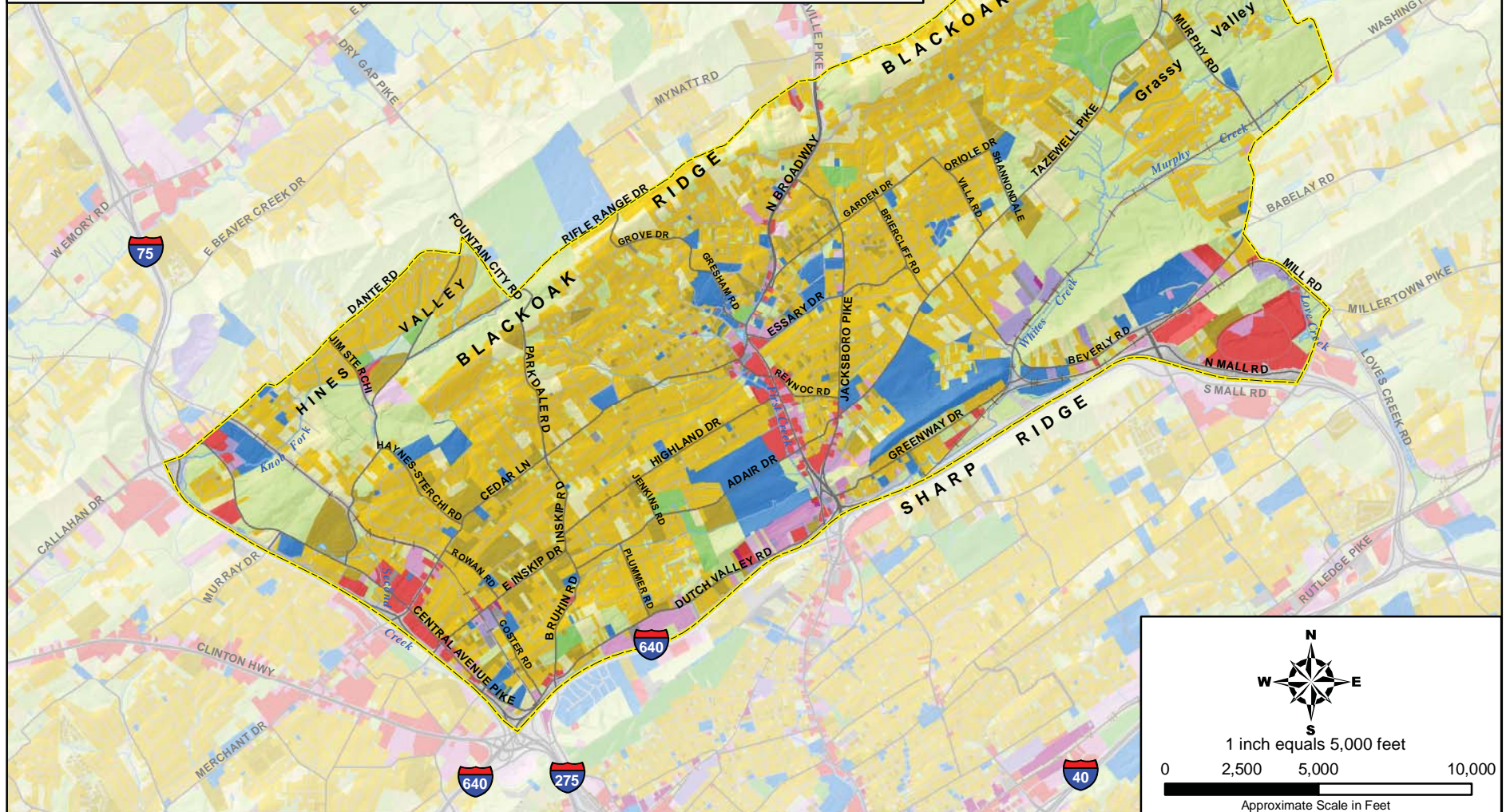
Office Trends

Most of the office space is spread out along North Broadway, with the exception of two large complexes at Beverly Road and Knoxville Center Mall. The sector contains only 3 percent of the total office space within the city limits. Its vacancy rate of 10.5 percent is one of the higher rates in Knoxville partially because 15 percent of this sector's office building stock is composed of buildings 26 to 50 years old. As of 2005, these older buildings have a 27.4 percent

Map 4: Existing Land Use

Legend

	Rural Residential		Industrial (Manufacturing)		Public Parks
	Detached Housing Units		Wholesale		Private Recreation
	Multi-Dwelling Structures		Trans./Comm./Utilities		Under Construction/Other Uses
	Commercial		Public/Quasi Public Land		Water
	Office		Agriculture/Forestry/Vacant Land		Right of Way/Open Space





vacancy rate. The overall vacancy rate in the sector has actually improved considerably since 2004 because of the renovation of the 246,725-square-foot Callahan Office/Warehouse Building III that allowed it to be almost fully leased by 2005.

Commercial Trends

Three main areas contain the majority of the commercial space in the sector. North Broadway and to a lesser degree Central Avenue are commercial corridors, while the Knoxville Center Mall is a large node of commercial space. The Knoxville Center Mall contains 1,151,393 square feet and makes up 66 percent of the shopping center space within the North City. This sector has the second largest total square feet of shopping center space among the city sectors. Its vacancy rate is 7.7 percent, which is the same as the city's total vacancy rate.



Industrial Trends

There are two main concentrations of industrial and warehousing/distribution uses within the sector. One is located by the railroad tracks along McCampbell Drive and the other is between Dutch Valley Drive and Interstate 640. Only 34 buildings are classified industrial in this sector, and their uses vary. The older industrial area near Beverly Road contains mostly metal production and some corrugated box manufacturing. The area near Dutch Valley Road contains light industrial uses such as warehouses, food distributors, wholesalers, and contractors. There is also a pocket of industrial uses near Inskip Elementary.



The industrial buildings' 5.8 percent vacancy rate is much lower than the surrounding Central and East City Sector's vacancy rates for industry, which are 23 percent and 31 percent respectively, reflecting the fact that industrial buildings along I-640 are fairly new.

**Table 5:
Office, Industrial/Shopping Center Space & Vacancies**

	Total Square Feet	Rentable Square Feet	Vacancy Rate %	Number of Buildings
2005				
Office	351,527	327,206	10.5	21
Industrial	1,272,371	Not available	5.8	34
Shopping Center	1,749,090	Not available	7.7	11

TRANSPORTATION

Since the last North City Sector Plan in 1998, some transportation projects have taken place. As noted in the previous sector plan, I-640 from I-75 to Broadway has been widened from 2 to 3 lanes by the Tennessee Department of Transportation (TDOT). Interstate 75 at Merchant Drive to north of East Emory Road has been widened from 2 to 3 lanes (TDOT). Callahan Drive and Dante Road at Central Avenue Pike have been given traffic signals with turn lanes through a Congestion Mitigation and Air Quality project. Murphy road from Washington Pike to Tazewell Pike increased lane width and added turn lanes through the County Capital Improvement Project (CIP).

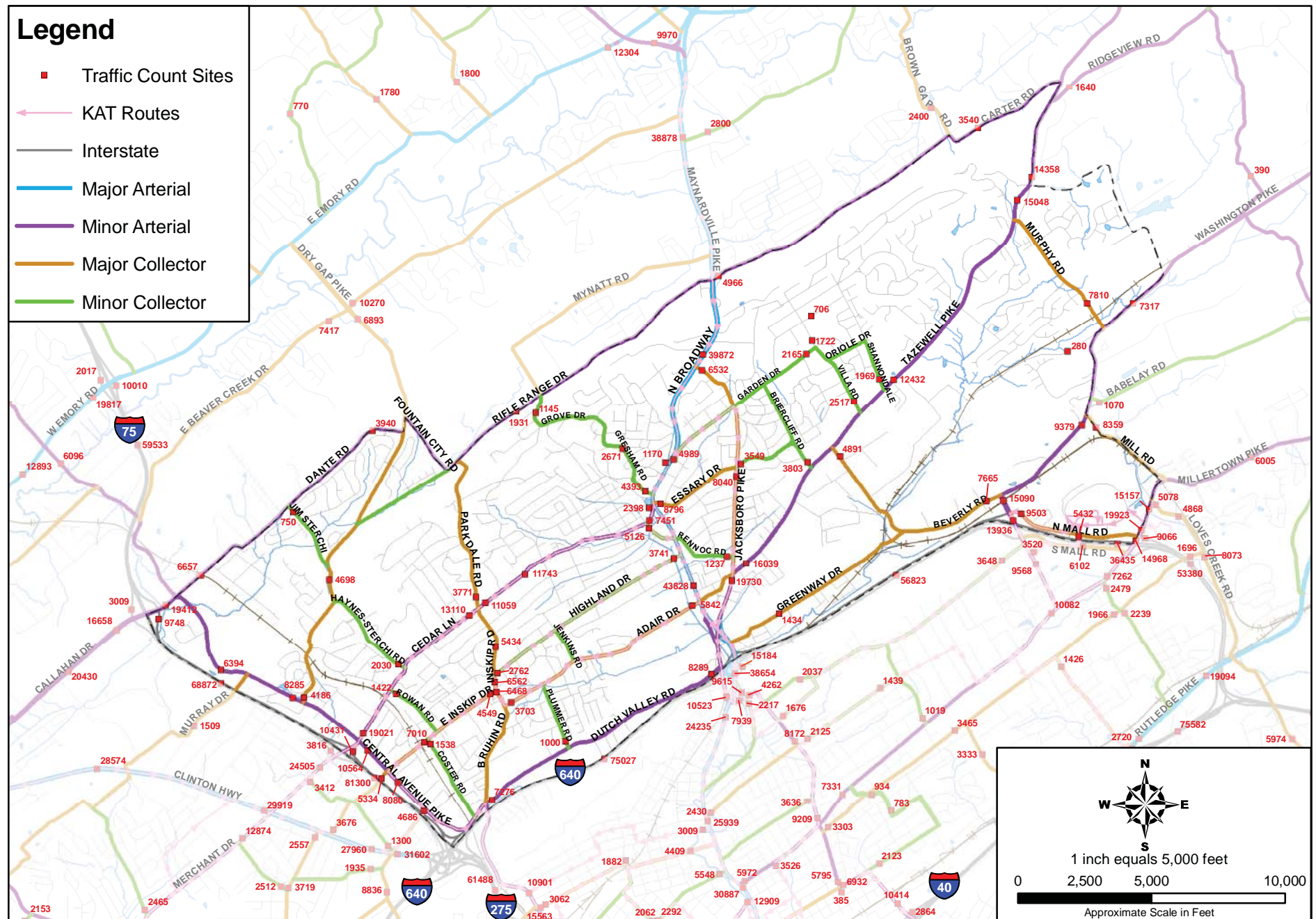
The Knoxville Regional Transportation Planning Organization (TPO) has received funding from TDOT for a study of the Broadway corridor through Fountain City. The Complete Streets Planning Study will encompass the North Broadway corridor along with a similar corridor in Blount County.

Public Transportation

Knoxville Area Transit (KAT) operates three bus routes that serve parts of the North City Sector. These routes include 22, 90A/B, and 20A/B/C.



Map 5: Existing Transportation System





Sidewalks and Bike Lanes

Most of the roadways do not have sidewalks. Even where sidewalks exist, connectivity is poor and needs to be improved. Sidewalks are encouraged, especially when larger developments are under construction and when roads are widened or extended. Priority areas for constructing sidewalks are often within the Parental Responsibility Zones (PRZ) adjacent to public schools, where bus service does not exist. Parents are responsible for getting their children to school if they live within 1 mile of the elementary school or 1.5 miles if the child attends a middle school or high school. When sidewalks are not available to provide a safe walking environment, this translates to several added vehicular trips each school day.



Bike lanes currently do not exist along any roads and paths for bicycles are limited to the shoulders of Broadway, parks, and greenways. The bike facilities within parks and on greenways are limited to a recreational component, but could serve a transportation component if the system were expanded and connected to various destinations.

COMMUNITY FACILITIES AND UTILITIES

Residents of the North City Sector are served by a wide range of public facilities, including parks, recreation centers, schools, and libraries.

Parks, Recreational and Greenway Facilities

There are approximately 212 acres of park land within the North City Sector, about 2 percent of the total land area. These parks include neighborhood, community, and district/regional parks. Neighborhood parks are 2 percent (approximately 5 acres) of the park land and are composed entirely of elementary school playgrounds. There are several community parks in this sector, comprising 43 percent or 91 acres of park land. Most of these parks are traditional community parks, a couple are middle or high school parks, and one is a sports complex. The largest part of the total park lands in this sector, at 55 percent or 116 acres, is Beverly Park, a district park with walking trails and golf.

The National Recreation and Park Association (NRPA) has published recommended standards for different types of parks and facilities. According to the NRPA, most communities should provide between 6.25 and 10.5 acres of close-to-home parks (neighborhood or community parks) per 1,000 people in order to adequately serve the public's recreational needs. Using the NRPA guideline (6.25 ac./1,000 pop.) and the estimated 2006 population (26,744) for the North City sector there is a 71-acre deficiency of close-to-home parks. If population trends were to continue growing without the addition of more park space, by 2020 (29,320 population) close-to-home parks would be deficient by more than 87 acres. There are several areas within the sector that would benefit from a neighborhood park, including:

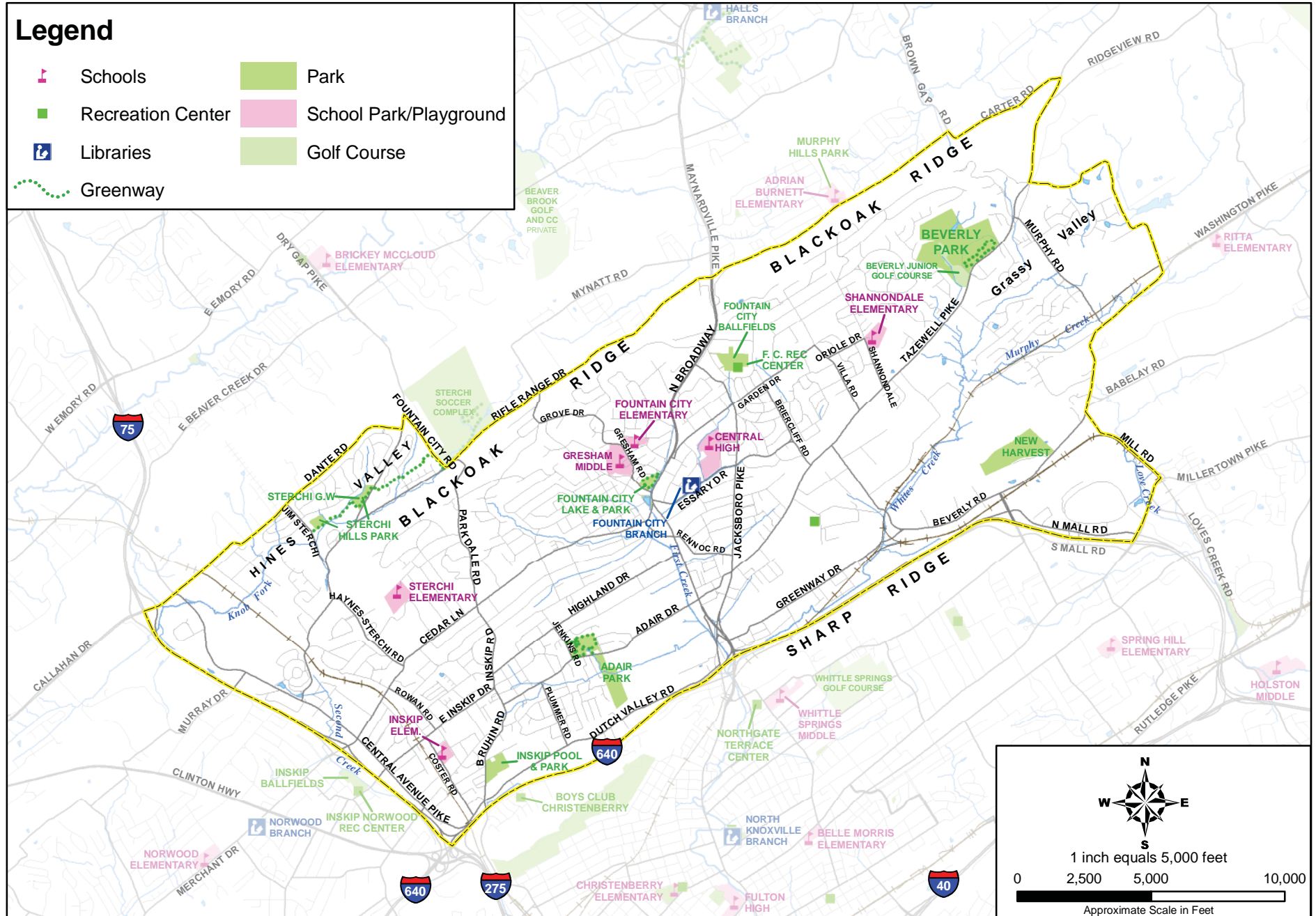
- South of Tazewell Pike and north of Sharp's Ridge – New Harvest Park being built on Washington Pike will help alleviate some of the need in this area.
- Between Cedar Lane and Highland Drive between Broadway and Central Avenue Pike
- South of Dante Road and north of Cedar Lane between Haynes-Sterchi Road and I-75



Looking at a broader area, there is also a need for district and regional parks. The next closest district/regional park will be Tommy Schumpert Park located on Rifle Range Road, once construction of the park is completed. It is also important to note that while Beverly Park is classified as a district park, it lacks many of the amenities that are commonly associated with district parks such as playground, active recreation areas (sports fields and courts for practice and games), and passive recreation areas (picnic shelters and benches). The need for more possible activities and amenities limits Beverly Park from being used as a close-to-home park for residents who live nearby.



Map 6: Community Facilities





Greenways:

There are four greenway trails in this sector, which provide approximately 4 miles for walking, jogging, or biking. Three of these greenways, Fountain City, Beverly, and Sue Clancy, are completely contained within parks as loop trails. The Sterchi Greenway is a linear trail that runs between subdivisions and provides connections to neighborhoods, parks, and residences.

Recreation Centers:

There are two City-owned recreation centers in the North City Sector: Fountain City and Oakland Recreation Centers. Fountain City has a gym, indoor basketball, playground, tennis court, softball field,



and meeting room, and is overall in good condition and adjacent to Fountain City Ballfields. A challenge with this facility is that it is not centrally located in the community and it is difficult to find, being tucked into a neighborhood. The Oakland Recreation Center is a former African-American school, built by the Works Progress Administration in 1936. It includes a playground, softball field, meeting room, kitchen, and a gym for martial arts classes. The martial arts classes are the primary use for this facility and it does not maintain other service hours. This recreation center also suffers from a lack of community visibility.



General Park Survey Requests

(from Zip Codes 37912 and 37918):

In the fall of 2006, the City and County Parks and Recreation Departments along with MPC conducted a Park, Recreation, Greenway and Open Space Survey to ascertain the public's opinion of the park systems. The most requested items were greenways and skate parks. The request for greenways included such comments as walking, jogging, fitness, bike trails, and pedestrian connections/amenities, including shaded walkways, mile markers, connecting sidewalks, and bike lanes. Additionally, skate parks were mentioned as frequently as greenways and pedestrian connections. Many

requests recognized that if a space were provided for skateboarders it would be safer and provide healthy recreation for teenagers.

Other frequently requested facilities include more swimming pools, indoor swimming pools (for year-round use), equestrian and horse riding facilities, soccer fields (especially lighted, adult fields and tournament locations), disc golf courses, mountain biking trails, natural areas (large, open, green spaces), baseball facilities, tennis courts, and splash pads. Some unique ideas included rugby fields (especially for youths), a whitewater park, nature programs within the parks, boating areas, fishing areas, ice skating rink, dog parks, archery course, and a boxing ring.

Specific Park Recommendations from the Public Meetings:

- Provide greenway to get foot traffic off of Cedar Lane
- More playground equipment at Adair Park
- Skate park for the community
- Improve tennis courts at Gresham Middle School
- Sterchi Greenway connection to Gresham Middle
- Improvements to Adair Park's pond and restrooms



Schools

Public education is provided by the Knox County Board of Education. The school zone boundaries correspond fairly well with the sector boundaries so most children live and go to school within the sector.

Table 6: Knox County Public Schools, 2006 Enrollment

Elementary Schools	
Fountain City	417
Inskip	357
Sterchi	376
Shannondale	383
Middle School	
Gresham	771
High School	
Central	1,257



Libraries

The Fountain City Branch Library is located in a new building on Stanton Road. The Norwood and the North Knoxville branches are located fairly close to the sector and may be more convenient for some residents.



The Fountain City Library has a special place for kids.

Public Safety

Police protection is provided by the Knoxville Police Department and the Knox County Sheriff's Department. Fire protection is offered by Knoxville Fire Department and Rural Metro. Fire stations 14 and 15 are located within the sector.

Utilities

The Knoxville Utilities Board coordinates distribution of most utilities, including electricity, natural gas, water and sewer services.

HISTORY

The North City Sector has a rich history that dates back more than two centuries to the original European settler, an Irishman named John Adair and his family. In 1788, the Governor of North Carolina gave Adair a land grant for a square mile of wilderness in what was then called the Grassy Valley. Adair's Station began as a supply post or commissary for the Cumberland Guards. The Guard was charged with protecting the settlers traveling along "Yellow Mountain Trace" from Morganton, North Carolina, to the Nashville area. By the end of the 1800s, within the present-day boundaries of the North City Sector, four separate but connected communities began to form. Fountain Head (later to become Fountain City), Smithwood, Beverly, and Inskip each developed their own community trade centers, churches, and schools.



Fountain City

The area called Fountain Head began to gain popularity in the 1830s for its fresh water springs and peaceful environment. One of the better-known springs was chosen as the location for the Fountain Head Camp Ground, which was used by the Methodist Church for religious meetings. In the 1870s, Fountain Head Camp Ground gained popularity as a health resort, and during the yellow fever epidemic in Memphis a large group of refugees

came to the camp ground. In the 1880s, when the Fountain Head Camp Ground lost appeal as a church meeting spot due to competition from the National Camp Ground in Inskip, the Methodist Church sold the land to the Fountain Head Improvement Corporation, and a hotel and park were developed on the site in 1886. Soon afterwards the Fountain City Lake was constructed in a marshy area of the park using the heart-shaped design of F.G. Phillips.

The 1880s saw a boom in Knoxville's industrial growth; 97 new factories were built that decade. With the use of coal for factory processes, and for home heating and cooking, the early downtown suburbs were dirty with coal dust. Residents began to look for ways to escape the conditions. The first mechanized street car, the Dummy Line, built by the Fountain Head Railway Company was completed in 1890 and provided a way for downtown residents to visit the beautiful Fountain Head resort area. The line's name referred to the fact that it was not a real train but a steam engine that could run forward and backward without turning around.

Also in 1890, with the establishment of the first post office in the community, the name was changed to Fountain City to avoid confusion with another Fountain Head in Sumner County. A trip on the Dummy line cost 10 cents at the time, and for another 50 cents riders could enjoy a good meal at Mary Donahue's dining room. The Dummy Line had a bad habit of breaking down mid-trip; its replacement with an electric streetcar in 1905 and gas-powered cars after 1934 corrected its unreliable operation. With the environment, amenities, and public transportation of Fountain City, it was not long before people began to build permanent houses. The Fountain City Land Company, which was a group of entrepreneurs from Kentucky headed by Col. J. C. Woodward, bought 430



The historic Dummy Line street car

acres around the park to subdivide and called it "a new town made of good moral fiber" in sales promotions. At the turn of the 20th century, Fountain City had little more than 400 people living there. However, by 1950, it had gained close to 20,000 new residents.

In 1893, Holbrook Normal College established a campus in Fountain City overlooking the park. Although the first building was lost to fire in 1900, a second one was soon built and later became Central High School, one of the earliest public high schools in Knox County. The building was dramatically modernized in 1931 with designs by Baumann and Baumann and eventually became Gresham Middle School. There was no grammar school in Fountain City until 1903; prior to that children went to the Smithwood Grammar School. Also in 1931, Baumann and Baumann designed Fountain City Elementary,



Gresham Middle School is still in use today.

which was the largest elementary school in the County in the 1940s. Gresham Middle School and Fountain City Elementary are still in use today.

Smithwood

Tazewell Pike was built in the 1790s to connect the stations to mills and ferries. The area along Tazewell Pike was composed of small farms with log cabins until the mid 1800s and was the home of many French-Swiss families who came to Knoxville in search of religious freedom.

The Smithwood community formed east of Fountain City at the intersection of Tazewell and Jacksboro where local businesses like Hill's Cash Store were located. A commercial node still exists there. The community was named Smithwood after John Smith, John Adair's grandson, who contributed land for the establishment of Adair's Creek Baptist Church and, later, for the land on which Smithwood School was constructed.

Beverly

Further east, the Beverly community was settled by William Anderson. His cabin, dating back to approximately 1810, is still standing but has been moved to Murphy Road. Isaac Anderson, William's son and a well-known Presbyterian preacher, started a school in 1802 in a cabin on the property; it was called Union Academy. In 1812, Anderson moved the school and his ministry to Maryville in Blount County where the school became Maryville College.

The Beverly community center developed just down the road from Smithwood at the intersection of Tazewell Pike and Beverly Road. After the Civil War, Tazewell Pike was designated as one of five toll roads located throughout Tennessee by the State Legislature.

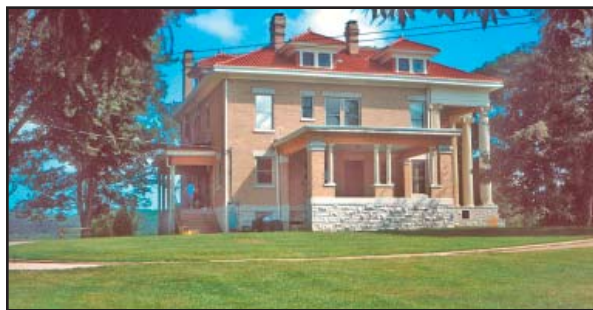
It was a heavily traveled route and the money collected was used to improve the road. Additionally, several prominent businessmen built homes along Tazewell Pike, where a Neighborhood Conservation Overlay (NC-1) is located.

The main industry that developed in the area was started by Charles Baum in 1889. Baum's Home of Flowers became one of the largest greenhouses in the Southeast. It is said that in the early years Charles would hang a scarf outside to indicate to the neighbors that a new kind of flower was blooming.

Inskip

John L. Tillery settled in the Inskip area, west of Fountain City, in 1795. He was joined by other settlers including the Mathis, Zeigler and Sterchi families. This area built up around the railroad and coal yards. The Coster Yards provided employment to many residents. It was once the primary switching yard for all major railroads that accessed the region.

The area was nameless until the 1870s, when church meetings brought attention to the quiet farming community. The National Camp Ground was established in the area by the Rev. Dr. Inskip on a farm owned by Arthur Crozier. The site was chosen because of its proximity to the railroad line. In 1872, the



The Sterchi Mansion

formal opening of the National Camp Meeting took place with thousands of people in attendance. The railroads ran special trips from Knoxville in order to accommodate all of the people traveling to the area.

In 1888, the Sterchi sons went into the furniture business. Shortly thereafter, J.G. Sterchi bought out his brothers, and by 1913 he was a millionaire. He continued to live in the community and built his grand Greek Revival mansion on Dry Gap Road, which is still standing.

A quasi-downtown evolved at the corner of Inskip Drive and Central Avenue. It was here in 1946 that Eldridge Litton opened Litton's market. It was his grandson who many years later closed the original market and reopened it in Fountain City as Litton's Market and Restaurant, which is still popular today.

RECENT HISTORY

When the *Fountain City Press*, a local newspaper, advertised Copeland Garage as Fountain City's first auto repair shop, it was clear that times were changing. Broadway evolved into the primary northbound arterial from Knoxville, and Fountain City became home to commuter suburbs. Some of Knoxville's earliest suburbs, like Adair Gardens and Gibbs Drive, show a progressive transition from dependence on electric streetcars, which were discontinued in 1934, to the automobile.

In September 1925, Dr. Reuben Neil Kesterson, one of the first dentists in Knoxville, began developing the Kesterwood subdivision off of Tazewell Pike. This new subdivision was near Greenwood Cemetery, which Kesterson had carefully designed after the death of his three-year-old son. The house built for his family in 1928 is still located on Kesterwood Drive.



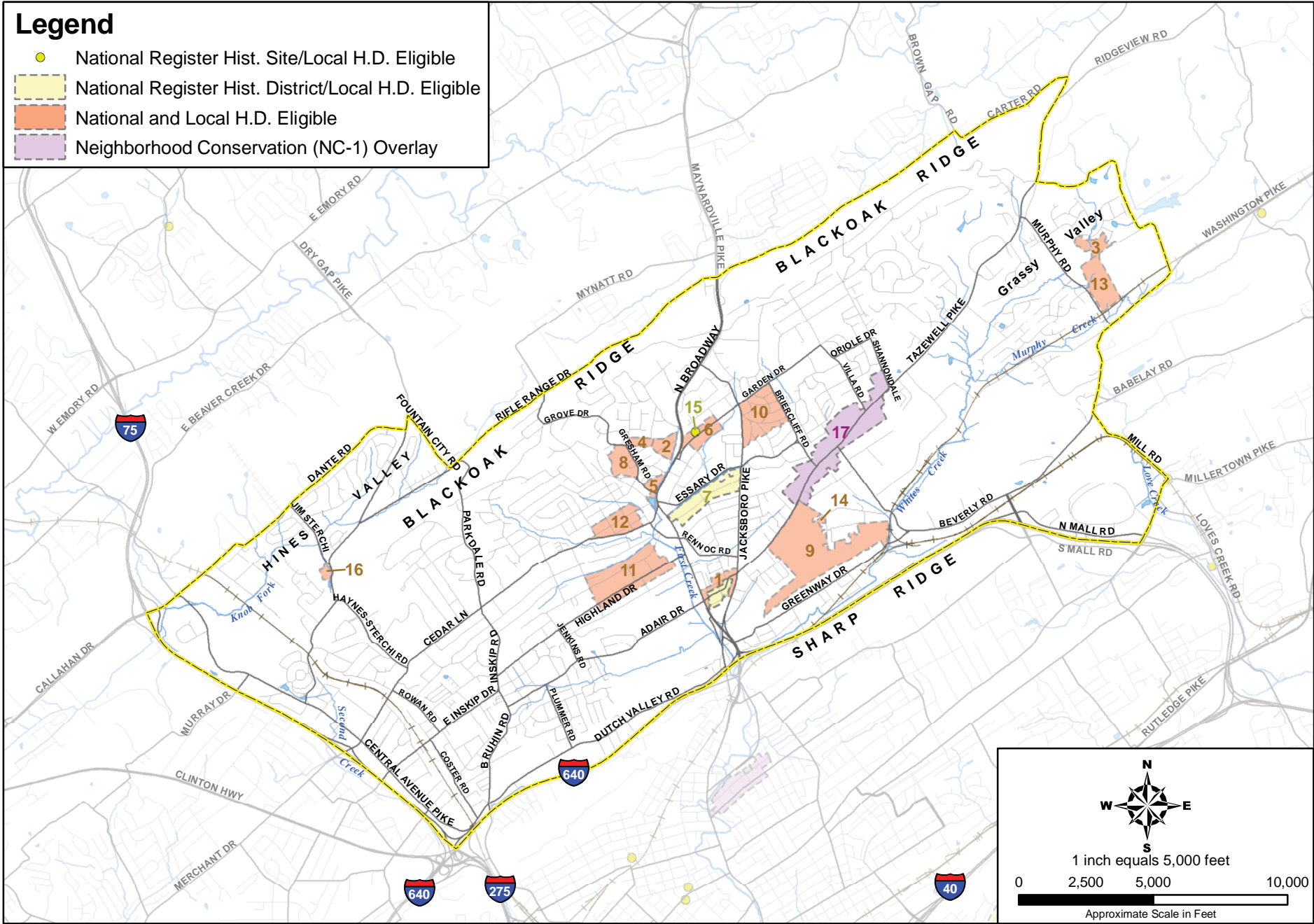
This sector has many historic commuter suburbs.

Harrill Hills, a suburb laid out in 1927, was named after Gaines Harrill, who founded Knoxville's first transfer and hauling company and previously owned the land on which the subdivision was built. The suburb's slogan "the beautiful north side," and the promise of a lake that never materialized, helped draw commuters from Knoxville. The Great Depression and World War II, however, slowed development and the development was not completed until the mid 1950s.

By the 1950s most of the farms between Smithwood, Fountain City, and Inskip had disappeared. From 1950 to 1958, 56 new subdivisions were created until little developable land was left. Broadway took on the commercial form that is recognizable today, and this development caused many of the local trade centers to go out of business. In 1962, Fountain City was incorporated into the Knoxville city limits. What had once been Grassy Valley had evolved into an urban community.

A lot of historical places in the North City Sector have been lost to urban development and fire. The streetcar tracks were dismantled, and the Fountain City station burned to the ground. Many historic homes, like the Victorian style Williams Mansion that sat on Broadway across from Gibbs Drive, have been demolished. Not a trace of Baum's Home of Flowers remains on Tazewell Pike. However, there are still many historical gems that can be found within the area and it is important that they be preserved.

Map 7: Historic Resources



HISTORIC RESOURCES



1. Adair Gardens Historic District

Located on portions of Adair, Rose, and Coile Drive, the houses in this district date mainly from 1920 to 1935. This neighborhood is the best example in Knoxville of a lower-middle-class suburban housing from this period. The neighborhood was built over a 15-year period, and the transition from streetcar to automobile can clearly be seen. The major architectural styles found here are Colonial Revival, Tudor Revival and Minimal Traditional.

2. Colonial Circle/Peyton Place

There are individual structures on these streets that may be eligible for designation; further research of early residents, architects, builders and architectural styles need to be acquired before designation is pursued.

3. Edmondson House

This two-story log cabin was built around the year 1810 by Isaac Anderson's family. He was a Presbyterian minister who is best known as the original founder of Maryville College.



4. Fountain City Elementary School

This building was constructed in 1931 along with Gresham Middle School based on the designs of local architecture firm Baumann and Baumann.



5. Fountain City Downtown, Lake and Park

The Lake was built in front of the Fountain City Hotel in 1890. The roughly heart-shaped dimensions of the Lake were traditionally thought to signify an area for young Knoxville residents to fall in love. Additionally, several of the existing commercial structures at the corner of Hotel and Broadway are possibly eligible. The Fountain City Park was also constructed along with the hotel. In 1944 the Fountain City Lions Club got permission to build their clubhouse (destroyed by fire and rebuilt) in the park in exchange for its upkeep.

6. Garden Drive Historic District

This area was developed between the 1900s and 1930s and contains late Victorian-era, Craftsman and some Revival-era cottages that may have been built originally as summer or resort homes for people visiting Fountain Head. It is centered by the National Register listed Savage Gardens.



7. Gibbs Drive District

The houses along Gibbs Road were constructed between 1915 and 1940. It is a good example of an early automobile suburb. The main architecture style found within it is Bungalow/Craftsman.

8. Gresham Middle School

A school of some form has been on this site since 1892, when Holbrook Normal College set its campus here. The current building was built in 1931 based on designs by the local architecture firm Baumann and Baumann. It served as Central High School until a new building was constructed in 1971. The old building was renamed Gresham after a 1902 graduate of Normal College and principal of the high school (1919-1947), Hassie K. Gresham.



9. Greenwood Cemetery

Dr. R.N. Kesterson created this cemetery in 1900 after the death of his young son. He wanted to create a “Place of Beauty Forever” and it shows from the beautiful entrances and carefully designed landscaping that are still maintained today. The designation could include the fence and entrance as historic structures.

10. Harrill Hills (Northern Portion)

A commuter suburb that started development in the late 1920s. The older portion of this neighborhood is potentially eligible based on a variety of popular architectural styles.

11. Highland-Maple Drive Historic District

To the west of Broadway, south of Cedar Lane is an area that developed between 1890-1935 as a streetcar suburb, and contains late Victorian and Craftsman-era design homes; their consistent architecture, history and lot configuration make this area eligible for designation.

12. Midlake and Ocala Drive

There are individual structures on these streets that may be eligible for designation; further research of early residents, architects, builders and architectural styles need to be acquired before designation is pursued.

13. Murphy House

This Gothic Revival cottage located on Murphy Road was influenced by landscape architect Andrew Jackson Downing. It was originally built in 1820 but was dramatically renovated in 1850.

14. Oakland Recreation Center

This recreation center was formerly “Oakland Colored School” built in 1936 by the Works Progress Administration during the Great Depression. The architect was Frank O. Barber.



15. Savage House and Garden

This house, located on Garden Drive, was built in 1917 in a Bungalow/Craftsman style. It is most significant for the beautiful gardens with sculptural pieces that surround the house.



16. Stratford-Sterchi Farm

The property contains a decorative Neoclassical mansion and a few outlying buildings. It was part of a Swiss settlement from 1910 to 1935 and is located at the intersection of Dry Gap Pike and Jim Sterchi Road.

17. Tazewell Pike NC-1 Corridor

The NC-1 designation runs along Tazewell Pike from the Greenwood Cemetery to Shannondale Road. It includes the following among many other historic buildings:

The Oaks: This historic home, 4105 Tazewell Pike, was constructed in 1885. It is two and a half stories high and built in the Eastlake style.

Shannondale Presbyterian Church: It was constructed in 1891 based on the designs by David Getaz. This church on Tazewell Pike can be connected back to the French-Swiss community that settled in the area in the 1800s. It is an Eastlake style with Gothic Revival Influences.

Spring Haven-Truan House: This house can also be associated with the French-Swiss community and was built in 1876 and remodeled in 1919. It is a traditional American Foursquare house located on Tazewell Pike.

William Crawford House: This two-story Greek Revival House was built in 1857 on Tazewell Pike. During the Civil War it was reportedly used as the headquarters for General Armstrong of Alabama.

Chapter 3:

Land Use, Community Facilities, and Transportation Plans

LAND USE PLAN

The Land Use Plan will serve as a guide for growth and for making zoning and subdivision decisions. Several changes to the former land use plan (1998) were made in preparing the Land Use Plan. In some cases, the change was made to reflect existing zoning conditions. In other cases, changes were made based on more accurate information on floodways and slope constraints. Please see Appendix C for a list of changes since the last sector plan update. Market conditions, planned road projects, traffic volume, and adjacent land use are other reasons for changing the recommended land use. This plan will be incorporated into the Knoxville-Knox County General Plan, and will be updated approximately every five years.

In preparing the Land Use Plan, existing zoning was found to be inconsistent with existing land uses. In order to implement the plan several general rezonings are needed.

- **East of Shannondale Road** – currently zoned general residential zone (RB) allowing medium density residential (up to 12 units/acre) and possibly increasing impervious surfaces and flooding problems. Recommend rezoning to low density residential (RA) and planned residential (PR). This change is recommended to reflect the existing low density residential land use that is predominately established in this area.

- **White's Creek between Anderson Road and Sharp's Ridge** – reduction of general industrial district (I-3) and restricted manufacturing and warehousing district (I-2) to parcels that are currently used for I-2 or I-3 uses and rezone remaining land to low density residential or planned residential.
- **Sharp's Ridge north of Knoxville Center Mall** – existing zoning is commercial and industrial, recommend change to mixed-use zone including slope protection area, low density residential and office.
- **Heart of Inskip area between Central Avenue Pike and Inskip Road** – currently zoned general residential district (R-2). Recommend rezoning to low density residential district (R-1A) to reflect the majority of uses in this area that are low density residential and to allow medium density residential uses only on collector and arterial streets which provide for increased traffic demands.

Other Considerations

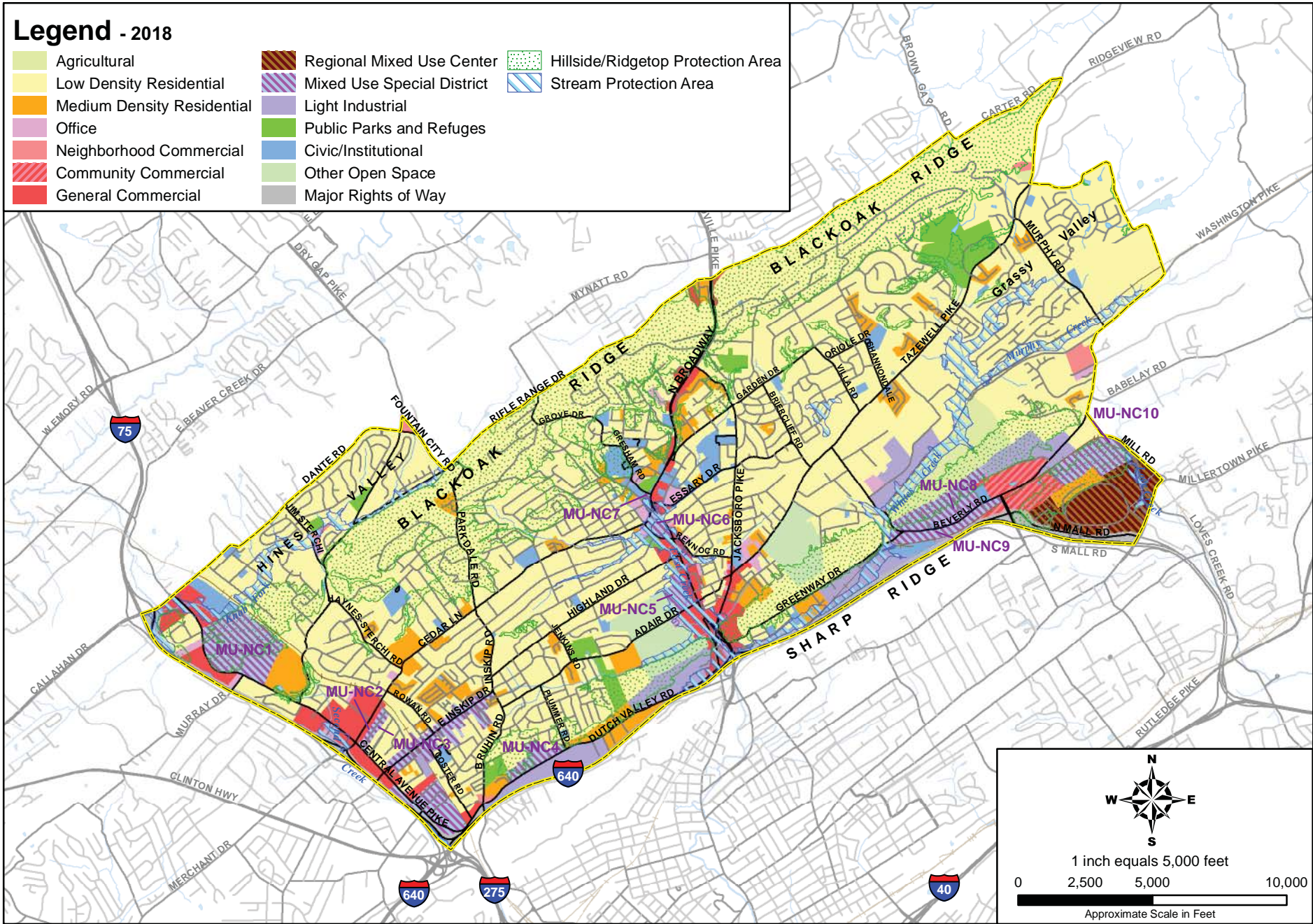
There are two portions of the sector that are still in agricultural use: the area in the northeast corner and the area between Sharps Ridge and Whites Creek. The later area, bounded by Beverly Road and the Wyngate subdivision, is within the Knoxville Urban Growth Boundary. There are no recommendations in the land use plan to change the use from agriculture and low density residential. However, there is a conflict between the zoning of these parcels, which is



Agricultural land near Whites Creek

industrial and general or medium density residential, and the pattern of low density residential development in the surrounding area. The industrial zoning was established decades ago because it was along a railroad corridor. Today most industries rely on truck transportation as opposed to rail; this area is poorly situated for truck access. Another concern is the drainage associated with the large areas of impervious surfaces typical of industrial development and medium density residential, especially with Whites Creek bisecting the properties. A general rezoning should be considered, working with area property owners. Agricultural zoning (with potential for clustered housing), and low density residential zoning, given the slope to the south and floodplain are two rezoning considerations. When the area is annexed into the City, planned zones should be put in place. Planned residential (RP-1) is recommended for any existing RB areas to protect slopes and water resources.

Map 8: Land Use Plan (Revised May 2018)



LAND USE CLASSIFICATIONS

The following classifications are an abbreviated form of the sector plan land use classification system and reflect the designations on the Land Use Plan map.

Mixed Use Special Districts (Sector designation, MU, and reference number): Areas designated to address urban design, pedestrian and transit-oriented development and vertical mixed use in specific circumstances. In this plan, these areas are designated as Mixed Use-North City# (MU-NC#).

MU-NC1: Slope Protection Area, Low Density Residential, Medium Density Residential and/or Office	
Location: <i>East side of Central Avenue Pike, north of Steeplechase Apartments</i> Because these parcels are located along an arterial road, not far from an interstate interchange and next to existing medium density residential these land uses are proposed to foster conservation of the steep slopes, recognizing that the flatter portions of the site should be used for the most intense uses.	Recommended Zoning: Planned Residential, Office Park (O-3) or other zoning requiring site plan review
MU-NC2: Office and Neighborhood Commercial	
Location: <i>North side of Shasta Drive</i> This area is experiencing significant development pressure from commercial properties facing Merchant Drive which have been developed on shallow lots. Concerns were raised about the impact of commercial uses on the existing neighborhoods. This district will require a buffer, including landscaping, at the rear of the commercial properties that could be a linear park space or deeded open space. Additionally, no commercial access should be allowed from or to Shasta Drive – all commercial traffic will access these parcels from Merchant Drive.	Recommended Zoning: Neighborhood Commercial (C-1) and Office (O-1) with buffer provisions
MU-NC3: Low Density Residential, Medium Density Residential and/or Residential-Office	
Location: <i>South side of Shasta Drive</i> In view of the relatively small lot sizes and the existing housing, this mix of uses is proposed to foster conservation of the existing residential while allowing office uses that would have complementary design standards to the residential units of this street.	Recommended Zoning: Low Density Residential (R-1), General Residential District (R-2) and new residential office zone
MU-NC4: Slope Protection Area, Civic/Institutional, Low Density Residential, Medium Density Residential and/or Residential-Office	
Location: <i>North side of Dutch Valley Road (one lot deep), west of Plummer Road</i> This area acts as a transition space between the low density residential uses to the north and the light industrial and commercial uses to the south of Dutch Valley Road. Design standard for residential office use should be adopted and implemented in order to preserve and promote the residential character of this area, including pitched roofs, front doors facing the street, parking to the side or rear with a landscape buffer. Additionally, slope protection, civic and institutional uses, low density and medium density residential are proposed to promote this area as a transition from low density residential to industrial uses.	Recommended Zoning: Low Density Residential (R-1A), Planned Residential District (RP-1, at up to 12 dwelling units per acre) and new residential-office zone
MU-NC5: Stream Protection Area, Medium Density Residential, Office, Commercial and/or Civic Institutional	
Location: <i>Current shopping center between Adair Drive and Woodrow Drive</i> This area is appropriate for a vertical mixed use development or center. It is located on a major arterial and major collector road and has transit service near by on Broadway. Residential densities of 12 to 24 dwelling units/acre are appropriate within the area and could be accommodated as apartments above retail or office. The surrounding land uses is primarily low or medium density residential. The buildings of this center should be designed to form a transition from high intensity commercial uses along Broadway to lower intensity residential uses. Additionally, a unique opportunity would be to “daylight” First Creek by removing the asphalt parking lot over the Creek and provide vegetation and viewing areas for this mixed use development.	Recommended Zoning: A design- or form-based zoning code

MU-NC6: Stream Protection Area, Medium Density Residential, Office and/or Commercial		
Location: <i>Property adjoining North Broadway between Knox Road and Cedar Lane</i> The major tenant of these properties has left and a store and parking lot stand empty. Therefore, this site will likely be redeveloped in the next few years. This area is appropriate for a vertical mixed use development or center with medium density residential above retail and office uses. It is located on minor arterial roads and a major collector road, near both medium and low density residential. There is a transit stop on Knox Road serving this location.		Recommended Zoning: Retail and Office Park District (PC-1), or a design- or form-based zoning code
MU-NC7: Medium Density Residential, Office, Commercial and/or Civic/Institutional		
Location: <i>Corners of Hotel Road and North Broadway</i> This area is the historic heart of Fountain City and there are several unique buildings and shops in this location. In order to enhance and promote this existing mixed use center, it is recommended that MDR, Office, Commercial, Civic and Institutional uses be permitted within the district. The location of this district along a major arterial and a collector road, along with its proximity to parks and schools make it an ideal place to encourage more density by providing medium density residential. Additionally, a historic zoning overlay is recommended to protect the historic elevations of these buildings and to ensure that new projects complement the existing development.		Recommended Zoning: A design- or form-based zoning code and an H-1 overlay on portions of the area
MU-NC8: Slope Protection Area, Low Density Residential, Medium Density Residential, Office, and/or Civic/Institutional		
Location: <i>North side of Greenway Drive between Beverly Road and New Beverly Baptist Church Road</i> This area is composed of a diversity of land uses and currently both the City and the County have jurisdiction over these parcels which influence zoning. With a branch of Sharps Ridge running through the rear of these properties slope protection measures should be in place and land uses should be concentrated on the flat portions of the site with lower intensity uses.		Recommended Zoning: Low Density Residential (R-1A), Planned Residential District (RP-1, at up to 12 dwelling units per acre), Office (O-1) and comparable County zones
MU-NC9: Low Density Residential, Medium Density Residential, Office, and/or Civic/Institutional		
Location: <i>South side of Greenway Drive between Beverly Road and Washington Pike</i> The western portion of this area is devoted to the Tennessee Valley Authority Greenway Drive Facility and the eastern portion of the area is a mix of housing, office, some commercial uses and vacant land. This plan recognizes that this area is likely to redevelop in the near future and that the previously mentioned land uses are appropriate given its location along a major collector.		Recommended Zoning: Low Density Residential (R-1A), Planned Residential District (RP-1, at up to 12 dwelling units per acre), Office (O-1) and comparable County zones
MU-NC10: Slope Protection Area, Stream Protection Area, Low Density Residential and/or Office		
Location: <i>North side of Sharps Ridge, parcels north of Knoxville Center Mall and south of railroad track</i> In view of the significant environmental resources (Sharps Ridge and Loves Creek) and the access challenges of these parcels, this mix of uses is proposed to foster the conservation of these resources while allowing residential and office uses on the flatter portions of the site.		Recommended Zoning: Low Density Residential (R-1A) or Planned Residential (RP-1, at up to 6 dwelling units per acre) and Office (O-1)

Agricultural (AG) and Agricultural Conservation

(AGC): Land (in the Rural and Planned Growth Areas of the Growth Policy Plan) that is suitable for agricultural purposes **(AG)** Farmland or undeveloped land, characterized by prime agricultural soils **(AGC)**

Low Density Residential (LDR): Residential at densities of up to 6 dwelling units per acre (City); 5 dwelling units per acre (County)

Medium Density Residential (MDR): Residential at densities from 6 to 24 dwelling units per acre (City) and 5 to 12 dwelling units per acre (County)

Office (O): Business and professional offices and office parks

Neighborhood Commercial (NC): Day-to-day retail and service-oriented uses, located within a walking or

short driving distance of neighborhoods (generally less than 5 acres)

Community Commercial (CC): Retail and service-oriented uses, including stores, restaurants, and “big box” establishments (typical service area: 20,000 to 30,000 residents)

General Commercial (GC): Primarily existing strip commercial corridors, providing a wide range of retail and service-oriented uses

Regional Mixed Use Center (MU-RC): Housing (upwards of 24 dwelling units per acre) created around/above a commercial core with sidewalks, transit and interstate/arterial access

Light Industrial (LI): Older industrial areas, intended for light manufacturing and warehouse/distribution uses – Note: Should not be used for “greenfield” economic development

Major Rights-of-Way (R-O-W): Generally, the rights-of-way of interstates and very wide parkways and arterial highways

Public Park and Refuge (P): Existing parks, wildlife refuges or similar public or quasi-public parks, open spaces and greenways

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

Other Open Space (OS): Cemeteries, private golf courses and similar uses

Hillside/Ridge Top Protection Area (HP): Ridge crests, and hillsides and ravines that have a slope of 15 percent or more. Residential: very low density housing. Other uses via use on review

Stream Protection Area (SP): Areas subject to flooding

Water (W): Primarily the French Broad River, Holston River, Fort Loudoun Lake/Tennessee River, and Melton Hill Lake/Clinch River and tributaries/coves

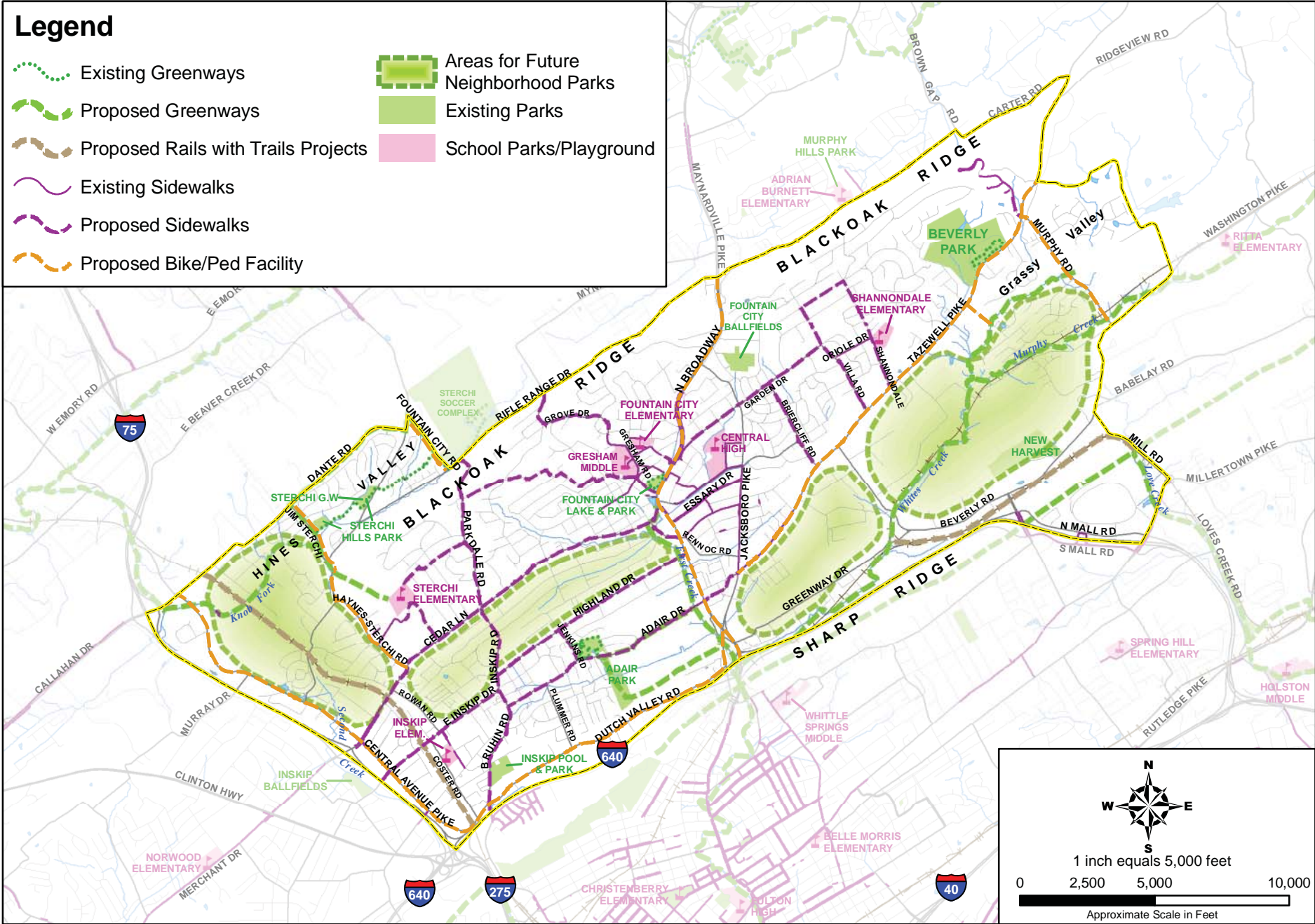


COMMUNITY FACILITIES PLAN

The Community Facilities Plan (see map on the following page) recommends projects and programs to be implemented for the first five and the next 10 years following plan adoption. They should be reviewed annually when preparing capital improvement programs. Improvements recommended in this section represent ongoing efforts as well as input from residents attending sector plan workshops and public meetings.

Project or Program	5-Year	15-Year	Responsible Agency
PARKS, GREENWAYS AND OPEN SPACE			
1. Beverly Park: Expand neighborhood park facilities	X		Knox County
2. Franklin Park: Acquire acreage for a new neighborhood park	X		City of Knoxville
3. Highland Neighborhood Park: Provide passive park uses on City-owned property	X		City of Knoxville
4. First Creek Greenway: Extension from Old Broadway to Adair Park	X		City of Knoxville
5. Neighborhood park land acquisition: South of Tazewell Pike and northwest corner of the sector		X	City of Knoxville and Knox County
6. First Creek Greenway: Extension from Adair Park to Fountain City Park		X	City of Knoxville
7. White's Creek Greenway: From north Broadway to Beverly Park		X	City of Knoxville and Knox County
8. White' Creek Greenway: Extension from Grassy Valley to Shannon Valley Farms		X	Knox County
9. Sterchi Greenway: Extension along Knob Fork Creek	X		Knox County
10. Rails with Trails Projects: Work with Norfolk Southern Railroad to provide greenway trails along existing rail beds; could connect Knoxville Center Mall to First Creek Greenway		X	City of Knoxville and Knox County
SCHOOLS, LIBRARIES AND COMMUNITY CENTERS			
Investigate needs and requirements for sidewalks within the Parental Responsibility Zones of each school	X		City of Knoxville, Knox County, MPC
Investigate future use of the Oakland and Fountain City Recreation Centers	X		City of Knoxville

Map 9: Community Facilities Plan



TRANSPORTATION PLAN

The Transportation Plan (see map, page 29) provides an overview of the projects that are recommended in various adopted plans and those that have been identified during the process of updating this sector plan.

Prior to the implementation of some of these projects, there should be opportunities for additional public input to address issues of impacts related to adjacent land use, neighborhood protection, and environmental and historic resource preservation. These are principles that are important in developing 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. To meet this goal this plan recommends the following:

- Create and maintain sidewalks, bike lanes, greenways and other facilities for alternative transportation
- Maintain services for the elderly, disabled, and low-income residents. Promote programs provided by the East Tennessee Human Resources Agency, Community Action Committee and KAT

Additionally, the following two principles should be considered in designing the road cross-sections and intersections of transportation projects.

Context Sensitive Design

This is a process that addresses the physical setting of a potential project and preserves scenic, aesthetic, historic, environmental and other resources, while maintaining mobility and safety. This facility planning should revolve around a collaborative, interdisciplinary approach that incorporates the desires and concerns of a community in order to achieve solutions.

Complete Streets

Any road projects, public or private, should adhere to the principle of creating 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 pedestrian and bicycle facilities that are depicted on the Transportation and Community Facility Plans are priorities in establishing a complete streets program.

Some considerations for more detailed road designs are outlined below:

- **Tazewell Pike** with its historic residential district and cemetery. Maintain the ambience of a two-lane road, yet provide turn lanes at major intersections is important.
- **Cedar Lane** with its residential character and landscape, specifically the Eastern Red Cedar trees planted by James McMillan in the mid-19th century (recognized as Landmark Trees by the Tennessee Urban Forestry Council). If it were found that there will be significant increase in traffic and travel times along Cedar Lane, selected intersection projects (such as at Parkdale Road and Inskip Drive) should be a foremost consideration rather than widening the road for its entire length.
- **Dry Gap Pike**, which winds through the heavily forested Beaver Ridge, just north of the sector, needs to be improved for vehicular access and safety reasons. The current recommendation of four lanes should be reconsidered since the road cannot be extended north of Emory Road and to the south it would funnel into a two-lane road. Initial projects should focus on intersection realignments at Dante Road and Fountain City Road and Fountain City Road and Parkdale Road.

- **Dante Road** was once slated to be a business park connector, west to I-75. The business park never materialized and the parcel was transferred to the County Parks Department and developed as Tommy Schumpert Park. New neighborhoods have been developed adjacent to this site along with a two-lane road. Unless a continuous east-west connector is to be pursued along Rifle Range Road or Mynatt Road, the necessity of providing four lanes the length of Dante Road is questionable. An immediate need is to widen Dante Road at the Central Avenue Pike intersection, allowing two westbound through lanes to I-75. This project would help to relieve peak-hour congestion, especially in the morning. A project to take out the right angle turns of Dante Road (east of the power line) would also benefit vehicular traffic flow.

Recommended Projects

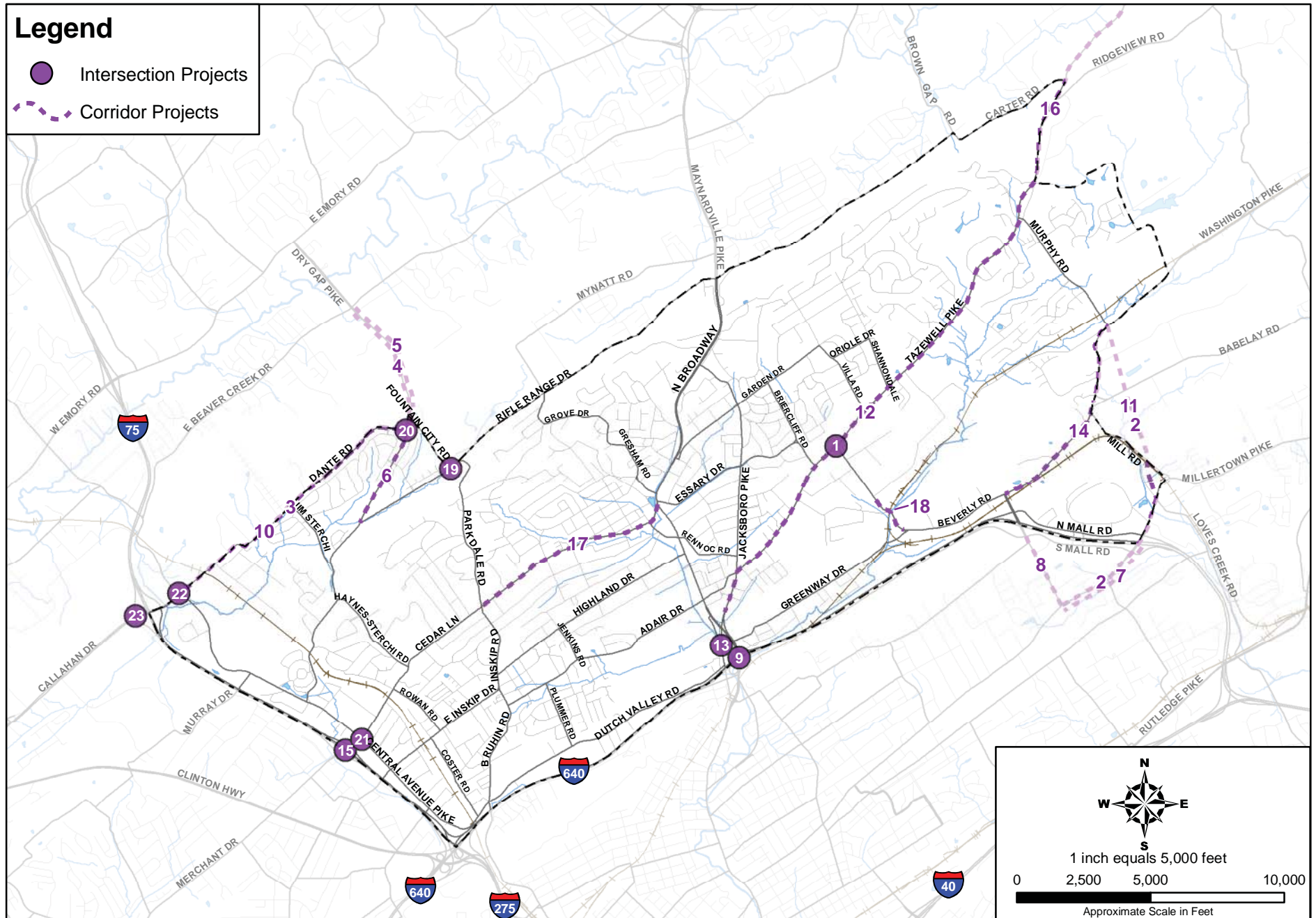
The Long Range Transportation Plan (LRTP) makes recommendations for state and federally funded road projects. MPC and the community recognize that the projects to widen Dante Road, Cedar Lane, Tazewell Pike, and possibly other projects, may be inappropriate to the scale of the existing community and neighborhoods and therefore as the design and implementation of road projects occur alternatives to road widening should be considered (such as only widening at busy intersections for turn lanes).

Note:

Dates shown in the following table indicate a projected completion date.

Project Location		Project Description	Program Schedule
PLANNED TRANSPORTATION PROJECTS			
1	Tazewell Pike at Beverly Road intersection	Design and construct turn lanes and traffic signal.	TDOT
2	Millertown Pike area plan (bounded by intersection of Millertown Pike/ Washington Pike and Washington Pike/Murphy Road)	City is hiring a consultant to update Transportation Planning Report for this area.	City of Knoxville CIP
3	Dante Road from Central Avenue Pike to Dry Gap Pike	Widen to 4 lanes	Knox County CIP 2011
4	Dry Gap Pike at Dante Road to south of E. Beaver Creek Drive	Phase II, Widen to 4 lanes	Knox County CIP 2010-2011
HIGHWAY PROJECTS			
5	Dry Gap Pike from Beaver Creek Drive/Cunningham Road to Dante Road	Widen 2-lane to 4-lane, construct roadway on new location	TPO - LRTP 2009
6	Dry Gap Pike from Dante Road to Rifle Range Road	Widen 2-lane to 4-lane, construct roadway on new location	TPO - LRTP 2009
7	Millertown Pike from Washington Pike to North Mall Road	Widen 2-lane to 4-lane with center turn lane, construct roadway on a new location	TPO - LRTP 2009
8	Washington Pike from Millertown Pike to I-640	Widen 2-lane to 4-lane with center turn lane, construct roadway on new location	TPO - LRTP 2009
9	I-640/Broadway Interchange	Project should include improved safety and capacity of railroad underpass at Old Broadway; improved access to Greenway Drive & Tazewell Pike from Broadway	TPO - LRTP 2014
10	Dante Road from Central Avenue Pike to Dry Gap Pike	Widen 2-lane to 4-lane	TPO - LRTP 2014
11	Murphy Road Extension	Construct new 4-lane road from Washington to Millertown Pike	TPO - LRTP 2014
12	Tazewell Pike (SR 331) from Broadway to Murphy Road	Add center turn lane	TPO - LRTP 2014
13	Tazewell Pike (SR 331) Intersection with Old Broadway & Greenway Drive	Intersection reconstruction	TPO - LRTP 2014
14	Washington Pike from I-640 to Murphy Road	Widen 2-lane to 4-lane, construct roadway on a new location	TPO - LRTP 2014
15	I-75/Merchant Dr Interchange	Interchange modification	TPO - LRTP 2020
16	Tazewell Pike (SR 331) from Murphy Road to Emory Road	Widen 2-lane to 4-lane, construct roadway on a new location	TPO - LRTP 2020
17	Cedar Lane from East of Central Avenue Pike to Broadway	Add center turn lane	TPO - LRTP 2030
18	Beverly Road	Improvements, especially in the vicinity of the railroad tracks and Whites Creek	Recommend for City CIP after annexation
19	Parkdale Road and Fountain City Road at Rifle Range Road	Align intersection to create a four-way intersection	Generated from sector plan public meeting
20	Fountain City Road and Dante Road at Dry Gap Pike	Align intersection to create a four-way intersection	Generated from sector plan public meeting
21	Merchants Drive and Central Avenue Pike	Redesign the intersection to relieve congestion	Generated from sector plan public meeting
22	Dante Road and Central Avenue Pike	Intersection project, includes 2 west-bound lanes to Interstate 75	Generated from sector plan public meeting
23	Callahan Road at Interstate 75	Add traffic signal on west side of interchange for safe turning movements to and from I-75	Generated from sector plan public meeting
SIDEWALK PROJECTS			
24	Millertown Pike	Sidewalks constructed as part of road project	LRTP 2014
25	Washington Pike	Sidewalks constructed as part of road project	LRTP 2014
26	Tazewell Pike	Sidewalk to enhance pedestrian travel	LRTP 2030
GREENWAYS			
27	Fountain City Greenway	Construct greenway from Fountain City Park to Adair Drive	LRTP 2014
OUTSIDE BUT RELEVANT TO SECTOR			
•	Central Avenue Pike and Beaver Creek	Intersection project	Knox County CIP 2007/2008
•	Valley View Drive realignment	Relocate eastern portion of Valley View Drive at Washington Pike to align with Centerline Drive	City of Knoxville CIP
•	Washington Pike from Murphy Road to Luttrell Road	Widen 2-lane to 4-lane	LRTP, 2020
•	Washington Pike from Luttrell Road to Maloneyville Road	Widen 2-lane to 4-lane	LRTP, 2020
•	Central Avenue Pike from Beaver Creek Drive to Emory Road	Widen 2-lane to 4-lane, construct roadway on new location	Knox County CIP 2008-2009

Map 10: Transportation Plan





Tazewell Pike has been recommended for road projects because of the congestion and volume of traffic.



The extension of Murphy Road from Washington Pike to Millertown Pike will help alleviate traffic problems on Broadway.

Chapter 4:

Fountain City Small Area Plan

INTRODUCTION

Residents and members of Fountain City Town Hall expressed a desire for MPC to provide a small area plan for the heart of Fountain City in order to address specific concerns. Some of the concerns that came out of a public meeting included the following:

- Consider streetscaping standards, underground utilities, sign controls and sidewalks along Broadway
- Maintain a sense of place and identity for Fountain City by promoting local businesses and protecting/strengthening both commercial and residential areas
- Find ways to enhance and further promote the existing town center at Hotel Avenue and Broadway
- Provide connectivity through sidewalks, greenways, and parks; improve existing recreational facilities and increase the number of neighborhood and community park facilities
- Focus attention on developing neighborhood conservation and historic district overlays to protect neighborhoods.

This small area plan highlights key steps to be taken in response to these requests.

BROADWAY CORRIDOR STUDY

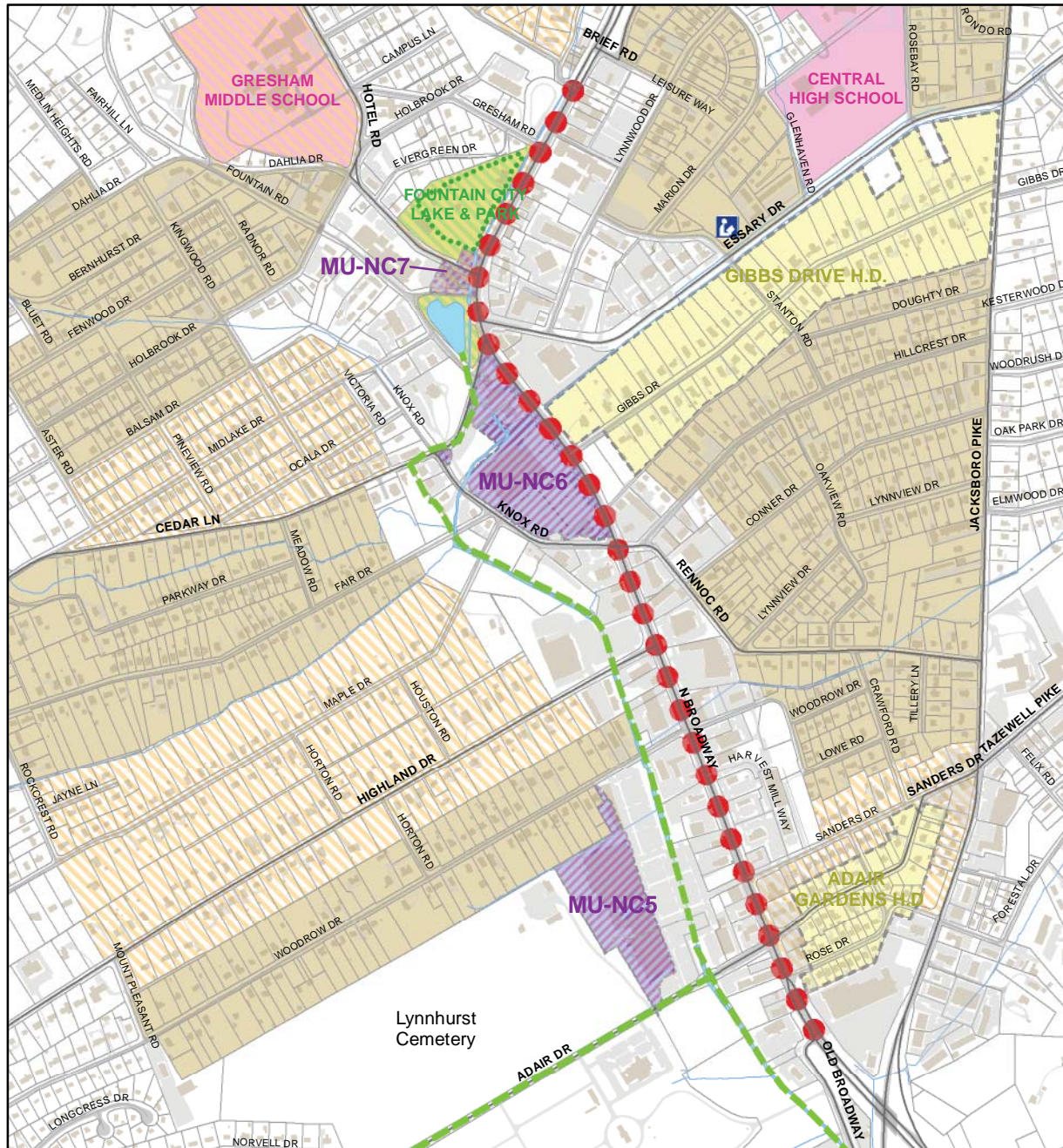
US Highway 441 is known in Knox County as Maynardville Highway, North Broadway, Henley Street and Chapman Highway. The North Broadway section through Fountain City acts as a major connector from downtown Knoxville to North



Knoxville and North Knox County. It is one of three roadways that provide north-south access in the North City Sector; the other two being Parkdale Road/Inskip Road (a narrow and winding road) and Interstate 75. There are no north-south roads east of Broadway that connect through the sector. The challenge of north-

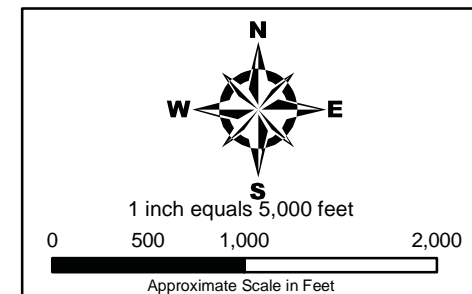
south access is predominately due to the topography and location of two major ridge lines, Black Oak Ridge to the north and Sharp's Ridge to the south. As a major arterial, North Broadway serves both local and regional trips. Its Average Daily Traffic (ADT) ranges from 39,000 to almost 44,000 ADT. A major

Map 11: Fountain City Small Area Plan



Legend

- Existing Greenways
- Proposed Greenways
- ● ● Broadway Corridor Study Extent
- Neighborhood Preservation Area
- National & Local Historic District (H.D.) Eligible
- National Register H.D./Local H.D. Eligible





Mark Fenton leads a walkability audit of the Fountain City area.

arterial is defined as “a street that provides major movement within the area, provides intercommunity connections to the local street system and moves through traffic between activity centers. Access control is desirable.”¹ Because of the commercial nature and automobile-oriented uses that currently line North Broadway, access is a major problem with multiple curb cuts, driveways, and intersecting streets. Additionally, there are very limited facilities for pedestrians and no dedicated facilities for bicyclists in the current street configuration.

Recognizing these challenges, the Fountain City community had an opportunity through the I Walk Month (organized by the TPO and funded by TDOT) to invite a nationally known pedestrian advocate, Mark Fenton, to conduct a walkability audit and a pedestrian workshop in Fountain City in April 2006. At the workshop, he reviewed the findings from the audit and encouraged residents and community leaders to address the whole problem by considering four elements of walkability: 1) a mix of land uses, 2) network of bike and pedestrian facilities, 3) site design and details, and 4) safety.

¹Major Road Plan, <http://archive.knoxmpc.org/zoning/mrp04txt.pdf>

Additionally, Fenton asked the 45 workshop participants to break into groups and brainstorm solutions for the issues seen in the audit. Ideas included programs, projects, and policies. The major program ideas included education about active lifestyles; beautification of Fountain City (litter pickup, etc.); and promotion of alternative transportation such as a walking school bus, public transit, bike facilities, etc. The major projects included creating more sidewalks and recommended locations; streetscape improvements including landscaping, sidewalks, building setbacks; transportation improvements – more bus stops, shelters, connected greenways; improved safety through crosswalks, signs, maintenance of existing sidewalks, etc.; and a skate park for youth. Finally, the recommended policies include promoting connectivity through Fountain City; better enforcing of traffic violations; changing development policies to be pedestrian-friendly; changing viewpoint of policy makers; and creating a master plan with Smart Growth principles, including mixed-use development.

From this public input, efforts are being made to improve North Broadway and Fountain City. A community group, Fountain City Connections, formed out of the walk audit with the purpose of making Fountain City a more pedestrian-friendly place. This group has been working with planners, engineers, public health officials and the Knoxville Police Department. To date, FC Connections has partnered with the City on identifying crosswalks on Broadway that needed striping or re-striping, and has been instrumental in getting several pedestrian push-button signals installed. Near-term goals include infrastructure changes in Fountain City, while in the long-run the group is working toward policy changes. FC Connections would like all of Knoxville to be a safer, more pleasant place to live.



Pedestrian safety on Broadway is an issue.

In addition, the TPO has been allocated funds for a complete street planning study for two auto-oriented commercial corridors in the Knoxville TPO region. One of those corridors is North Broadway from Old Broadway to Colonial Circle in Fountain City. This study will make recommendations for transforming the corridors into places that are safe and accessible for all transportation modes. The study will also consider how these corridors can be better integrated into the residential neighborhoods surrounding them so that they become amenities in the neighborhoods rather than barriers to non-motorized travel, while still serving their role as movers of significant amounts of motorized traffic.

MIXED-USE AND TOWN CENTER REDEVELOPMENT CONCEPTS

There are two types of mixed-use discussed in this sector plan. One deals solely with land use: An example would be a parcel that could appropriately be used for either low density residential, medium density residential or office in comparison with surrounding land uses. The other is more appropriately termed “vertical mixed-use” and refers to an area where land use can be a multiple uses within a parcel or multiple parcels. An example would be a parcel with a building



Figure 1:
MIXED-USE AND TOWN CENTER REDEVELOPMENT CONCEPT

EXISTING CONDITIONS

Auto-oriented regional arterial is inhospitable to pedestrians. The street is wider than it needs to be; signage and lighting are oversized. Despite being located on a major transportation corridor, land uses are low-intensity and underutilized. Driveways invade what little pedestrian space exists. Parking lots along the street and blank-walled buildings form a public space that is unattractive.



PHASE 1

Public improvements in the streetscape and pedestrian environment are coupled with changes in land use policy. Higher intensity, mixed-use developments are attracted to the corridor. New buildings are placed next to the street, on-street parking is provided and off-street parking is located in the rear. A landscaped median adds definition to the corridor, and the former parking lot entrance is converted to a street. Building placement and the mix of ground-floor commercial and upper-story office uses bring pedestrian activity to the sidewalk, which is made pleasant and interesting by building design details. Street trees and on-street parking buffer pedestrians from traffic.



PHASE 2

A new housing development with apartments above office and retail on the ground floor frames the street and provides a smooth transition to the adjacent neighborhoods by transitioning to street-fronting townhouses. The increased land use activity has generated greater demand for transit services. A bulbout-style bus stop is added, along with other features to speed bus operations. Through incremental improvements, the street has become a place – it has evolved into a vibrant mixed-use corridor serving as a center of activity and commerce for surrounding neighborhoods.

that has retail or commercial uses on the first floor, office uses on the second floor and residential units above. Multiple mixed-use developments can be clustered together to form what is known as a town center.

The town center is best described as a pedestrian-friendly, mixed-use urban development that provides shopping, employment, housing, and business and personal services. The developments are intended to promote efficient, compact land use patterns and reduce reliance on personal motorized vehicles. A high level of attention to site and building design is required to promote attractive, functional development.

An area that already has a town center feel is the historic Fountain City area where Hotel Road and Broadway intersect. This area could be enhanced through the addition of residential units, a comprehensive parking plan, and design standards for future buildings. Additionally, the district could be expanded across Broadway as properties redevelop and a safer pedestrian connection could be made to enhance this district.

Low-density and medium-density residential units are already located within a 10-minute walk of the area near North Broadway and Adair Drive and North Broadway and Knox Road, and long-term redevelopment opportunities could add more residential units. The City of Knoxville zoning ordinance currently has a Town Center District (TC-1) to facilitate this type of development. It could also be realized through the use of form-based codes or overlays that are not currently a part of the development regulations in Knoxville.

The illustrations show how an aging suburban shopping center can be transformed into a thriving mixed-use development.



Figure 2:
REDEVELOPMENT

EXISTING CONDITIONS

Deep building setbacks, large expanses of unused parking and building design that lacks visual interest are unwelcoming to pedestrians.

PHASE 1

Corner-located, pedestrian-scale buildings make more effective use of unused parking and bring the shopping center closer to the street and surrounding community. The new buildings include office above retail, bringing more activity and customer base to the shopping center. Surface parking is located behind the buildings. Human-scale building details such as transparent windows, street-facing entrances and awnings, along with landscaping and pedestrian-scale lighting, improve the walking environment.

PHASE 2

The original shopping center has been reinvigorated with a redesigned retail anchor and further infill development. The parking lot entrance becomes a real street. Intensification of buildings, such as adding a third story, brings more people to the site and parking can be consolidated into structures that also contain other uses. Outside spaces are comfortable and pleasant for pedestrians.

COMMUNITY FACILITY IMPROVEMENT

There are two major community facility improvements in the works for Fountain City. This includes a satellite skate park that would be owned and maintained by the City Parks and Recreation Department. The request for this facility has come up in multiple meetings including the City County Parks, Recreation and Greenway Plan meetings and Fountain City Town Hall meetings.

Additionally, greenway connections and connectivity were the most requested facility in the update of the Parks, Recreation and Greenway plan. First Creek runs roughly parallel to North Broadway on the western side of the street and provides a possible greenway link from Adair Park north to Fountain City Park.

Another request that was commonly brought up was for a new baseball field for Central High School and more soccer fields in general. These requests are being accommodated through the design of the new Tommy Schumpert Park which is outside the sector area, but directly adjacent to it.

NEIGHBORHOOD PROTECTION

This plan recognizes that there is pressure on Fountain City neighborhoods to redevelop with apartments, commercial, and office uses. Several lots within Fountain City neighborhoods have been redeveloped with apartment complexes that have a blank wall facing the streets and significantly more parking than neighboring detached homes. This trend of individual home lots being converted into apartments that have no relationship to the existing neighborhood has raised concerns on the part of residents and sector plan participants. The following Overlay Districts have

various levels of controls in place to protect the design and character of older, traditionally low density detached dwelling neighborhoods. Additionally, neighborhood preservation areas (see Map 11) may benefit from rezoning the base zone to a more appropriate zone.



H-1: Historic Overlay District

This district is intended to preserve and protect historic structures and areas which serve as visible reminders of the history and cultural heritage of the City of Knoxville, State of Tennessee and the United States of America. It is the intent of this district to regulate the construction, repair, alteration, rehabilitation, relocation or demolition of any building or other structure which is located or proposed to

be located in an H-1 Historic Overlay District. This district is not intended, however, to regulate the use of land, buildings or structures.

Recommended Neighborhoods: Northern portion of Harrill Hills, Adair Gardens, Gibbs Drive, Colonial Circle and Peyton Place, and Midlake Road.

NC-1: Neighborhood Conservation Overlay District

The Neighborhood Conservation Overlay District recognizes that older Knoxville neighborhoods need to be conserved for their cultural, historic and housing values. The Neighborhood Conservation District is intended to foster new construction that is in harmony with the scale and physical character of the original buildings of the neighborhood through the use of Design Guidelines. This district is not intended to regulate the use of land, buildings or structures.

NC-1 is a geographically definable area that has a significant concentration, linkage or continuity of sites which are united by physical development or history built prior to 1950 and an area greater than 10 acres.

There are no neighborhoods recommended for the NC-1 Overlay at this time.



Inappropriate infill does not relate to the surrounding neighborhoods

IH-1: Infill Housing Overlay District

This overlay district is intended to foster infill residential development and major additions that are compatible with the design of original houses in older Knoxville neighborhoods, particularly those built prior to 1950 along grid streets that often had sidewalks and alleys. A geographically definable area is also required of ten acres or more. The district is not intended to regulate the use of the land, buildings or structures. Property and buildings in the in the Infill Housing Overlay District may be used for the purpose permitted by the base zoning.

Recommended Neighborhoods: see Map 11 for Neighborhood Preservation Area.

For more information on these overlay tools, please see the City of Knoxville Zoning Ordinance, available online at www.knoxmpc.org/zoning.

Appendix A: DEVELOPMENT POLICIES FROM THE GENERAL PLAN

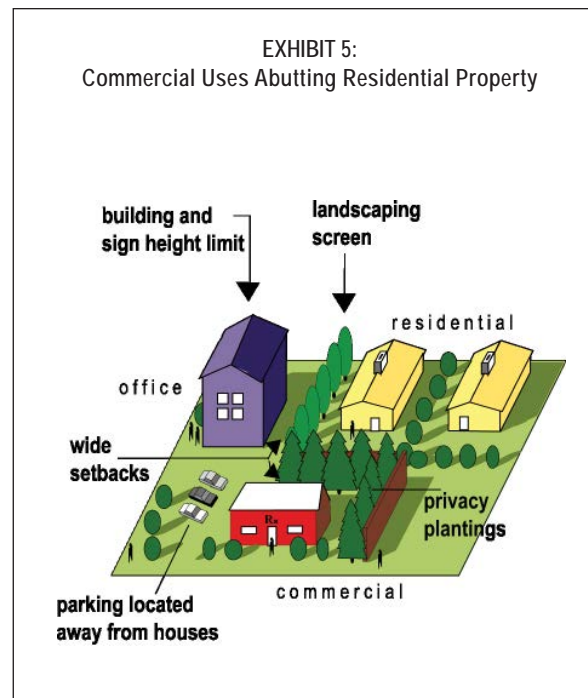
This section of the General Plan contains development policies that support each of the ten major ideas of the Agenda for Quality Growth. These written and graphic policies advocate actions that will help to fulfill the communities' vision for Knoxville and Knox County. They are intended to improve the appearance and function of public and private development, conserve scenic and heritage assets, preserve property values and build on Knox County's image as a great place to live and work.

1. Develop a Strong Economy.
 - 1.1 Increase the competitive position of Knoxville for the retention and attraction of business activities.
 - 1.2 Ensure that Knoxville and Knox County continues to offer the land, roads, utilities, work force, and business climate needed to support economic growth.
 - 1.3 Provide incentives for new industrial development and for redevelopment or rehabilitation of older industrial facilities.
 - 1.4 Provide government assistance in land consolidation, financing and industrial recruitment when rehabilitating the city's industrial areas.
 - 1.5 Capitalize on Knoxville and Knox County's business assets, skilled work force, easily accessible transportation network, educational incentives and excellent quality of life as marketing assets.
 - 1.6 Capitalize on tourism opportunities, including University of Tennessee sports teams and proximity to the Smoky Mountains.
 - 1.7 Establish Knoxville and Knox County as a center for technological research and development, building upon the existing base of technological industries and personnel.
 - 1.8 Coordinate utility service extensions to attract new jobs to Knoxville & Knox County.
 - 1.9 Identify and recruit businesses and industries which can benefit from the Technology Corridor's access to freeways, the airport, Pellissippi State Technical Community College and the Oak Ridge National Laboratory.
 - 1.10 Assist local firms that want to expand their business into international markets.
 - 1.11 Reserve an adequate supply of large sites for industrial growth.
 - 1.12 Use zoning and land acquisition to protect areas reserved for industry from encroachment by residential development.
2. Provide Transportation Choices for All Citizens.
 - 2.1 Integrate pedestrian, bicycle, transit and automobile modes in developing a comprehensive transportation system.
 - 2.2 Improve the continuity of the urban and regional thoroughfare system.
 - 2.3 Acquire rights-of-way for future transportation projects well in advance of construction.
 - 2.4 Allow narrower local roads to conserve open space and improve air quality.
 - 2.5 Implement transportation improvements at frequent crash locations.
 - 2.6 Discourage through-traffic in residential neighborhoods by routing arterial streets and highways outside neighborhoods.
 - 2.7 Whenever possible, emphasize low-cost solutions to traffic problems, as opposed to new construction or capital acquisition.
 - 2.8 Develop a transit system, including trolleys, buses and potential light rail.
 - 2.9 Provide paratransit services to elderly and handicapped citizens that are comparable in quality to fixed-route bus services.
 - 2.10 Provide facilities and programs to encourage ride sharing.
 - 2.11 Develop a transportation center in downtown Knoxville.
 - 2.12 Include separated sidewalks and landscaping as a part of new construction or widening of all thoroughfares.
 - 2.13 Review development plans to ensure pedestrian needs are being met and that the sidewalk network's continuity is being achieved, especially in the school parental responsibility zones.
 - 2.14 Create transportation corridors and centers that can efficiently handle the movement of goods, including truck, rail, water, and air transportation.
3. Build on Knoxville's Role as a Regional Capitol.
 - 3.1 Work with other East Tennessee cities and counties to pursue common regional economic interests.
 - 3.2 Ensure that proper information and communication infrastructures are in place for the region to compete in the 21st century business world.
 - 3.3 Cooperate with other local governments to create a regional open space and greenway system between Knoxville and the Smoky Mountains.
 - 3.4 Work with federal, state and local governments to improve air quality and other environmental issues on a regional basis.
 - 3.5 Conserve the natural assets that make this region attractive and enhance the quality of life.
4. Understand the Building Blocks: Neighborhoods, Districts, Corridors and Communities in the Region.
 - 4.1 Use schools and parks as foundations in planning neighborhoods and communities.
 - 4.2 Require vehicular and pedestrian connections between subdivisions to encourage safe access to community facilities and to reduce reliance on the automobile.
 - 4.3 Develop and use guidelines to foster good architectural design, landscaping, and aesthetically-pleasing streetscapes.
 - 4.4 Use landscaping, signage, and architecture to identify significant entrances to communities, neighborhoods, and business districts.
 - 4.5 Avoid creating small, isolated pockets of residential development; encourage neighborhoods large enough to support cost-effective provision of community facilities and services and to maintain a strong residential quality and stability.

- 4.6 Provide support for the development of neighborhood and community organizations.
 - 4.7 Continue to develop new ways for citizens to receive information and to voice opinions regarding neighborhood and community issues.
 - 4.8 Train local government staffs and appointed boards to be supportive of neighborhood revitalization and to be responsive to the neighborhood's opinions on development and revitalization plans for their areas.
 - 4.9 Enhance the quality of special districts such as the university, the Old City, Emory Place and Bearden Village.
 - 4.10 Support downtown Knoxville's growth as a regional center of entertainment, professional services, government, and finance.
 - 4.11 Encourage housing and employment growth downtown to expand the market for retail, restaurants, and other services.
 - 4.12 Provide incentives for residential reuse of vacant downtown buildings.
 - 4.13 Enhance highway corridors by landscaping, creating attractive architecture, providing pedestrian-friendly atmosphere and eliminating visual clutter.
5. Make Strategic Community Investments.
- 5.1 Coordinate new utility services with development of roads, schools, employment centers, shopping areas and recreation sites to encourage efficient development patterns and limit sprawl.
 - 5.2 Encourage development in areas with excess utility capacity, or in areas where utilities may be easily extended.
 - 5.3 Plan far in advance for land acquisition, financing and design of neighborhood-serving community facilities: roads, schools, parks, utilities, and public buildings.
 - 5.4 Use existing and future public land to create greenways and parks.
 - 5.5 Use greenways to link parks, schools, and other public facilities.
 - 5.6 Emphasize park acquisition along potential greenways.
 - 5.7 Meet minimum national standards in providing neighborhood, community and district park space.
 - 5.8 Meet the needs of individuals who are physically challenged.
6. Respect and Nurture Our Heritage Areas.
- 6.1 Encourage flexible, planned development zones to protect hillsides, woodlands, wildlife habitats, and stream corridors.
 - 6.2 Compliment natural land forms when grading, and minimize grading on steep slopes and within floodways.
 - 6.3 Encourage development in areas with the fewest environmental constraints.
 - 6.4 Allow clustered development in rural areas to preserve farms, open space and rural character.
 - 6.5 Protect and enhance monumental buildings, public open spaces, bridges and similar physical features that contribute to Knoxville's identity.
 - 6.6 Encourage the reuse of vacant an underutilized historic resources.
 - 6.7 Use historic zoning and conservation districts to protect neighborhoods.
 - 6.8 Protect the scenic vistas of ridges and valleys.
 - 6.9 Set aside greenways along streams and ridges to protect floodplains, stream sides and steep slopes.
 - 6.10 Develop a metropolitan forestry program to conserve and reestablish trees and woodlands.
 - 6.11 Strengthen the Scenic Highways Program regulations and enforcement.
7. Reclaim Our Rights to Clean Air and Water.
- 7.1 Meet state and federal water quality standards.
 - 7.2 Protect water resources by reducing pollution and retaining trees and ground cover on ridges and near streams, rivers, lakes and sinkholes.
 - 7.3 Create wetlands and naturally landscaped retention basins to slow down rapid runoff and reduce pollutant discharges.
 - 7.4 Strengthen stormwater and flood protection standards, particularly in flood-prone drainage basins.
 - 7.5 Protect the natural drainage systems associated with floodways and floodplains.
 - 7.6 Restrict development on slopes greater than 15% and along streams and rivers. Housing densities on 15 – 25 % slopes: 2 dwelling units per acre. Housing density on slopes greater than 25%: 1 dwelling unit per 2 acres. Non-residential uses on slopes over 15%: via a planned development zone. Floodplains: Limit uses to 50% of flood fringe area.
 - 7.7 Provide trees and minimize impervious surfaces when developing parking lots.
 - 7.8 Encourage development in areas with adequate sanitary sewer lines, and improve existing systems to eliminate sanitary sewer overflow.
 - 7.9 Meet state and federal standards regarding all air pollutants, particularly ozone and toxic air emissions.
 - 7.10 Reduce greenhouse gas emissions.
 - 7.11 Create programs that reduce air pollution by promoting alternatives to automobile travel.
 - 7.12 Develop land use patterns and infrastructure that encourage trip reduction.
- 6.12 Create community facilities and commercial services that are in keeping with the scale and character of the surrounding rural area, using the rural commercial zone.

8. Encourage Growth in the Existing Urban Area.
 - 8.1 Develop “infill” housing on vacant lots and redevelopment parcels. Infill housing should be compatible with neighboring residences in scale, design, and site layout.
 - 8.2 Locate neighborhood commercial so that it will enhance, rather than hinder, the stability of residential areas.
 - 8.3 Focus on design quality and neighborhood compatibility in reviewing development proposals.
 - 8.4 Protect residential areas from encroaching commercial development and other incompatible uses.
 - 8.5 Protect neighborhoods from intrusive uses, declining public facilities, and other blighting influences.
 - 8.6 Promote crime prevention through design that emphasizes visibility and neighborhood protection.
 - 8.7 Avoid the concentration of halfway houses, boarding houses, day care centers, and publicly assisted rental housing in any given neighborhood.
 - 8.8 Support the efforts of government, neighborhoods and nonprofit organizations to address housing issues, particularly housing rehabilitation.
 - 8.9 Promote the development of small scale planned business parks in the central city, making sure there is no significant adverse impacts on residential neighborhoods.
 - 8.10 Encourage redevelopment of obsolete commercial strip space by providing incentives for “infill” rather than greenfield development.
 - 8.11 Improve the appearance of existing commercial strips by encouraging better landscaping and fewer signs.
 - 8.12 When commercial uses abut residential property, ordinance provisions or use-on-review conditions requiring fencing, landscaping screens, earthberms, height restrictions, and/or deeper than usual building setbacks can improve land use transitions. (Exhibit 5)

9. Build Sustainable New Neighborhoods.
 - 9.1 Encourage creative use of the flexibility offered in planned residential zones to develop alternative neighborhood forms, such as traditional neighborhood developments, pedestrian-oriented neighborhoods, and neighborhoods designed to take advantage of mass transit.
 - 9.2 Encourage development practices that respect and fit the natural landscape, minimizing the loss of trees, woodlands and wildlife habitat.
 - 9.3 Ensure that the context of new development, including scale and compatibility, does not impact existing neighborhoods & communities.
 - 9.4 Provide incentives for conservation subdivisions, to set aside large portions of open space and protect natural resources.
 - 9.5 Avoid locating residences or other noise-sensitive land uses in locations that will be subject to excessive noise.
 - 9.6 Improve standards for public and private development to reduce noise and to foster light abatement.



- 9.7 Reduce visual clutter by improving sign regulations and encouraging underground utility lines.
- 9.8 Encourage a mixture of housing sizes and prices within planned residential developments.
- 9.9 Encourage village centers as the preferred form of retail development, and use the neighborhood commercial zones to provide day-to-day services near residential areas.
- 9.10 Encourage commercial and office development that improves the form and function of traditional “strip” development patterns.
- 9.11 Locate community-serving commercial areas where they can be easily shared by several neighborhoods.
- 9.12 Locate day care centers and other neighborhood services at the edges of neighborhoods or in village centers. Locate freestanding day care facilities (those serving six or more children) on the perimeter of residential areas, on arterial or collector streets, in a manner which will not adversely affect surrounding properties.

10. Development Decisions Should be Predictable, Fair and Cost Effective.

- 10.1 Encourage creative site layouts by providing flexibility and incentives in zoning regulations.
- 10.2 Facilitate better communication and provide impartial technical assistance and arbitration between neighborhood organizations, government offices and developers where needed.
- 10.3 Involve school, police and fire officials in land use planning at the sector, neighborhood, and site plan levels.
- 10.4 Rigorously enforce zoning regulations and conditions of approval to maintain public confidence in the planned development process.
- 10.5 Use “as-built” plans and engineering inspections to insure that developments are built according to approved designs, requiring certification that projects are built as planned.
- 10.6 Provide site design flexibility to developers who provide amenities such as recreation areas, trails, sidewalks, streetlights, underground utilities or exceptional architectural or landscape design treatments.
- 10.7 Provide incentives for developers to include some affordable units in higher cost developments.

- 10.8 Base land development policies and regulations on an awareness of the ever changing character of the housing market.
- 10.9 Avoid creating zoning boundaries that result in unlike uses directly facing each other. (Exhibit 6)
- 10.10 Once transitional zoning patterns are in place, keep them intact; do not compromise buffer zones by rezoning them commercial.
- 10.11 Allow higher densities, smaller yards and narrower lots for portions of planned developments that do not abut or face conventional suburban developments. In exchange, deeper setbacks, wider lots or landscape buffers shall be provided where the new development abuts lower density housing.

11. Additional Development Policies

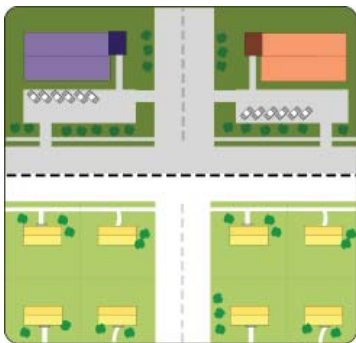
- 11.1 Environmental constraints and the availability of utilities, drainage, and transportation are factors in setting standards for the densities of residential developments.
- 11.2 The density for residential development will be based upon the amount of usable acreage, excluding areas which are under water, in floodways, have steep slopes, or are otherwise undevelopable. Rural,

planned growth and urban growth boundaries also influence density. These areas are designated in the Knoxville-Knox County-Farragut Growth Policy Plan. The following general standards will be applied in setting densities for residential development, providing these densities do not conflict with other policies in this plan:

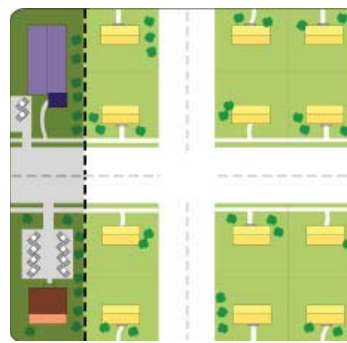
- Up to one unit per acre in rural areas with environmental constraints or infrastructure inadequate for greater densities.
- Low-density 1 to 3 du/ac in rural areas with infrastructure.
- Low-density 1 to 5 du/ac in planned growth areas.
- Low-density 1 to 6 du/ac within the City of Knoxville.
- Medium-density 6 to 12 du/ac in planned growth and urban growth areas; appropriate along collector or arterial roads, waterfronts, and as buffer zones between lower density residential and more intense uses.
- Medium-density 6 to 24 du/ac in urban growth areas adjacent to neighborhood and community centers.

- High-density over 24 du/ac, appropriate in downtown and UT area, and in regional activity centers; should have good access to transit.
- 11.3 Discourage environmental nuisances in the vicinity of residential development, including rundown commercial development, noxious industrial uses, railroad tracks, noise and fumes from heavy traffic volumes, large storage tanks of gas, oil and other flammable materials, smoke, noise, offensive odors, vibrations, dust, or glare from nearby or distant uses.
- 11.4 Create gradual zoning transition patterns by placing medium intensity zones and uses such as offices, condominiums, and community buildings in between single-family residential areas and higher intensity uses. Require landscaping, screening, earth berms, walls and similar techniques to separate incompatible land uses when gradual zoning transition patterns are not possible. (Exhibit 7)
- 11.5 Avoid abrupt, incompatible changes in density, scale, and building appearance from one development to another.
- 11.6 Office developments meeting the following standards should be allowed in buffer zones between residential neighborhoods and more intense uses in conventional suburban developments:

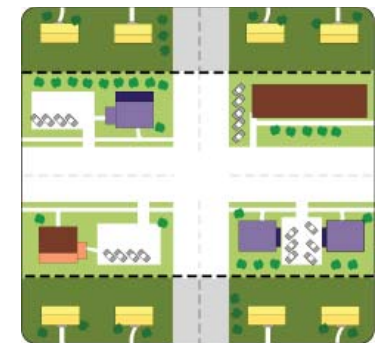
EXHIBIT 6: Zoning Boundaries



A bad situation: Zoning boundaries at front property lines cause unlike uses to face each other, often creating visual conflicts and affecting residential uses with intense noise and traffic.



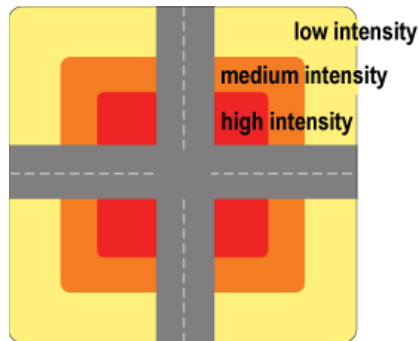
This situation, while better than the one at left, can cause visual and noise conflicts, which can be reduced by landscaping or other buffers.



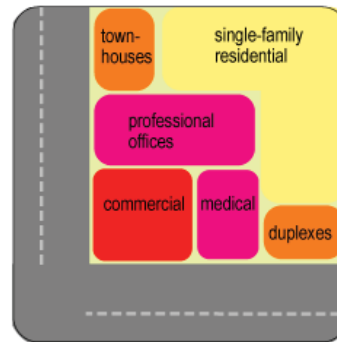
This arrangement, with zoning boundaries along rear lot lines, causes unlike uses to face away from each other, reducing intense noise, visual, and other conflicts.

- residential architectural style
 - building height limited to 36 feet
 - site coverage no more than 35 percent
 - parking areas well landscaped and screened from any abutting residences
 - landscape screens or architectural quality walls or fencing along any property line abutting single-family residences
 - low, monument style or wall mounted signs
 - special attention to locations of parking lots, trash receptacles and outdoor lighting to avoid impacts on residential neighbors
- 11.7 Mid-rise office buildings (four to eight stories) should be allowed next to commercial or light industrial areas, along freeway corridors, on or around the University of Tennessee campus, on or around major hospital sites, and in the Central Business District, subject to the following standards:
- Avoid blocking major scenic vistas.
 - If the site abuts low-rise residential development, it should be large enough to provide large building setbacks along the residential property line.
 - Buildings should not be close enough to residences to cast shadows or block sunlight.
 - Stepped-back building facades should be considered.
- Consideration of mass, scale and style of surrounding development in building and site design.
- 11.8 High-rise office buildings (nine stories or more) should be limited to the Central Business District.
- 11.9 Locate new industrial development primarily in industrial parks, business parks or other suitably planned settings of ten acres or greater, with locations for technology-based industry less restricted than general or heavy industry.
- 11.10 Locate business parks on sites which are:
- relatively flat and require minimal physical alteration
 - regular in shape and sufficiently large for the proposed activity
 - have direct access to arterial roads and where appropriate, to rail lines
 - prohibit access via residential streets
 - developed in a manner compatible with adjacent existing or proposed land uses
 - served by power, water, gas, sanitary sewer and waste disposal facilities

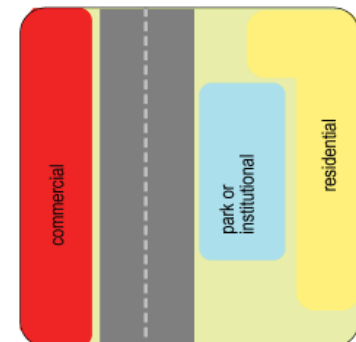
EXHIBIT 6: Gradual Zoning Transitions



Good transitions in zoning and land use are the best way to avoid having highly incompatible uses too close to each other.

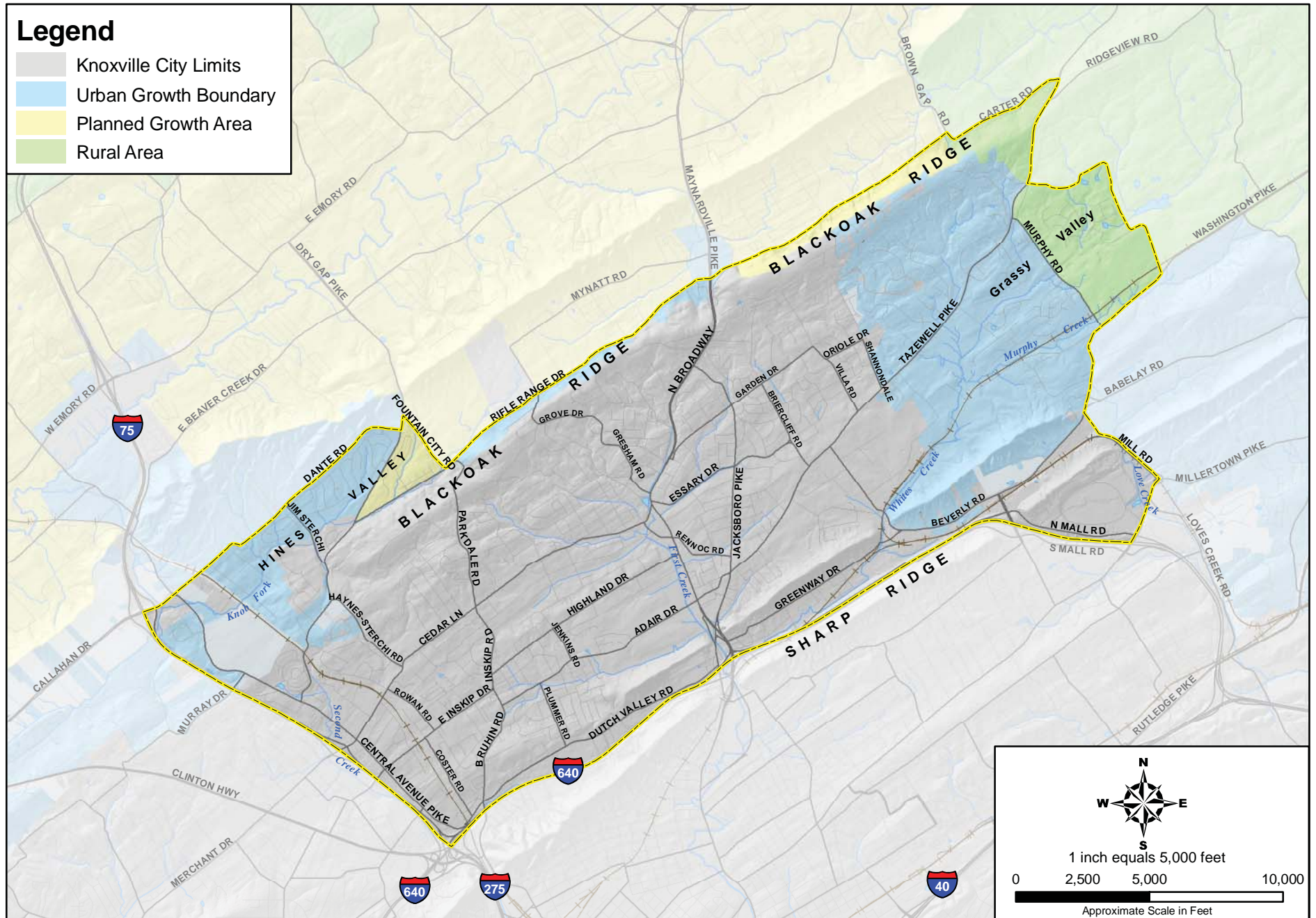


Buffer districts, which allow uses that are compatible with residential property, can help achieve effective land use transitions.



Institutional or public uses with large open spaces (hospitals, parks, cemeteries) can make excellent buffers.

Appendix B: GROWTH POLICY PLAN MAP FOR THE NORTH CITY SECTOR



Appendix C: SIGNIFICANT CHANGES IN LAND USE IN THE NORTH CITY SECTOR

The most significant changes in land use that have occurred or are proposed for the following areas:

Jim Sterchi Road and Dry Gap Pike
Changed to reflect low density residential rezoning that has occurred since the last update. There is a remnant of commercial (C-6) zoning still in place.
Central Avenue Pike (North of Steeplechase Apartments and West of the Railroad)
Changed from slope protection area, low density residential and office to mixed-use including slope protection area, office, low density residential, and medium density residential.
Dante Road and Fountain City Road
If and when the alignment of Fountain City Road is changed to create a "T" intersection with Dante Road, recommend that the remnant triangle parcel be changed from low density residential to neighborhood commercial.
North side of Shasta Drive
Changed from office to mixed-use including office and neighborhood commercial. Concerns were raised by residents about the impact of these uses on existing neighborhoods. A consensus was reached with the following ideas: 1) a buffer (which could be a linear park space or deeded open space) on the north side of Shasta would be required including planting requirements, and 2) no pass-through or commercial traffic would be allowed on Shasta (all traffic for commercial purposes would be off of Merchants Drive).
South side of Shasta Drive
Changed from low density residential to mixed-use including office, low density residential, and medium density residential. It was determined that office uses could be permitted if there were design standards that kept the architecture of the office compatible with surrounding housing and including landscape buffers and parking location requirements.

North side of Dutch Valley Road (one lot deep) west of Plummer Road
Changed from slope protection area, public institutional, low density residential and medium density residential to mixed use including slope protection area, public institutional, low density residential, medium density residential and office. Through the community meeting it was determined that office uses could be permitted if there were design standards that kept the architecture of the office compatible with surrounding housing and including landscape buffers and parking requirements.
North side of Greenway Drive between New Beverly Baptist Church Road and Beverly Road
Changed from slope protection area, public institutional, commercial, office and medium density residential to mixed-use including slope protection area, public institutional, low density residential, medium density residential and office.
North side of Greenway Drive next to Target site
Changed from commercial to general commercial and low density residential consistent with C-3 and R-1 zoning.
North side of Sharp's Ridge, south of the railroad tracks
Changed from slope protection area and light industrial to mixed-use including office, low density residential, and slope protection area.
South side of Sharp's Ridge between Mill Road, Millertown Pike and North Mall Road
Changed from slope protection area, stream protection area and commercial to mixed-use including slope protection area, stream protection area, commercial, office, medium density residential and high density residential.

Appendix D: PROPOSED NEW LAND USE CLASSIFICATIONS

It is proposed that starting in 2007-08, each City sector plan will be made consistent with the One Year Plan. This process will take several years as the Sector Plans and One Year Plan are updated. This system will also be the basis for proposed land uses in the county sector plans.

The purposes of the following land use classifications are to:

1. Establish the location criteria for land uses in the city and county.
2. Create a consistent set of land use classes that are to be used in sector plans and the city's One Year Plan.
3. Provide a list of zoning districts that are to be considered in implementing the land use plans.

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).

<p>Location Criteria:</p> <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 	<p>Recommended Zoning and Programs:</p> <p>City: C-1</p> <p>County's Planned Growth Area: CN</p>	<p>Other Zoning to Consider:</p> <p>SC-1</p>
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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).

<p>Location Criteria:</p> <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 	<p>Recommended Zoning and Programs:</p> <p>Because of traffic and lighting impacts (potential glare) and buffering needs of surrounding interests, 'planned zones' should be used.</p> <p>City: SC-2, PC-1 and PC-2.</p> <p>County's Planned Growth Boundary: PC or SC</p>	<p>Other Zoning to Consider:</p> <p>As infill development within areas already zoned C-3, C-4, C-5 and C-6 (City), and CA, CB and T (County)</p>
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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.

1. 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

2. 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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3. 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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4. 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

5. Special Mixed Use District (MU with reference number)

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: <ul style="list-style-type: none"> • 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.
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6. Special Corridors (CD with reference number)

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: <ul style="list-style-type: none"> • 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.
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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: <ul style="list-style-type: none"> • 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.
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Business Park (BP) Type 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: <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 • 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
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INDUSTRIAL AND WAREHOUSE/DISTRIBUTION LAND USE CLASSIFICATIONS . . . continued

Business Park (BP) Type 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 OB)	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

METROPOLITAN
P L A N N I N G
C O M M I S S I O N

T E N N E S S E E

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400 Main Street
Knoxville, Tennessee 37902
8 6 5 • 2 1 5 • 2 5 0 0
F A X • 2 1 5 • 2 0 6 8
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