

NORTHWEST CITY SECTOR

Executive Summary

The Northwest City Sector is a 16.5 square mile area that is suburban/urban in character, well-served by city infrastructure systems, and home to several well-established, healthy neighborhoods and a wide diversity of thriving businesses. The Sector Plan for this area includes land use, community facilities, green infrastructure, historic resources, and transportation plan recommendations. Summary recommendations are organized into 5-year and 15-year implementation stages. The sector plan recommendations reflect observation of data trends, projects implemented since 2004 (the last sector plan update), and public input resulting from an online survey and public meeting comments.

City and county sectors vary widely regarding character, population, development activity, and rate of growth. For the Northwest City Sector, population growth has increased steadily. From 1990-2000, the sector's population grew by 11.0%, and from 2000-2010 it grew by 7.9%. Development activity was equally consistent – since 2004, \$100 million (permit value) was invested in residential construction (\$82 million) and remodeling (\$18 million), with another \$104 million in nonresidential construction (\$50 million) and remodeling (\$54 million). Vacant land declined since 2004 from 2,180 acres to 1,781 acres, and much of the remaining land supply for new development is challenged due to slope or stream constraints. Growth and improvements within the sector will likely rely more on redevelopment and renovation of existing developed properties, and less so on 'greenfield' development. Although some residents are concerned that new development will pose land use conflicts for existing neighborhoods, most of the public comments reflected a desire to improve quality of life through amenity improvements, such as sidewalks and greenways, and to improve design quality and connectivity for commercial strips and centers.



Clinton Highway



Victor Ashe Park

As a result, the Northwest City Sector Plan recommendations are structured to address redevelopment strategies, preserve and enhance existing neighborhoods, and improve aesthetics and infrastructure. The sector plan is consistent with PlanET's preferred growth scenario, which recommends "strong cities and towns and dynamic new centers along existing transportation corridors." The sector plan identifies different types of "centers" with differing scales and functions, including neighborhood, community, and employment centers. Rather than creating new centers, the Northwest City Sector Plan recommends strengthening existing centers, improving connectivity to the neighborhoods they serve, accommodating appropriate infill opportunities, and using design guidelines to improve aesthetics and appearance.

Section 2:

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

PROPOSED LAND USE PLAN

The 15-Year Land Use Plan is a basis for land development and conservation, including rezoning decisions. Those decisions are made periodically through recommendations of the Metropolitan Planning Commission and the actual zoning changes via the decisions of City Council or County Commission. Zoning districts are recommended in relation to the following land use plan designations and policies.

In developing the proposed land use plan there were six steps to develop this section:

1. Standard Land Use Classifications Conversion

In 2007, MPC developed a standard land use classification table that is now used in all 12 sectors. The table includes descriptions, location criteria, and zoning districts allowed for each proposed land use classification (See Northwest City Sector Proposed Land Use Classifications). In developing the proposed land use map, the conversion from the older land use classification used in 2003 to the new standardized land use classification now used in all sector plans was completed.

2. Slope Protection and Stream Protection Areas

In recent years, MPC started to identify Slope Protection Areas and Stream Protection Areas as environmental overlay areas in sector plans. Without an underlying sector plan land use designation, review of rezoning and other applications became difficult and confusing. As a result, Slope Protection Areas and Stream Protection Areas have been converted to environmental overlay areas with underlying sector plan land use designations.

3. 2003 General Plan

Adopted in 2003, the Knoxville - Knox County General Plan serves as the official 30-year comprehensive plan for Knoxville and Knox County. The plan outlines a vision and framework for physical and economic development, to which sector plans must conform. Several Development Policies are set forth in the General Plan that have been used to guide Northwest City Sector Plan recommendations. An example is General Plan Development Policy #4: Understand the Building Blocks: Neighborhoods, Communities, Districts and Corridors in the Region. The sector plan reinforces the concept of building and enhancing strong neighborhoods, communities and corridors by making recommendations that support the stabilization of these building blocks and offers news enhancement tools, such as a corridor overlays and revisions to off-street parking requirements.

4. Citizen Input

Through the sector plan community involvement process, citizens provided input that helped to form plan recommendations. People who attended public meetings or responded to an online survey wanted better designed commercial areas that have street trees, less vacant buildings, and better design principles for new private development. Citizens were concerned about the continuing development of medium density residential in and around their neighborhoods. Many were interested in the redevelopment prospects for the northwest corner of Clinton Highway and Merchant Drive. The need for smaller neighborhood business services was also mentioned.

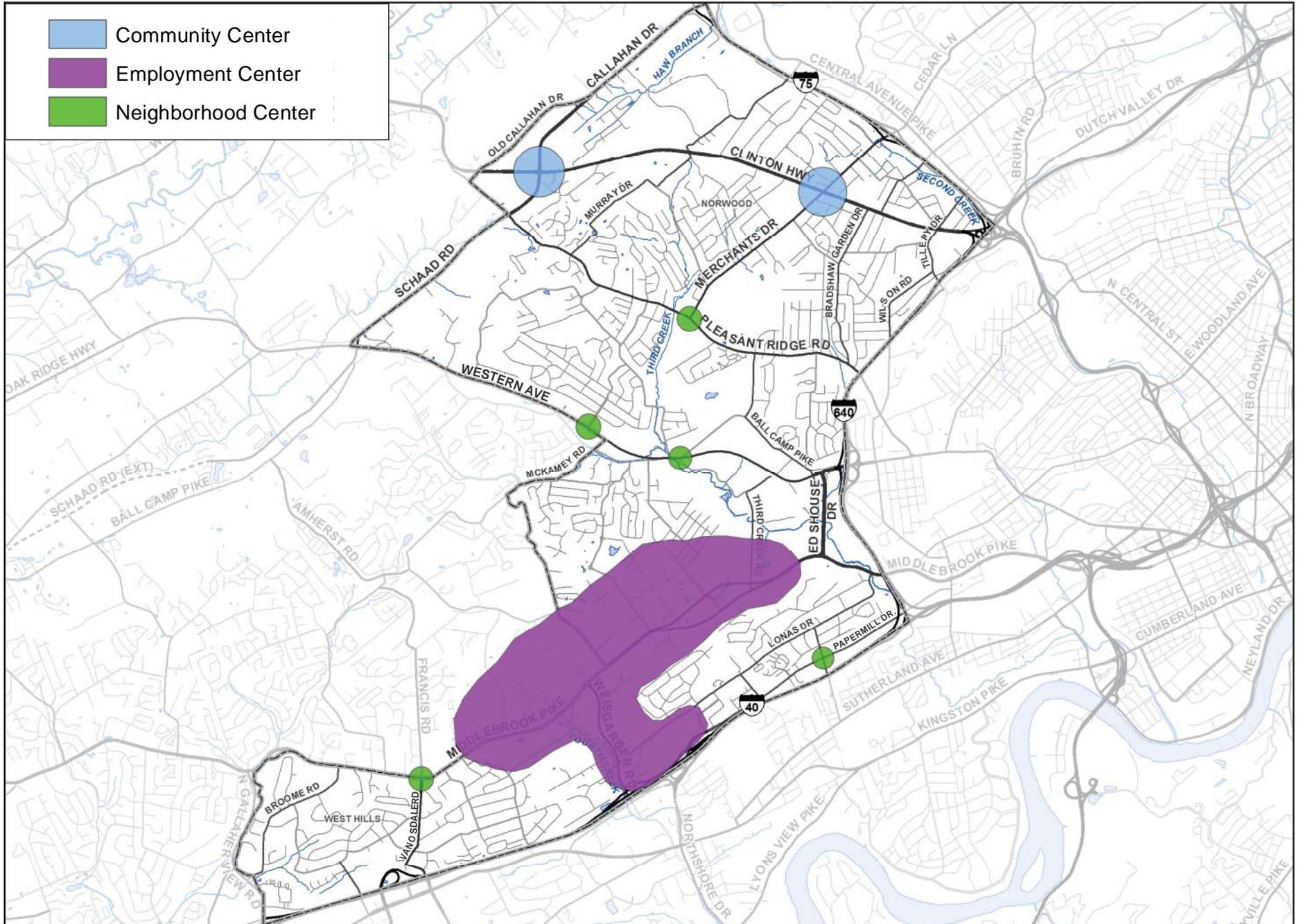
5. 2003 Northwest City Sector Plan and the 2001 Callahan Drive Schaad Road Corridor Plan

Previous plan recommendations were analyzed for relevancy, and when appropriate were incorporated into the sector plan.

6. PlanET Preferred Growth Scenario

The proposed land use plan implements broader land use objectives identified in the PlanET Playbook. The Plan East Tennessee (PlanET) Playbook is a high-level road map whose aim is to ensure our region remains beautiful, becomes healthier, and offers pathways to success for residents. The Playbook is the result of several years of work and the efforts of over 30 organizations and thousands of people from the five-county PlanET region. The Playbook outlines a preferred growth scenario, which recommends “strong cities and towns and dynamic new centers along existing transportation corridors.” This plan identifies “centers” at a sector plan level and recommends a variety of scales and functions, including community, neighborhood, and employment centers. All the centers are served by adequate utilities and road connectivity.

Northwest City Sector: Development Centers



COMMUNITY CENTERS

Community centers serve the surrounding community with goods and services, and are generally defined in scale as a “cluster of neighborhoods, with a population large enough to support a high school, sports complex, and shopping center.” They are easily accessible by roadways and transit. The sector plan identifies two community centers, both located on Clinton Highway at the intersections of Merchant Drive and Schaad Road/Callahan Drive.

All community centers should have the following amenities:

- Street trees
- Complete sidewalk system throughout the center, including both sides of the street and crosswalks
- Convenient and efficient bus service with bus shelters

Schaad Road/Callahan Drive

This community center is located at the edge of the city’s municipal limits. The area is immediately accessible by vehicle via major roads such as Schaad Road, Clinton Highway, and Callahan Drive. Interstate 75 is located less than two miles away, via Callahan Drive. Transit service is provided by KAT on weekdays and Saturdays via Route 20, Central Avenue/Clinton Highway. The area is auto-oriented in its design and use with few pedestrian amenities such as sidewalks, street trees, and bus shelters.

Existing community commercial uses include retail, service-oriented businesses, shops, restaurants, and “big box” retail stores. Some of the “big box” retail stores within this center include, Walmart, Home Depot, Lowes, Kroger and Target. There are few commercial vacancies at this interchange, and much of the development in the area occurred fairly recently. Opportunities for new development or redevelopment of this community center appear to be limited.

The land use plan recommends Community Commercial for this area, which recognizes the existing land use of the center. No land use plan revisions are needed since the plan reflects the use and development pattern that is there today.



A PlanET concept drawing of a proposed community center in Oak Ridge

Merchants Drive

This community center has two intersection quadrants with strong redevelopment potential; the west (Expo Center) and east (Clinton Plaza) corners. The area is easily accessible via Merchants Drive, Clinton Highway, I-75, and nearby I-640. In addition, two transit lines serve this center on weekdays and Saturdays, Route 20 Central Avenue / Clinton Highway and Route 90 Crosstown Connector. The area is auto-oriented in its design and use with little pedestrian amenities such as sidewalks, street trees, and bus shelters.

West Quadrant

The west quadrant includes a new Cheddars restaurant, the Knoxville Expo Center, a vacant Kroger, and 23 acres of undeveloped land. The land use plan changes the designation for this area from General Commercial to Community Center Mixed Use (MU-CC). Currently, one developer owns the majority of this quadrant, and has expressed interest in developing a town-center on this

site should market conditions improve. Redevelopment under MU-CC could include retail, office, residential, and commercial uses located in multi-story buildings that front new streets laid out to create smaller walkable blocks, similar to a small town historic main street. In addition, making pedestrian connections to the nearby Norwood Elementary School, Norwood Branch Library, and New Hope Presbyterian Church would be important elements of a town-center development. The wetland area behind the school could also be developed as into a passive park that connects future development to the school with walking trails.

East Quadrant

The east quadrant includes Clinton Plaza where the Food City and Ace Hardware occupy the largest building spaces. The remainder of the area includes Joe Nubert Collision, smaller retail uses, an apartment building, and

a house. The area has good transportation access and utility capacity, but due to age of structures and expanse of underutilized parking lot pavement, redevelopment is likely when market conditions change. Redevelopment is envisioned to be similar to that of the east quadrant, where a mix of uses, new streets, and pedestrian connections would be encouraged.

The land use plan recommends a change from General Commercial to Community Center Mixed Use (MU-CC) for the east quadrant, which recognizes the potential for redevelopment in a more compact development pattern with a mix of uses (commercial, office, and residential) with sidewalks and transit service. In order to implement this plan recommendation, rezoning the MU-CC property to TC-1 prior to redevelopment is recommended. Other new zoning tools potentially available in the future that incorporate town center principles could also be considered.

North & South Quadrants

The other two quadrants of the intersection are less likely to be redeveloped due to the smaller lot sizes, slope, and existing low density residential neighborhoods. The north quadrant includes nonresidential development that is limited to 200-300 foot deep lots fronting Merchant Drive or Clinton Highway. The Merchants Corner plaza was built recently, with single family residential development on Ridgefield Drive and Wallwood Road in close proximity. The south quadrant is similarly limited by a linear row of automotive-oriented businesses that front Clinton Highway and by office buildings that front Merchant Drive, backed by single family homes located on Marguerite Road and Britton Drive. The east and west quadrants of the Clinton Highway / Merchant Drive intersection have retained a General Commercial (GC) designation on the land use map.



Jennifer Crain

Neighborhood commercial: The Wildwood Building in Olympia Washington

NEIGHBORHOODS CENTERS

Neighborhood centers include limited nonresidential uses intended to serve adjacent neighborhoods and provide for day-to-day needs. They are smaller in size and scale as compared to community centers.

Recommendations for all the neighborhood centers include:

- Rezoning to Neighborhood Commercial (C-1) should be pursued in all centers, except at the intersection of Vanosdale and Middlebrook Pike. Also, C-1 zoning is already in place at the intersection of Western Avenue and Palmetto Road where TND-1 or new design guidelines would be more appropriate.
- Sidewalks should exist on both sides of the street in neighborhood centers.
- Crosswalks should be developed at main intersections.
- Better parking lot standards, corridor overlays or other standards that incorporate front yard landscaping and/or partial screening should be established for these areas.
- Transit service should extend throughout neighborhood centers. With the exception of the two neighborhood centers on Western Avenue, all other neighborhood centers within the sector are currently served by transit.

Specific neighborhoods centers include:

Merchant Drive/Pleasant Ridge Road Neighborhood Center

This neighborhood center is located at the edge of the Norwood neighborhood. Current land uses include a gas station, a Goodwill store, vacant land, underutilized land currently serving as bus storage, and office uses. The Victor Ashe Greenway provides connectivity between Victor Ashe Park, the Northwest Middle School, Victor Ashe Park, and the neighborhood center. The area is also serviced by transit via Route 90 Crosstown Connector. Establishing a stronger neighborhood center could take advantage of the easy pedestrian accessibility via the Victor Ashe Greenway, to the nearby Northwest Middle School, and to underutilized land currently at the old gas station which is currently being used for bus storage. The land use designation for this center is Neighborhood Commercial (NC). Retail and service-oriented commercial uses are available to provide goods and services that serve the day-to-day needs of households within walking or short driving distance.

Western Avenue/Palmetto Road Neighborhood Center

This neighborhood center is located at the edge of the Cumberland Estates neighborhood. Current land uses include a Weigel's gas station, Cumberland Estates Center plaza, a Food City grocery store, Weaver funeral home, and self-storage units. This area shares a planning boundary with the Northwest County Sector Plan and the recommendations should be consistent for both sides of the street. The primary transportation corridor serving the area is Western Avenue; no bus routes serve this center. Redevelopment along Western Avenue is likely to occur after improvements to the streetscape are completed.

The plan recommendation for this center is Neighborhood Center Mixed Use (MU-NC). This would allow a recommended mix of uses (office, medium density residential and commercial). The size and scale of new buildings in this center should complement the surrounding neighborhoods.

Western Avenue/Ball Camp Pike Neighborhood Center

This small neighborhood center is located where Third Creek crosses Western Avenue, and where the future Third Creek Greenway extension is planned to cross Western Avenue. The area contains several vacant lots and only one commercial development, Brogdon Plumbing Company. With the reconstruction of Western Avenue and Third Creek Greenway extension, there is an opportunity to develop previously undeveloped land and establish connectivity that could serve adjacent residents. The land use plan designation for this center is Neighborhood Commercial (NC), to provide opportunities for retail and service-oriented commercial uses. These uses would provide goods and services to serve day-to-day needs of nearby households within walking or a short driving distance. Funding for the Third Creek Greenway extension is not currently available, and collaboration with TDOT is needed to develop the design for the Western Avenue crossing. Continued improvements to Victor Ashe Park will help make this a thriving neighborhood center.

Papermill Drive/Hollywood Road Neighborhood Center

This neighborhood center is located next to Pond Gap Elementary School. Current uses include day care, a beauty salon, a photography studio, an exterminator, and an auto repair business. Pond Gap Elementary was the first "community school" in Knox County. The center could be improved further by establishing a neighborhood commercial land use pattern at the intersection near the school. The Papermill Bluff Greenway is recommended to be extended through this center, with Third Creek Greenway access located at the southern terminus of Hollywood Drive. The center has a limited sidewalks system, with sidewalks currently existing only on Papermill Drive near the school and on Hollywood Drive.

The land use plan designation for this center is Neighborhood Commercial (NC). Such uses would provide goods and services to serve day-to-day needs of nearby households within walking or a short driving distance.

Vanosdale Road/Middlebrook Pike Neighborhood Center

This neighborhood center is located next to the West Hills neighborhood. One parcel at the southwestern corner is currently designated Neighborhood Commercial (NC). Middlebrook Pike United Methodist Church is designated Civic/Institutional (CI). The northern side of Middlebrook Pike is in the Northwest County Sector Plan area and should be designated as Neighborhood Commercial (NC). The center has good access, sidewalk connectivity, and is served by transit via Route 90 Crosstown Connector.

The land use plan designation for this center is Neighborhood Commercial (NC), intended to provide retail and service-oriented commercial uses within a walking or short driving distance.

EMPLOYMENT CENTERS

Employment centers are concentrations of nonresidential land uses that employ a significant number of people. Characteristics associated with these centers include an efficient transportation system, larger tracts of land, and some level of separation from adjacent residential uses. The PlanET employment center in the Northwest City sector is located along Middlebrook Pike/Weisgarber Road/Lonas Drive.

Middlebrook Pike/Weisgarber Road/Lonas Drive

Middlebrook Pike contains major employers along the industrial area east of Weisgarber Road. To the west is Dowell Springs and the proposed site for the new Tennova hospital. Major employers such as Bush Beans and Pilot Travel Center have located their corporate headquarters in this center. The general area is served by an easily accessible road system with good connectivity to I-40, I-640, and I-75. Transit service is provided by KAT via the Route 90 Crosstown Connector on Middlebrook Pike and the Route 19 Lakeshore/Lonas Connector. This center will become a more active employment center should the new hospital be developed. The sector plan includes land use designations for a majority of the center capable of accommodating large employers such as industrial and office uses.



Bush Brothers and Company corporate headquarters on Weisgarber Road

LAND USE CLASSIFICATIONS

The land use classifications used in this sector plan are now part of standardized Land Use Classifications used for all sector plans. Under each classification is a “Proposed Changes” section that contains the total changes in acreage, along with specific locations that have been changed since the 2003 sector plan update.

Some of the changes in acreage were a result of reassigning approximately 2,000 acres of former slope protection areas and stream protection areas. These two environmental layers (slope protection area and stream protection area) will be added to the map once the proposed land use plan is finalized.

Agricultural Conservation (AGC)

This includes farmland that is conserved through a land trust. The 2003 sector plan included an Agriculture/Forestry/Vacant Land category that no longer exists.

Proposed Changes

- The 2003 land use plan does not include this land use classification.
- The new proposed land use plan recommends 66 acres.

Specific location:

- A. Middlebrook at 4001 Middlebrook Pike is in a conservation land trust that would limit future development of the site, and therefore is being proposed to be changed from Office (O) to Agricultural Conservation (AGC).

Low Density Residential (LDR)

This classification includes primarily residential uses at densities of less than 6 dwelling units per acre (city) and less than 5 dwelling units per acre (county).

Proposed Changes

- The 2003 land use plan designates 4,800 acres as Low Density Residential (LDR).
- The proposed land use plan recommends 6,091 acres.

Specific locations changed to LDR:

- A. The attached units located at Maple Grove Way, Cummins Lane, Stone Hedge Drive, Springfield development on Pleasant Ridge Road and a vacant parcel near Moss Creek on Pleasant Ridge Road were designated Medium Density Residential (MDR), but

were developed or zoned for less than 6 dwelling units per acre.

- B. A vacant lot and steeply sloped lot at 4170 Middlebook Pike was designated Slope Protection Area .

Medium Density Residential (MDR)

This classification includes primarily residential uses at densities from 6 to 24 dwelling units per acre (city) and 5 to 12 dwelling units (county).

Proposed Changes

- The 2003 land use plan designates 614 acres as Medium Density Residential (MDR).
- The proposed land use plan recommends 764 acres.

Specific locations changed to MDR:

- A. The Keystone Apartments, located at 3910 Middlebook Pike was designated as Office (O).
- B. A portion of the existing apartments at Papermill Square was designated as Medium Density Residential/Office (MDR/O).
- C. The Metropolitan Way development was Low Density Residential (LDR), but is zoned RP-1 at 8 du/ac or greater.
- D. Parcels in the vicinity of 4800 Western Avenue were designated as Commercial (C).

Medium Density Residential/Office (MDR/O)

Land uses within this classification have similar development characteristics: scale of buildings, areas devoted to parking, yard spaces, and location requirements. In areas designated MDR/O, either residential or offices uses can be developed. 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 neighborhoods.

Proposed Changes

- The 2003 land use plan has 63 acres designated as Medium Density Residential/Office (MDR/O).
- The proposed land use plan recommends 257 acres.

Specific locations changed to MDR/O:

- A. A vacant lot located at 8300 East Walker Springs Lane was designated as Medium Density Residential (MDR).
- B. The Knoxville Racquet Club located at 5535 Lonas Drive was designated as Medium Density Residential (MDR).

- C. The area between 5917-6319 Western Avenue was designated as Medium Density Residential (MDR).
- D. The area on Western Avenue between McKamey Road and Third Creek was designated as Public Institutional (PI), Office (O), and Commercial (C).
- E. The area on Western Avenue east of Jimmy Carter Drive on the north side of Western Avenue was designated as Medium Density Residential (MDR).
- F. The area on Callahan Drive east of the proposed Community Commercial area was designated as Office (O).
- G. The area northwest of Wilson Road/Gap Road/Rickard Drive intersection was also previously designated as Office (O).

Office (O)

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

Proposed Changes

- The 2003 plan designates 396 acres as Office (O).
- The proposed land use plan recommends 313 acres as Office.

Specific locations changed to O:

- A. An existing office building located at 8320 E. Walker Springs Lane was designated Medium Density Residential (MDR).
- B. Three parcels located at the intersection of Hinton Drive and Ball Camp Pike were previously designated Low Density Residential (LDR).

General Commercial (GC)

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

Proposed Changes

- The 2003 land use plan has 913 acres designated as commercial.
- The proposed land use plan recommends 629 acres as General Commercial (GC).

Specific locations designated in 2003 as GC:

- A. Properties located at 4810 and 4750 N. Middlebrook Pike were designated as Light Industrial (LI).
- b. The back portion of the parcel located at 6601 Willbanks Road was designated as Light Industrial (LI).
- c. Other areas previously designated as General Commercial (NC), Community Commercial (CC), or as Mixed Use/Commercial Center (MU-CC).

Neighborhood Commercial (NC)

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

Proposed Changes

- The 2003 land use plan has 2 acres designated as Neighborhood Commercial (NC).
- The proposed land use plan has 47 acres designated as NC.

Specific locations designated in 2014 as NC:

- A. The Papermill Drive/Hollywood Road Neighborhood Center was changed from Mixed Use to Neighborhood Commercial (NC).
- B. The Western Avenue/Ball Camp Pike Neighborhood Center was designated Neighborhood Commercial (NC).
- C. The Merchant Drive/Pleasant Ridge Road Neighborhood Center was redesignated from Commercial (C) and Office (O) to NC.
- D. A vacant parcel at Middlebrook Pike and Lonas Drive intersection previously designated as Office (O), but zoned C-1 and has been changed to (NC).

Community Commercial (CC)

This category allows retail and service-oriented development, including shops, restaurants, and “big box” retail stores; typical service areas include 20,000 to 30,000 residents. The CC category was not available for use when the 2003 sector plan was produced.

Proposed Changes

- The 2003 plan does not have any Community Commercial (CC) designations, but had 913 acres designated as commercial.
- The proposed land use plan recommends redesignating 168 acres as Community Commercial (CC).

Specific location:

- A. The area at the Callahan Drive/Schaad Road/Clinton Highway was redesignated from Commercial (C) to (CC).

Light Industrial (LI)

This category is typically used in older industrial areas for assembly, packaging, and indoor warehousing.

Proposed Changes

- The 2003 plan has 774 acres designated as Light Industrial (LI).
- The proposed land use plan recommends 648 acres.

Specific locations:

- A. The area between 4308-4337 Middlebrook Pike was changed to Commercial (C).
- B. A parcel located at 3801 Henson Road was changed to Office (O).

Heavy Industrial (HI)

This category is typically used in older industrial areas, such as chemical processing, production of materials, and heavy outdoor storage.

Proposed Changes

- The 2003 plan has 150 acres designated as Heavy Industrial (HI).
- The new land use plan recommends 212 acres.

Specific locations:

- A. Tank farm areas of 1801 Third Creek Road and 5100 North Middlebrook Pike were designated Light Industrial (LI).

Civic/Institutional (CI)

This category includes land used for major public and quasi-public institutions, including schools, colleges, churches (2 acres or larger), correctional facilities, utilities, and similar uses.

Proposed Changes

- The 2003 plan has 256 acres designated as public institutional uses.
- This category has been converted to Civic/Institutional (CI) in the proposed land use plan. As a result, the proposed land use plan recommends 373 acres Civic/Institutional (CI).

Specific locations:

- A. Churches located at 1540 Robinson Road, 4211 Pleasant Ridge Road, 5520 Ball Camp Pike, 405 Black Oak Drive, 3020 Walridge Road, 2614 Merchant Drive, 538 Vanosdale Road, 5518 Nickle Road were previously designated Low Density Residential (LDR).
- B. The church located at 701 Merchant Drive was previously designated as Commercial on the front half of the parcel.
- C. The fire station located at 200 Portsmouth Road was previously designated Low Density Residential (LDR).
- D. Knoxville Utilities Board facilities located at 4622 Robindale Road was designated Low Density Residential (LDR) and 6924 Middlebrook Pike was designated as Office (O). Both are shown as CI in the 2014 land use plan.
- E. South College, located at 3904 Lonas Drive, was previously designated as Medium Density Residential/Office (MDR/O).
- F. A portion of the Northwest Middle School was listed in 2003 as a Parks and Public Open Space.

Public Parks and Refuges (PP)

This category includes existing parks, wildlife refuges, or similar public or quasi-public parks, open spaces, and greenways.

Proposed Changes

- The 2003 plan has 244 acres designated as Parks and Public Open Space.
- This category has been changed in the proposed plan to Public Parks and Refuges (PP), with a total of 238 acres.

Specific location:

- A. The parcel located at 4815 Ball Camp Pike was Low Density Residential (LDR), but is actually part of Victor Ashe Park.

Mixed Use Community Center (MU-CC)

Centers within this land use category are envisioned to be developed at a moderate intensity with a variety of housing types (8 to 24 dwelling units/acre). The core of the district, with its predominant commercial and office uses, should be within ¼ mile of higher intensity residential uses (such as townhouses and apartments). The center should also 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 should be considerations for these centers.

Proposed Changes

- The Mixed Use Community Center (MU-CC) designation was not available in 2003.
- The proposed land use plan recommends redesignating 106 acres as MU-CC.

Specific locations:

- A. The northwest corner of Clinton Highway and Merchant Drive intersection was re-designated from Commercial, Low Density Residential, and Office to MU-CC.
- B. The southeast corner of Clinton Highway and Merchant Drive intersection was re-designated from commercial to MU-CC.

Mixed Use Neighborhood Center (MU-NC)

These are the least intense of the proposed mixed use districts. Residential densities of 5 to 12 dwelling units/acre 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.

Proposed Changes

- The Mixed Use Neighborhood Center (MU-NC) designation was not available in 2003.
- The proposed land use plan recommends redesignating 47 acres as MU-NC.

Specific location:

- A. The intersection of Western Avenue and Palmetto Road was designated Commercial in 2003.

Mixed Use Special Districts

These districts may be specially designated to address issues such as urban design, pedestrian and transit-oriented development and vertical mixed use. Such areas may include older portions of the city or county where redevelopment and/or preservation programs are needed for revitalization purposes.

Proposed Changes

- The 2003 plan has a mixed use designation for Papermill Drive totaling 33 acres.
- The proposed land use plan recommends 312 acres in Special Mixed Use Districts along portions of Callahan Drive, Schaad Road, and Papermill Road.

The changes include:

- A. Several properties located in the Schaad Road corridor were previously designated as Office (O), Other Open Space (OOS) and Light Industrial (LI).
- B. A significant segment of Callahan Road extending west from I-75 was previously designated primarily as Light Industrial (LI) with some Office (O).

Coordination between the Northwest City and Northwest County sector plans is important to address the Callahan and Schaad Road districts.

Table: LAND USE ACREAGE COMPARISON

Land Use Classification	2003 Sector Plan	2014 Sector Plan
Slope Protection Area*	1,798	0
Stream Protection Area*	198	0
Agriculture Conservation**	0	66
Low Density Residential	4,800	6,091
Medium Density Residential	614	764
Medium Density Residential/Office	63	257
Office	396	313
General Commercial	913	629
Neighborhood Commercial	2	47
Community Commercial**	0	168
Light Industrial	774	648
Heavy Industrial	150	212
Civic/Institutional	256	373
Public Parks and Refuges	244	238
Community Center Mixed Use**	0	106
Neighborhood Center Mixed Use**	0	47
Mixed Use Special District	33	312

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

**This is a new land use designation that was not used in the 2003 sector plan.

NWC-1

Callahan Drive Mixed Use Special District

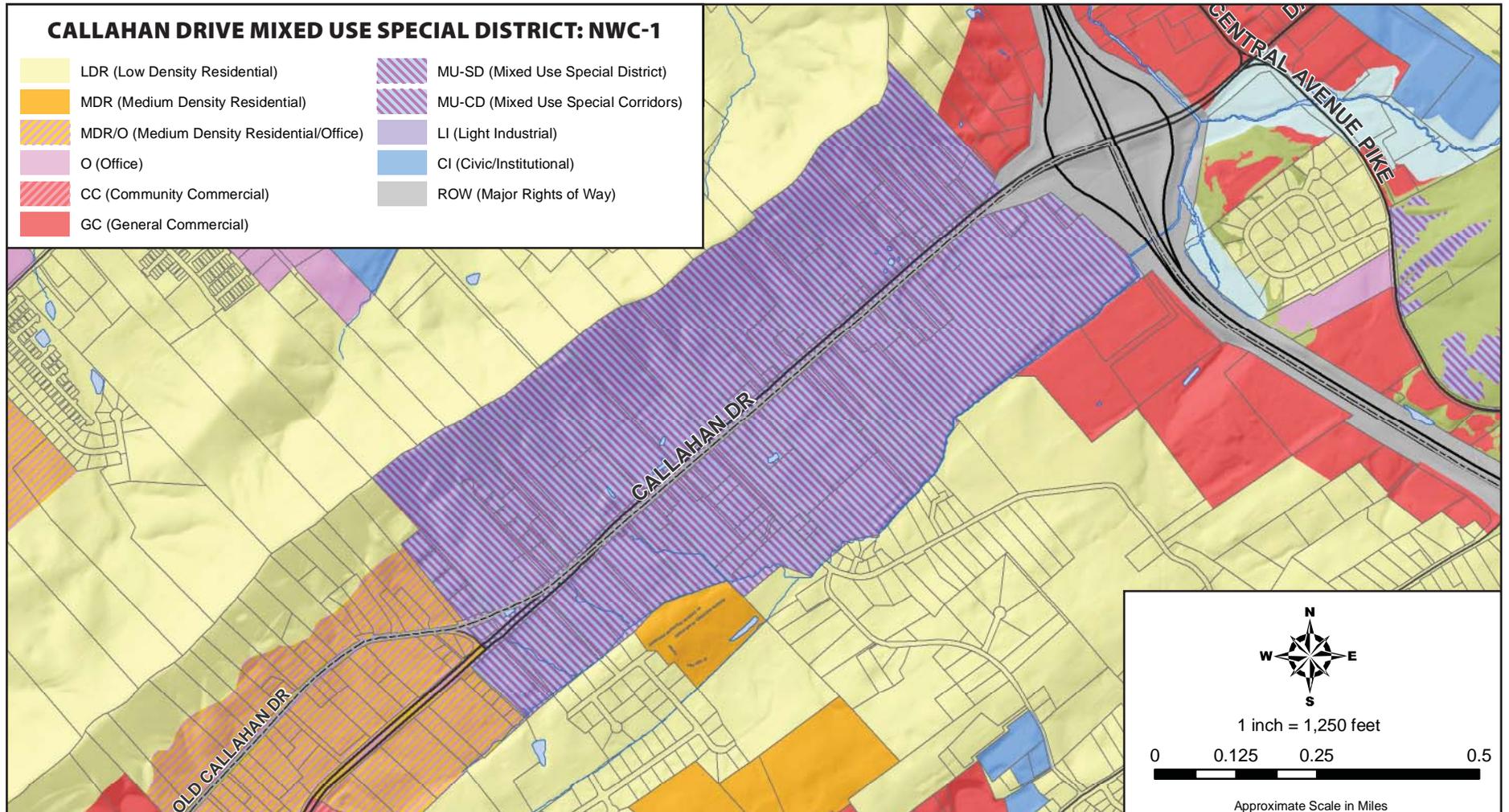
This district is currently comprised of low density residential, office, commercial, and warehousing. The zoning is predominantly commercial with some light industrial. In 2001, a corridor plan was developed and adopted by City Council and County Commission for Callahan Drive and Schaad Road, and the recommendations are carried forward as design guidelines for the district. In addition the plan made recommendations for transportation and community facility improvements.

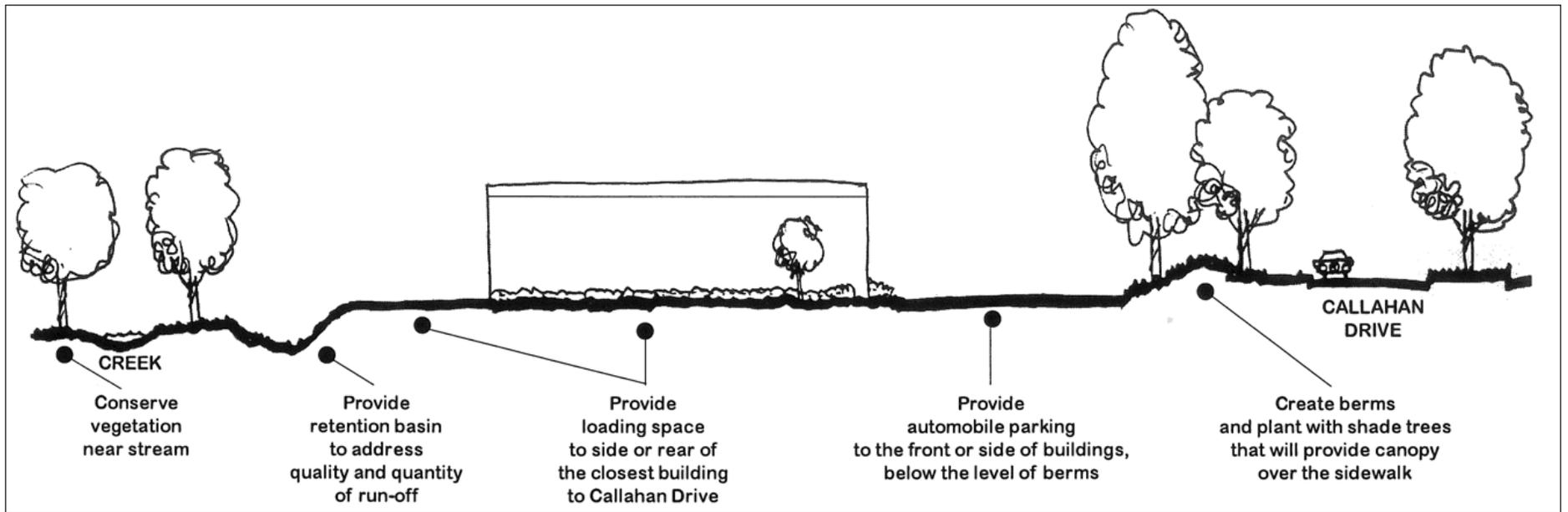
Recommended Land Uses

- General Commercial (recommended zones C-6, PC, PC-1)
- Light Industrial (recommended zones LI- LI-1, C-6, PC, PC-1)
- Office and Medium Density Residential (recommended zones PR, RP-1, and any O)
- Mixed Use Development (recommended zones TC, TC-1, TND-1)

Note:

The North side of Callahan Drive is in the North County Sector Plan and the south side is in the Northwest City Sector Plan area. The plan recommends consistency for both sides of Callahan Drive.





NWC-1 CALLAHAN DRIVE MIXED USE SPECIAL DISTRICT SITE DESIGN GUIDELINE RECOMMENDATIONS

Visual Screening

- Screening between incompatible uses should consist of masonry walls, hedges, planted berms, or combination of these screens.
- All loading areas shall be screened from the view of Callahan Drive/Schaad Road and adjacent residential or office properties.
- Screening of parking and loading areas that face Callahan Drive/Schaad Road should be based on a combination of native vegetation and berms.

Landscaping

Planned zones are recommended, requiring development according to a landscape plan showing the quantities, sizes, and types of plants to be used. In preparing the landscape portion of the site plans, the following should be addressed:

- A combination of evergreen trees, shrubs, and deciduous trees should be used to enhance the "streetscape" of the corridor.
- Grass, ivy or other natural ground cover, native trees and shrubbery should be used in landscaping. A minimum

of 8 canopy trees (such as oaks or maples, capable of growing to a height of 50 feet or more), 4 evergreens (such as magnolia or pine, capable of growing to 50 feet or more) and 8 understory trees (such as dogwood or redbud) are to be planted per acre, with a minimum caliper of 2 ½ inches. Shrubby should be used on berms located around buildings along Callahan Drive.

- Landscape plans should emphasize the conservation of natural features, including stands of trees. Existing trees can be used to meet a portion of the planting requirements.
- Five percent of the hard surface areas (e.g., parking and loading areas) should be landscaped.

Setbacks

- Provide a minimum of a 30-foot setback when parking is provided to the side of a building. Allow for additional space for automobile parking and detention basins between the right-of-way and building(s) as needed to meet site conditions. Truck loading areas should be oriented to the proposed access road.

Lighting

- The height of lighting should not exceed 30 feet in parking areas.

Signs

- In order to preserve views of scenic assets such as ridges along the corridor, monument signs reaching no more than 5 feet high should be used along the corridor.
- For development of parcels of 20 acres or more, monument signs should be no more than 100 square feet.
- For development of parcels between 5 and 20 acres, monument signs should be no more than 60 square feet.
- For development of parcels less than 5 acres, monument signs should be no more than 40 square feet.
- Wall signs should be limited to 1 square foot of signs for every linear foot of building frontage up to a maximum of 100 square feet.

Transportation Improvements

Continue tree planting program in center medians.

NWC-2

Schaad Road Mixed Use Special District

This district covers the south side of Schaad Road from Oak Ridge Highway to Pleasant Ridge Road. Existing land uses on the south side of Schaad Road are primarily single family residential west of Hilda Lane; to the east is mainly vacant land. The recommendations from the 2001 *Callahan Drive/Schaad Road Corridor Plan* are carried forward as design guidelines for this district. The Long Range Mobility Plan identifies Schaad Road for widening in 2019. With the Schaad Road/Clinton Highway community commercial center nearby, there

is no need to have strip commercial development along this corridor. Approximately 39% of the parcels that front Schaad Road are currently zoned commercial. Near the intersection with Oak Ridge Highway, another nonresidential area is envisioned that will support office, residential, and light industrial uses.

Recommended Land Uses

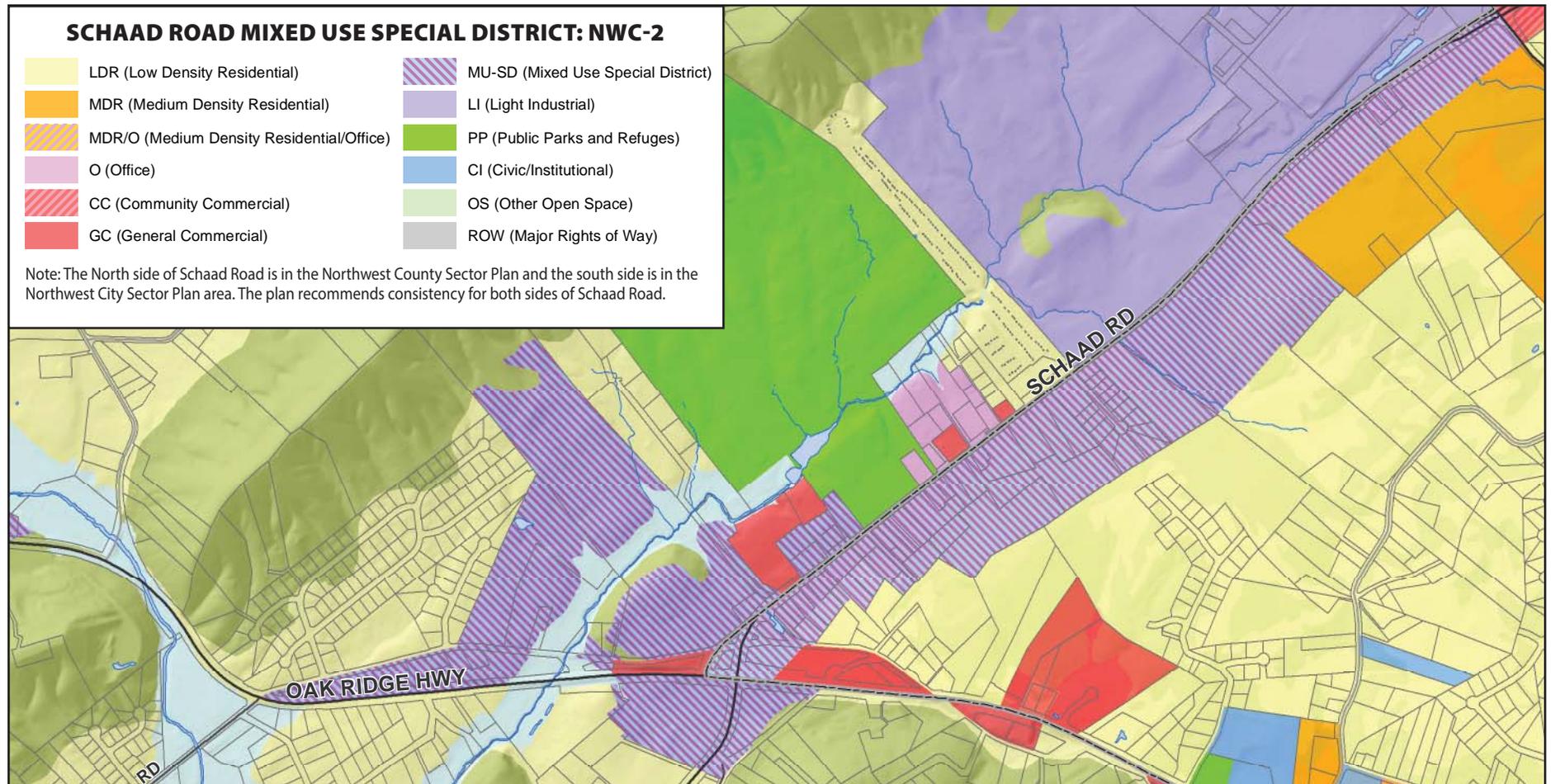
- East of Hilda Lane: Light Industrial (recommended zones LI- LI-1, C-6, PC, PC-1) and Mixed Use Development

(recommended zones TC, TC-1, TND-1)

- West of Hilda Lane: Office and Medium Density Residential (recommended zones PR, RP-1, and any O) and Mixed Use (recommended zones TC, TC-1, TND-1)
- Site design guidelines from NWC-1 Callahan Drive are also recommended for this district

Transportation Improvements

- Develop a new street design with four travel lanes, a center median, and sidewalks
- Plant new medians with street trees



NWC-3

Papermill Drive Mixed Use Special District

The existing land use pattern for the Papermill Drive District includes industrial, warehousing, office, and commercial land uses. The district is generally located between Hollywood Road to the west and the I-640 ramp to the east. Immediately to the west of this district is a neighborhood commercial center, near Pond Gap Elementary School.

Recommended Land Uses

- General Commercial (GC), Light Industrial (LI), and Office (O). The corridor is envisioned to allow a mixture of land uses in the area, but with better off-street parking standards, including reducing the number of required off-street parking spaces, encouraging parking to the rear and side of buildings, and encouraging parking lot screening and landscaping. Also, better site design standards should include monument signs, front yard landscaping, discouraging chain link fencing near future sidewalk locations, and landscape buffering along residential edges of the district.

Site Design Guidelines

- The visual screening, landscaping, lighting, and sign sections of the site design guidelines as outlined in NWC-1 Callahan Drive mixed use special district should be observed.
- Front yard setbacks should be less than 30'.
- Limit chain link fencing in the front yard space, especially near any proposed sidewalk locations.

Transportation Improvements

- Extend sidewalk along Papermill Drive, connecting to Pond Gap Elementary School and Third Creek.
- Establish tree planting areas.

Community Facilities

- Connect the Cedar Bluff Greenway through the district to the Third Creek Greenway.
- Enhance and build off the successful community garden at nearby Pond Gap Elementary School.

OTHER OPPORTUNITIES

Proposed Corridor Overlay District (CO-1)

Throughout the community input in the sector plan update process, people expressed concern that better design standards on the major commercial corridors within the Northwest City sector should be established, particularly as major roadway segments are improved or reconstructed. This is not new – the 2001 corridor plan developed for Callahan Drive and Schaad Road addresses these same design concerns. In response, MPC staff recommends the adoption of a new Corridor Overlay (CO-1) or a similar zoning tool that would address these design concerns. This new tool has been drafted by MPC staff and has been presented to City Council for consideration.

The purpose of such an overlay district is to enable the designation of specific roadway corridors and employ supplemental zoning regulations already in place.



The intent of the overlay district is:

1. To promote the health, safety, and welfare of the community;
2. To promote the safe and efficient movement of all modes of travel, including motorized vehicles, bicycles, and pedestrians;
3. To promote safe and efficient property access;
4. To create a sense of place that is aesthetically pleasing and environmentally sustainable; and
5. To establish consistent and harmonious design standards for development.

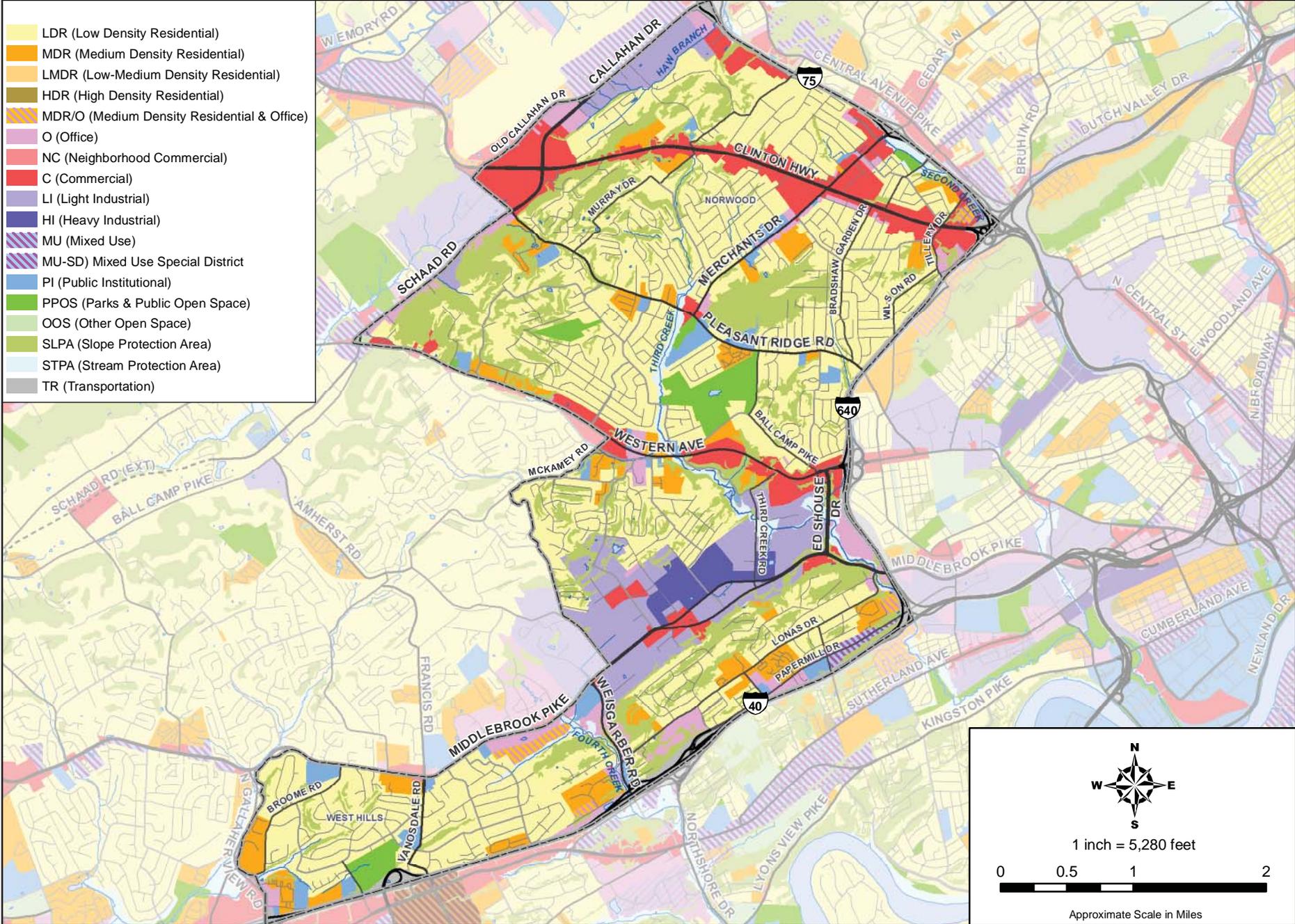
A separate public input process would be used to develop design standards unique to each corridor. This would help address issues specific to each of the Northwest City's corridors, including, but not limited to:

- Callahan Drive
- Clinton Highway
- Merchant Drive
- Middlebrook Pike
- Schaad Road
- Western Avenue
- Neighborhood & Community Center Arterial Intersections

The standards for a CO-1 overlay district may include the following elements:

1. Building and related development characteristics;
2. Lot characteristics, including setbacks and lot coverage;
3. Landscaping and lighting;
4. Access management;
5. Stormwater management;
6. Signs; and
7. Other features that may be unique to the corridor.

Northwest City Sector: Proposed Land Use



PROPOSED COMMUNITY FACILITIES PLAN

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

The community facilities plan incorporates recommendations from the following sources:

- Community input
- City of Knoxville Parks and Recreation staff interviews
- *Northwest City Sector Plan* (2003)
- *Greenway Corridor Feasibility Study* currently being conducted by the City of Knoxville
- *Knoxville-Knox County Park, Recreation and Greenways Plan* (2010/2011)
- *Long Range Regional Mobility Plan 2040* (2013)

Schools and Libraries

Schools and libraries are well distributed in the sector. Anticipated growth trends do not point to the need for additional schools or libraries. The Knox County School Board and Knox County Library Board will concentrate on facility maintenance programs for the foreseeable future and should consider the following recommendations voiced by the public:

Recommendations

- When additional school class room space is needed in existing schools, expansion of existing school facilities should be accomplished through permanent structural additions rather than portable classrooms.
- The Norwood Library should encompass a community gathering space in any renovation plans to the building.

Parks, Greenways, and Recreational Facilities

Parks and greenways are well distributed throughout the sector, except for the northeastern portion. The City of Knoxville is currently conducting a feasibility study to explore implementation of the *Knoxville-Knox County Park, Recreation and Greenways Plan* recommendations. One greenway route being studied is the connection from West Hills Park to Victor Ashe Park, along Middlebrook Pike and Third Creek.



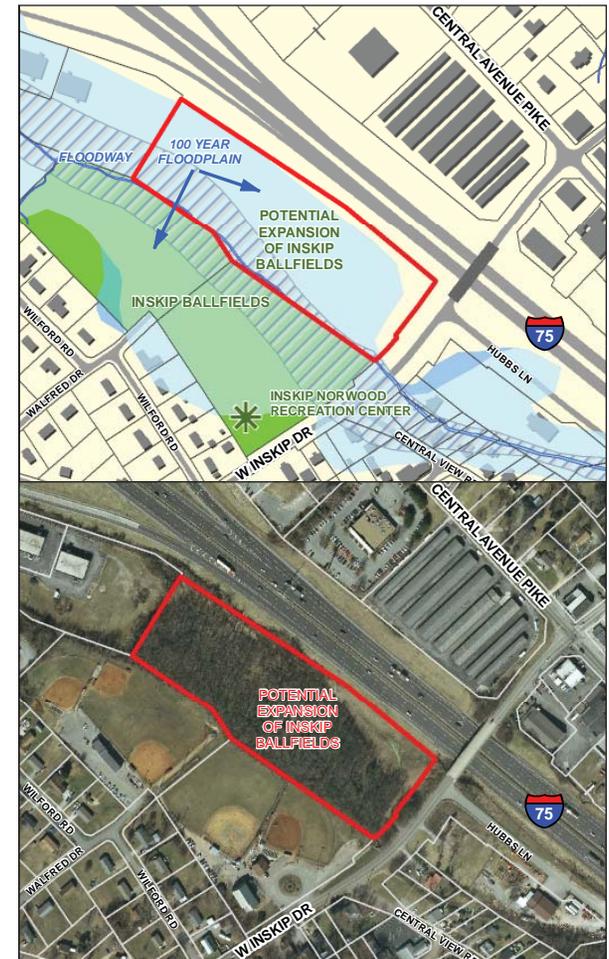
Third Creek

Other Recommendations from the 2010 Plan include:

- Fourth Creek Greenway – Phase 2: Construct a greenway from Weisgarber Greenway to Jean Teague Greenway (2019).
- West Knoxville Greenway: Construct a greenway from Weisgarber Greenway to Victor Ashe Park (2024).
- Third Creek Greenway – North Extension: Construct a greenway from Sutherland Avenue/Third Creek Greenway to Victor Ashe Park (2024). This segment of greenway may be moved up in priority due to the crossing of Western Avenue, where TDOT is currently analyzing a pedestrian bridge versus a culvert to establish access across Western Avenue.
- Extend the Pleasant Ridge Greenway to the northwest to connect to the sidewalk system along the widened Pleasant Ridge Road.
- Acquire space for new neighborhood parks (5 to 10 acres each) in the general vicinity indicated on the plan: Westbrook Park, Oak Road Park, Victor Drive Park, Lonas Drive Park (consider a partnership including the United Way, Knox Racquet Club, or the Elks Lodge in providing this facility), Wilson Road Park, Murray Drive Park and Montwood Drive Park.
- Provide a connection from the Papermill Bluff Greenway to Pond Gap Elementary School.
- A Pond Gap Greenway should be created as a buffer to and recreation resource for the neighborhood north of Lonas Drive.
- Sidepaths along roadways for biking and walking are partially established along Middlebrook Pike. More

connections are needed to link the Weisgarber and Jean Teague greenways and provide a connection to Bearden Middle School. Other major bicycle-pedestrian connectors include Western Avenue, Clinton Highway, Pleasant Ridge Road and Merchant Drive.

- Create a master plan for the Cumberland Estates Recreation Area and expand the opportunities for outdoor recreation.
- Expand the Inskip Ballfields into adjacent property consisting of approximately seven acres of floodplain and forested land. This new addition could be used primarily for passive activities such as nature observation or walking paths.



Northwest City Sector: Proposed Community Facilities Plan

Park and Greenway Proposals

Proposed Parks: General Vicinity

- C** Community Park
- D/R** District/ Regional Park
- RC** District Recreation Center
- N** Neighborhood Park
- General Vicinity 3,000 Foot Buffer

Proposed Park: Specific Location

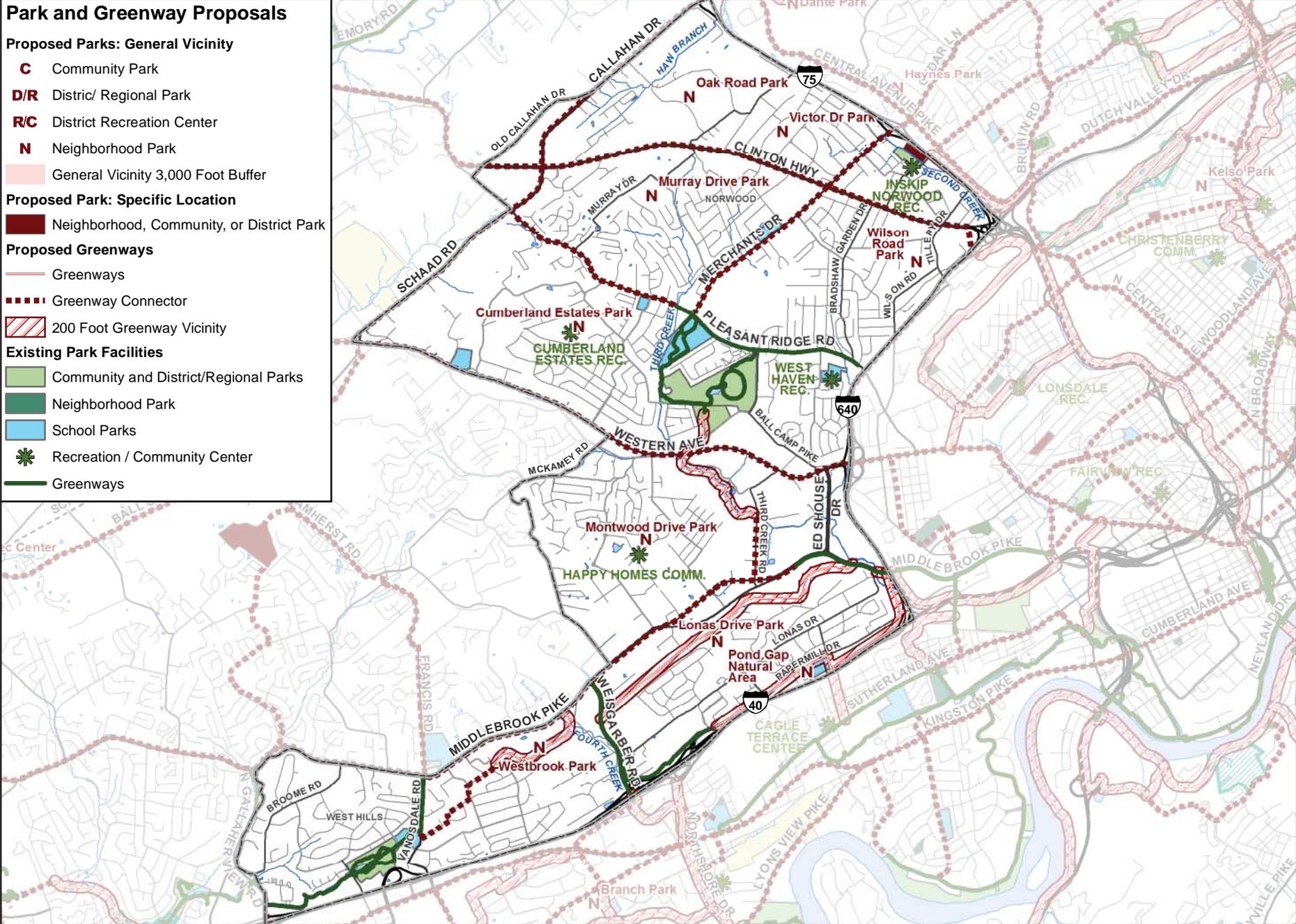
- Neighborhood, Community, or District Park

Proposed Greenways

- Greenways
- Greenway Connector
- 200 Foot Greenway Vicinity

Existing Park Facilities

- Community and District/Regional Parks
- Neighborhood Park
- School Parks
- Recreation / Community Center
- Greenways



PROPOSED GREEN INFRASTRUCTURE PLAN

Green infrastructure represents the natural resources needed for environmental, social and economic sustainability, including existing parks, schools, natural areas, wooded hillsides, lakes, creeks, and existing and proposed greenways. A well-connected green infrastructure system has both environmental and economic benefits to communities. These benefits include clean air and water, increased property values and healthier citizens.

The green infrastructure plan incorporates recommendations from the following sources:

- Community input
- City Forester interviews
- Knoxville Food Policy Council recommendations
- Knox County Stormwater Management Ordinance
- City of Knoxville Stormwater Ordinance
- *Greenway Corridor Feasibility Study* currently being conducted by the City of Knoxville
- *Knoxville Street Tree Master Plan* (2002)
- *Northwest City Sector Plan* (2003)
- *Knoxville-Knox County Tree Conservation and Planting Plan* (2007)
- *Knoxville-Knox County Park, Recreation and Greenways Plan* (2010/2011)
- *Knoxville-Knox County Hillside and Ridgetop Protection Plan* (2011/2012)

The 2003 Northwest City sector plan includes recommendations for landscaping and beautification improvements to major roads in the sector. The public input process through surveys and the first round of meetings stressed the importance of carrying forward these recommendations. Furthermore, the *Knoxville-Knox County Tree Conservation and Planting Plan* calls for tree plantings along streets and new landscaping standards for parking lots.

Floodways and Floodplains

The FEMA Flood Insurance Study (FEMA) maps, which designate boundaries for floodways, 100-year floodplains, and 500-year floodplains in the vicinity of streams and rivers, have been adopted by the City and County as

part of their flood prevention ordinances. “Open-type” uses (such as parks, parking lots and golf driving ranges) are allowed within the floodway, however, the clearing of vegetation is limited within water quality (riparian) buffer zones around streams. Structures are only allowed in the floodway if extensive stormwater modeling proves that there is no effect to the 500-year floodplain. The “no-fill line”, which is established halfway between the FEMA floodway and 100-year floodplain, does not allow any type of fill or new construction that reduces flood storage capacity (for example, a parking lot can be constructed but the asphalt cannot be higher than the current ground elevation). New structures are allowed within the FEMA 100-year and 500-year floodplain but they must be approved by the City or County engineering department and certified that all habitable floors are 1-foot above the 500-year flood elevation and the foundation is designed to ensure the unimpeded movement of floodwaters.

Stormwater Best Management Practices

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

Impervious Pavement Coverage

The City Urban Forester recently conducted an impervious pavement coverage assessment for all city neighborhoods. Within the Northwest Sector, Norwood East has the most impervious pavement coverage (34.90%) and Cumberland Estates has the least impervious pavement (9.00%).

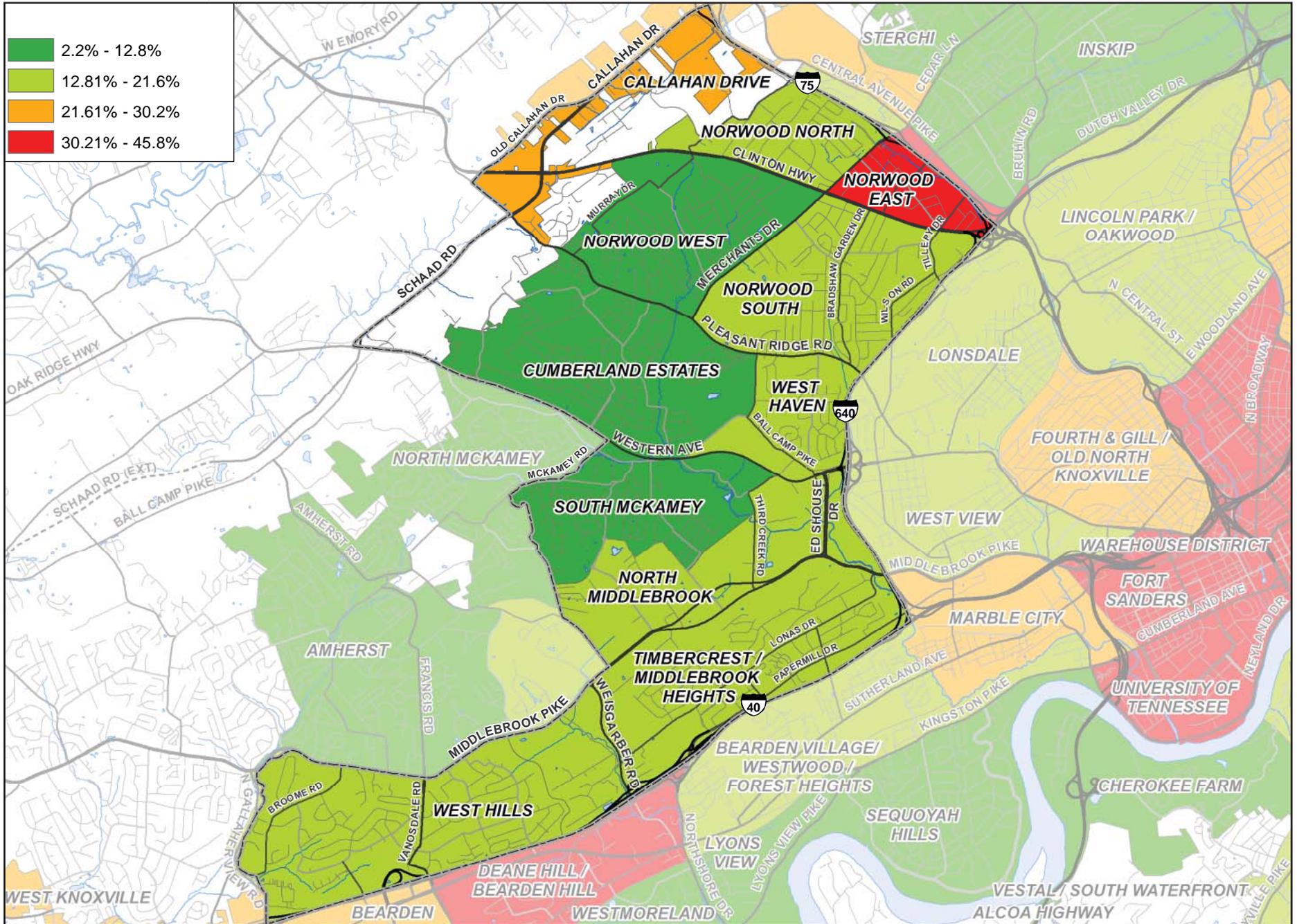
NORTHWEST CITY SECTOR IMPERVIOUS PAVEMENT COVERAGE	
Neighborhood	Pavement Coverage (%)
Cumberland Estates	9.00
South McKamey	9.14
Norwood West	11.80
Norwood South	13.80
Norwood North	17.10
Timbercrest/Middlebrook Heights	18.60
West Hills	19.20
North Middlebrook	20.60
Norwood East	34.90
City of Knoxville Average	18.51

Tree Canopy

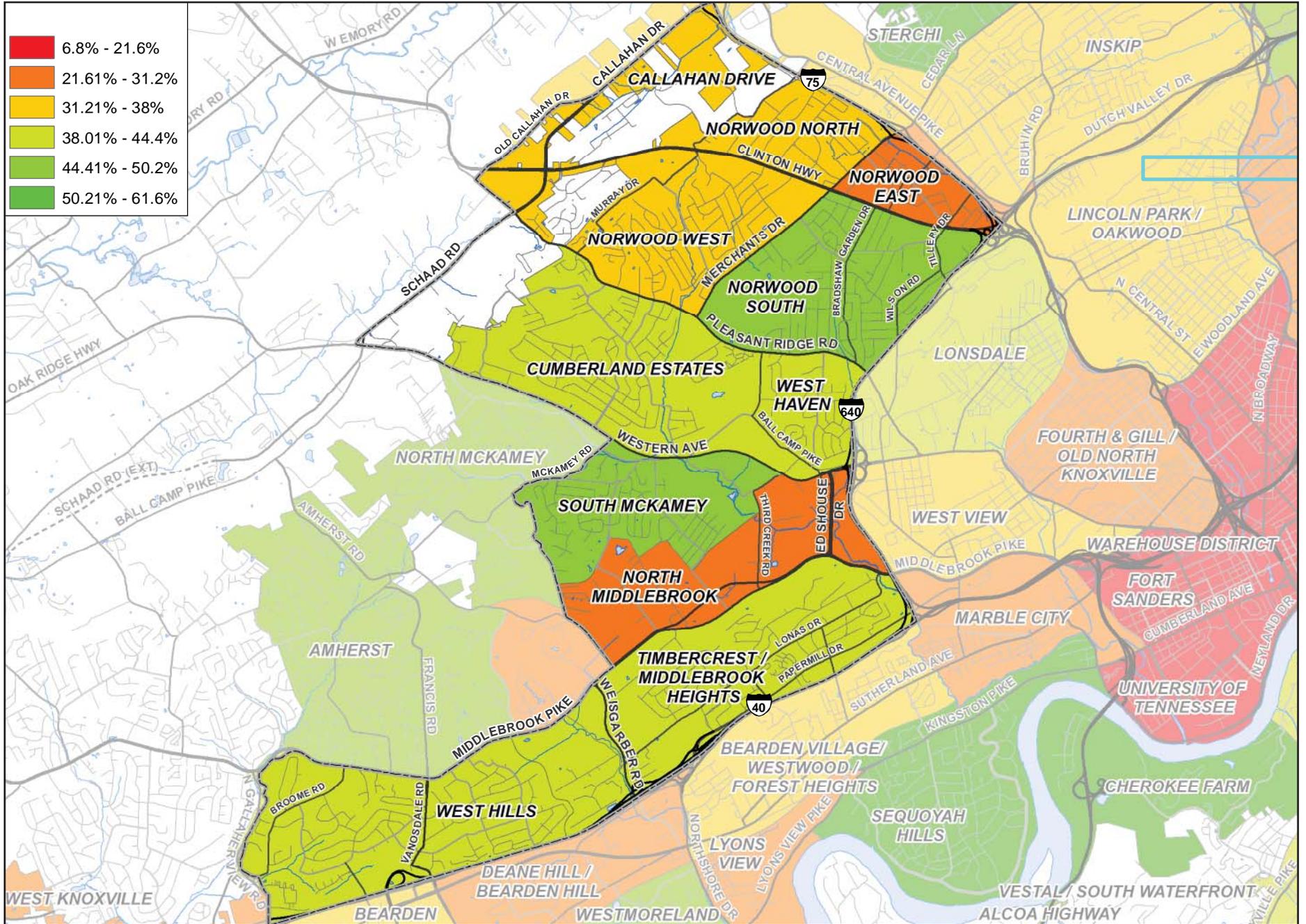
Knoxville was named a 2013 Tree City USA community by the Arbor Day Foundation in honor of its commitment to effective urban forest management. The City also received a Tree City USA Growth Award for demonstrating environmental improvement and a higher level of tree care. The plan recommends building on this momentum as a means to improve the green infrastructure.

The City Urban Forester recently conducted a tree canopy assessment for all city neighborhoods. Norwood East (25.30%) and North Middlebrook (30.90%) have the least tree canopy coverage within the sector. Norwood South (45.40%) and South McKamey (45.40%) have the most tree canopy within the sector. The average for the City is 38.99% and 43.31% for suburban sections of the city (American Forests recommends 50% coverage for suburban areas).

Northwest City Sector: Impervious Pavement Coverage



Northwest City Sector: Tree Canopy Coverage



NORTHWEST CITY SECTOR TREE CANOPY COVERAGE	
Neighborhood	Tree Coverage (%)
Norwood East	25.30
North Middlebrook	30.90
Norwood West	35.60
Norwood North	38.00
West Hills	40.80
Timbercrest/Middlebrook Heights	42.00
Cumberland Estates	43.10
Norwood South	44.40
South McKamey	45.40
City of Knoxville Average	38.99

Economic Benefits

Commercial, office, and multifamily developments are greatly enhanced by shade trees. Consumers want a pleasant place to shop, work, and reside. Developers of several new commercial and office projects have placed a premium on planting and saving trees. Trees in commercial and office settings provide a more seamless transition between businesses and residences. Landscaping adds value to properties. In fact, residential property values increase by as much as 15 percent in wooded settings.

Environmental Benefits

Trees and planting areas reduce water run-off and the heat of asphalt paving. On a hot summer day, surface temperatures in unshaded parking lots can reach 140°. When a rainstorm occurs, run-off to nearby streams can cause thermal pollution that threatens aquatic life. Shade trees can reduce that effect and filter stormwater, thereby reducing water temperatures, pollutants and flooding problems.

Parking Lot Landscaping

Developing stronger landscaping standards for off-street parking is one way to increase urban canopy and reduce impervious pavement coverage. Currently, Knox County does not have a provision for tree planting standards in parking lots, while the City of Knoxville

has standards that are applied in specific situations. While some developers have provided shade trees and landscaping in relation to parking lots, it is common to see wide, uninterrupted expanses of parking lot asphalt, particularly along commercial corridors and within older shopping plazas. Parking lot landscaping is beneficial for reasons that are discussed below.

Also, off-street parking standards should be revised to allow better storm water management, reduction in parking spaces, and other best management practices.



An employee parking area at Bush Brothers and Company corporate headquarters

Urban Agriculture and Food Access

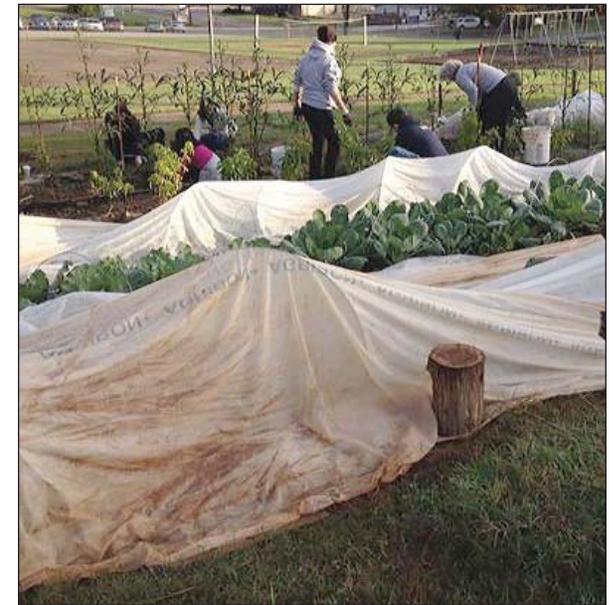
Knoxville is home to the first food policy council in the world. The Food Policy Council was created in 1982 and includes appointees made by the Knoxville and Knox County mayors. Along with the appointed members, there are associate members; together they work to address issues of food security, access and equity.

Recently, there has been building interest in food systems planning, including food access and urban agriculture. Public health impacts, such as rates of obesity, diabetes and heart disease have demonstrated strong correlations with lack of access to healthy affordable food. Burgeoning interest in local food, including the growth of farmers markets and community gardens, is creating a robust local

food economy. Cities across the world, including Knoxville, are looking at reuse of blighted properties for urban agriculture as a means of job creation and for neighborhood stabilization. These neglected spaces have the capacity to become income generators as well as providing a space for social interaction to further strengthen connections between neighbors.

The Knox County Health Department, the City of Knoxville, and other organizations have been working to address these challenges and interests. A recent focus has been addressing the problem of “food deserts,” which are sections of the city where populations are challenged by low-income and low access to be able to reach a supermarket or large grocery store.

Recently, the U.S. Department of Agriculture (USDA) announced more than \$52 million in grants nationwide to support local and regional food systems. As part of the announcement, the Knoxville-Knox County Metropolitan Planning Commission (MPC) was awarded \$25,000 to study the feasibility of a food hub for the Knoxville region.



The Edible Schoolyard at Pond Gap Elementary is a community garden sponsored by Pellissippi State Community College.

Green Infrastructure Implementation Strategies

- **Continue to expand the greenway system** within and beyond the sector plan boundary, especially by expanding the parks and open space system along the creeks.
- **Connect residential areas** to natural areas and community facilities such as schools and parks.
- **Conserve wooded hillsides**, which help maintain our natural ridge system and reduce stormwater runoff.
- **Strategic acquisition and/or the establishment of conservation areas** should be undertaken to connect ridges and streams/floodplains in order to connect and preserve existing environmental systems.
- **Protect the area's watershed systems**, fostering more widespread use of best management practices that reduce stormwater runoff and protect water quality.
- **The zoning regulations should be revised to accurately reflect current FEMA map boundaries and City and County flood prevention and stormwater regulations.** The City and County zoning ordinances each have a "Floodway" zoning district and "Flood fringe area" regulations that were created before recent FEMA maps and boundaries were updated. City and County flood prevention and stormwater regulations have been continually updated and are now the primary tools devised to address a wide range of development issues. Current zoning regulations have not been substantially updated since 1982 and no longer accurately reflect current regulations that are enforced.
- **Amend off-street parking standards** to improve property values, reduce impervious surfaces, introduce landscaping and trees, capture and filter stormwater, and reduce thermal pollution.
- **Adopt better buffer standards** in the zoning ordinance to enhance landscaping between residential property and large scale commercial uses.
- **Enact conservation subdivision regulations** or other tools to foster green infrastructure protection while allowing clustered residential development.
- **Adopt conservation subdivisions and courtyard development** ordinances to provide incentives for creation of common open space that can be used for community gardens and urban agriculture practices.

- **Create policies to address food deserts:**
 - Allow gardening and urban agriculture practices by right in all zone districts.
 - Seek grant funding to enable food desert populations to have the means to create community garden and agricultural programs.
 - Encourage acceptance and promotion of certain defined urban agricultural activities (for example, hoop houses where plants can be propagated, and allowances for goats).
- **Implement tree planting plans** in public spaces such as parks and greenways, major streets and neighborhoods. More specifically, priority tree planting areas should include Callahan Drive, Clinton Highway, Oak Ridge Highway, Papermill Drive, Pleasant Ridge Road and "gateways" to the interstate system. There is a need to incorporate tree planting areas into major street design phases of road projects. Also, neighborhoods that have lower tree canopy coverage and higher impervious surface coverage should be considered priority areas for future tree plantings.

Clinton Highway Tree Plantings

Clinton Highway has been frequently cited as an eyesore due to the lack of trees and landscaping. This arterial has a wide median, which has been partially landscaped. Occasionally, small ornamental trees have been planted next to commercial uses. Otherwise, there are very few trees along the corridor.

Recommendations include:

- **I-640 to McClain Drive**
The median has been partially landscaped, additional trees can be added and, most importantly, trees should be planted in the adjoining yards and parking areas.
- **McClain Drive to Murray Drive**
The median is drained by a swale, and there is the potential opportunity for further median planting, possibly by enclosing portions of the drainage system and adding trees in those areas. Planting in yards and parking areas are also recommended.



Tree plantings at Alcoa Highway and Neyland Drive could be used as a model for interchanges, like Callahan Drive and I-75.



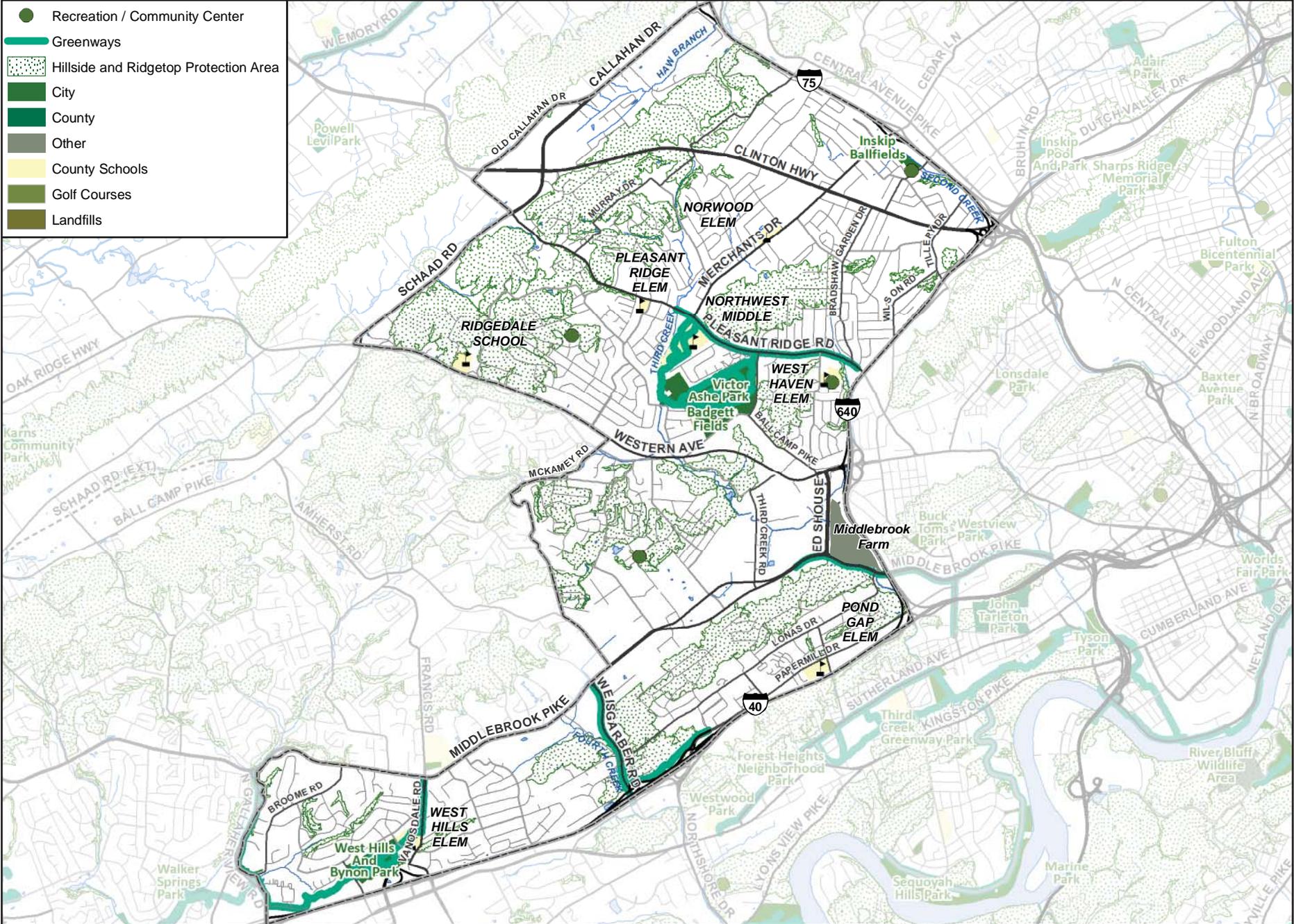
Trees have been recently planted in seven medians on Callahan Drive. In the next fiscal year when the two remaining medians are planted, there will be street trees from Clinton Highway to I-75.



Trees were planted along Papermill Drive in the area visible from I-40, and planting should continue east along this road.

Northwest City Sector: Green Infrastructure

- Recreation / Community Center
- Greenways
- Hillside and Ridgetop Protection Area
- City
- County
- Other
- County Schools
- Golf Courses
- Landfills



PROPOSED HISTORIC RESOURCES PLAN

Plan recommendations were incorporated from the following sources:

- MPC historic preservation files
- MPC historic resources inventory
- Community Input

Historic Preservation Program

The goals for historic preservation are threefold:

1. Preserve all buildings that are on the National Register of Historic Places.
2. Support more National Register of Historic Places nominations for historically significant properties.
3. Collaborate with non-profits and property owners to develop strategies to stabilize and restore historic resources.
4. Update the historic resources inventory.

The following descriptions of each historic resource are followed by a preservation recommendation.



• **The Knott-York House** at 4810 Middlebrook Pike is eligible for listing on the National Register. Constructed c. 1840, the two-story brick house with federal-style detailing is a significant example of antebellum architecture.

Recommendation: Support nomination to the National Register of Historic Places.



• **Hotpoint House** at 509 West Hills Road was listed in the National Register of Historic Places in 2010. The 1954 house was built as a demonstration model for small starter homes. The home is also known as Anderson-Wilson House and was designed by nationally-known local architect Bruce McCarty, who was considered to be a champion of modern architecture.

Recommendation: The preservation of mid-century modern structures is of growing importance as more are destroyed due to the lack of recognition that they convey a significant era in our architectural history. National Register nomination should be utilized as a model for needed documentation and for preservation to heighten awareness of the contributions of modern structures to the City's architectural heritage. Efforts should be made to ensure the owner is aware of federal rehabilitation income tax credits that are available for approved restoration and maintenance projects.



• **Middlebrook** at 4001 Middlebrook Pike: Constructed in 1845, this house is one of the few remaining pre-Civil war frame structures in Knox County. It was originally part of a 1,000 acre farm. It was listed on the National Register in 1974.

Recommendation: Ensure that the owner is aware of federal rehabilitation income tax credits that are available for approved restoration and maintenance projects.

Northwest City Sector: Historic Resources

Legend

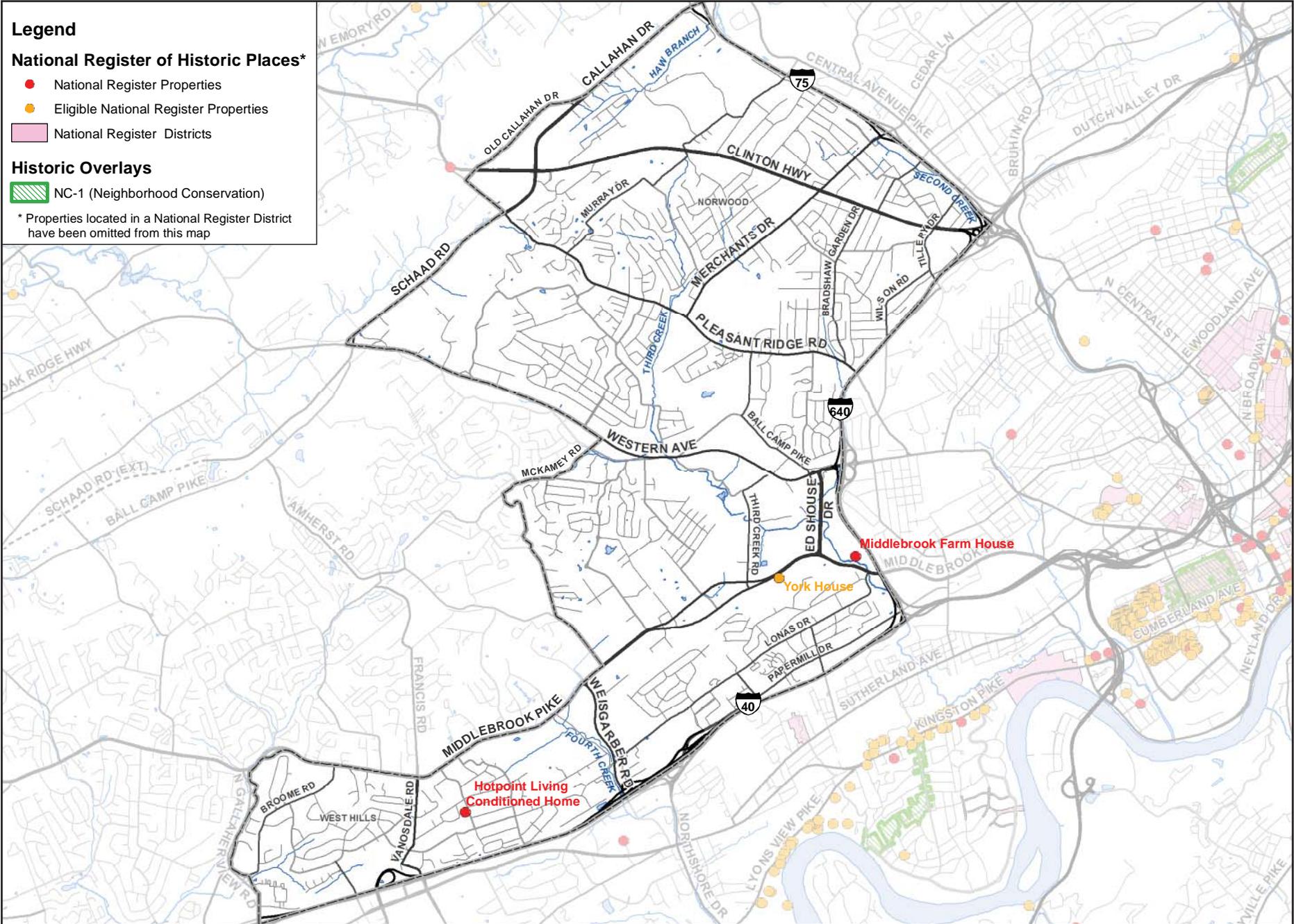
National Register of Historic Places*

- National Register Properties
- Eligible National Register Properties
- National Register Districts

Historic Overlays

- NC-1 (Neighborhood Conservation)

* Properties located in a National Register District have been omitted from this map



PROPOSED TRANSPORTATION PLAN

Northwest City sector plan transportation recommendations are based on previously adopted plans and studies, including the *Long Range Regional Mobility Plan 2040*. Roadway and sidewalk recommendations from the Mobility Plan and public input are presented below. The recommendations from the mobility plan include the horizon year.

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

Roadways

In March 2014, the City secured multimodal funding for intersection improvements at the Merchant Drive and Clinton Highway intersection. Construction is scheduled for 2016. The project will extend on Merchant Drive from Marguerite Road to Ridgefield Road and on Clinton Highway from Orchid Drive to Harriett Place and make the following improvements:

- Realign the left turns, allowing left-turn traffic to run concurrently and eliminating the need for separate left-turn phases.
- Add appropriate pedestrian crossing times to the signal.
- Convert flushed-painted channelization islands to raised channelization islands, providing pedestrian refuges with pedestrian crosswalk markings on all four legs of the intersection.
- Improve the sidewalks on each of the corners to provide ADA compliant access at the intersection and add new sidewalk on all four legs of the intersection.
- Extend sidewalk improvements from the intersection to provide pedestrian access to the eight nearby Knoxville Area Transit (KAT) bus stops on two bus routes, a public library, local retail businesses, and churches. Currently, of the eight (KAT) stops in this area, only two are accessible via dedicated pedestrian facilities.

- Modify curb lines along Clinton Highway at the intersection to maintain a minimum of 4' shoulders for bicyclists, and designate the westbound right-turn lane as a combined bicycle/right turn lane with a shared lane marking or sharrow.

Additional roadway improvements include:

- Pleasant Ridge Road/Merchant Drive widening, Phase 2: Add a center turn lane from Knoxville City Limits (Country Book Lane) and on Merchant Drive from Pleasant Ridge Road to Wilkerson Road (2019)
- Schaad Road: Widen from 2-lanes to 4-lanes (2019)
- I-75 at Merchant Drive interchange improvements (2019)
- I-640 at I-75/I-275 interchange improvements: Add a through lane on I-75 north and southbound ramps (2034)
- I-75 at Callahan Drive interchange improvements: Reconfigure existing interchange to improve safety and operations (2034)
- Vanosdale road widening: Add center turn lane from Buckingham Road to Middlebrook Pike (2040)

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. Recently City Council adopted a complete streets policy.

Considerations for more detailed road designs include:

- Callahan Drive
- Clinton Highway
- Merchant Drive
- Middlebrook Pike
- Schaad Road
- Western Avenue

Traffic Calming

Neighborhood residents have expressed concern about speeding traffic along their streets, especially near elementary schools. Speeding at West Haven Elementary School was mentioned during the public input process. Traffic calming involves a set of design strategies aimed at reducing motor vehicle speeds, improving safety and enhancing quality of life. The goal of traffic calming efforts is to balance vehicle traffic on local streets with other uses such as walking and bicycling. The City of Knoxville is currently analyzing calming program/policy options to address appropriate calming measures in neighborhoods.

Transit

Transit-oriented development should be encouraged along several corridors. Strip commercial development should be discouraged. Nonresidential development and redevelopment investment energy should be directed toward neighborhood and community centers. Between the centers, residential densities sufficient to support or increase transit ridership should be encouraged, provided design guidelines that include neighborhood buffering are utilized.

The frequency of service and comfort of using the bus service should be improved. For example, all bus stops should have a minimum of a concrete pad to stand on and a bench to sit. Incorporate bus shelters on major stops, like those inside the community and neighborhood centers.

Sidewalk Improvements

Priority areas include Parental Responsibility Zones (PRZ) where students do not have bus service to and from school. In 1993, the Knox County Board of Education established guidelines for Parental Responsibility Zones (PRZs) in Knox County. These guidelines state that for elementary schools, students within an area of one (1) mile from the school by the shortest route will not be provided transportation services by Knox County Schools. For middle and high schools, PRZs are one and a half (1.5) miles.

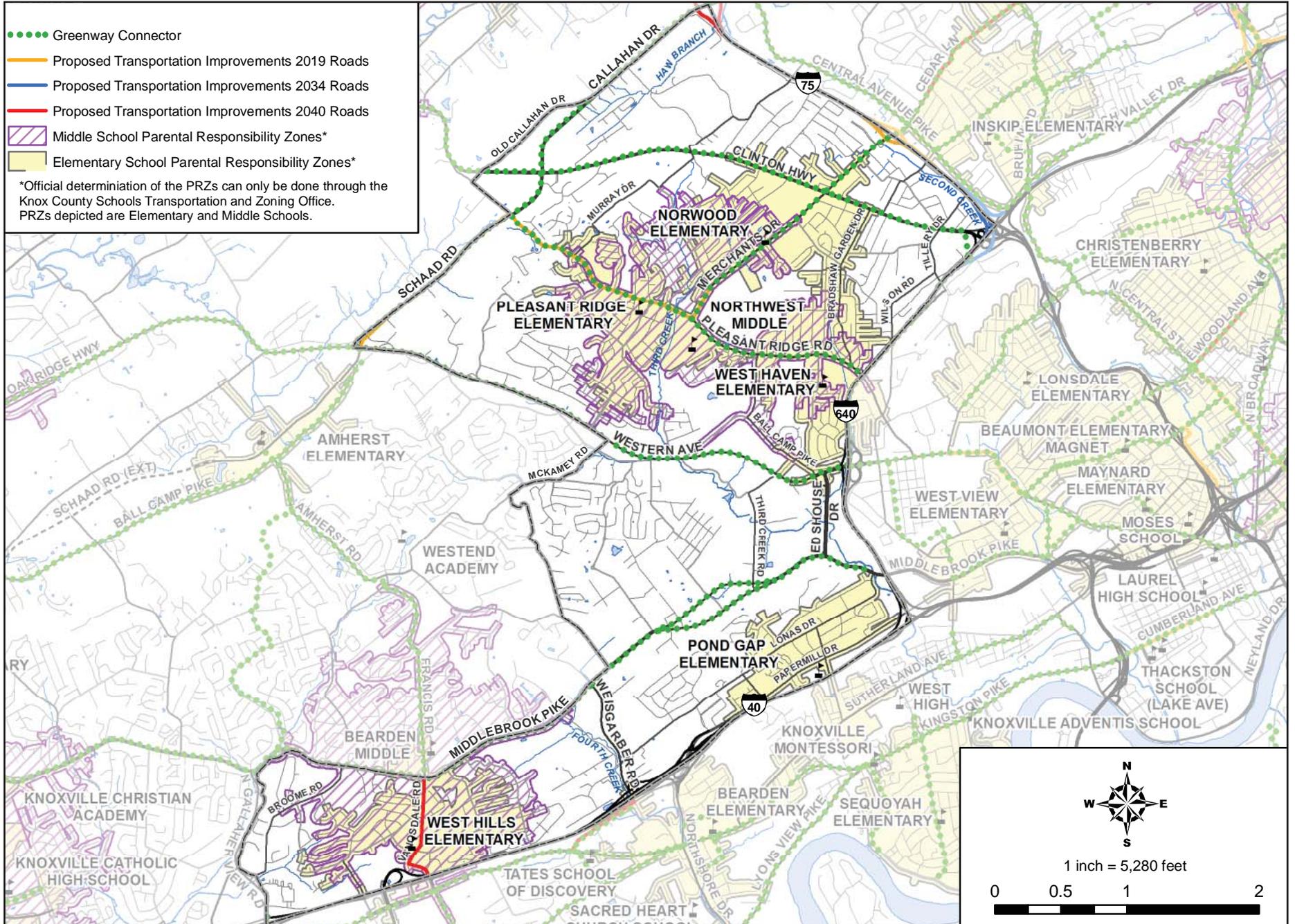
Sidewalks recommendations from the *Long Range Regional Mobility Plan 2040* are provided below.

- Construct 4,300 linear feet of sidewalk on Sheffield Drive between Wesley Road and the existing sidewalk near Portsmouth Road (2019)
- Construct 15,000 linear feet of sidewalk on Lonas Drive between Middlebrook Pike and Gate Lane (2034).
- Construct of sidewalk on the south side of Bennington Drive, between Sheffield Drive and Vanosdale Road
- Construct a complete sidewalk system in all the neighborhood and community centers identified within this plan
- Sidewalk connections should be made to greenways, consistent with the community facilities plan

Northwest City Sector: Planned Roadway Improvements

- Greenway Connector
- Proposed Transportation Improvements 2019 Roads
- Proposed Transportation Improvements 2034 Roads
- Proposed Transportation Improvements 2040 Roads
- ▨ Middle School Parental Responsibility Zones*
- ▨ Elementary School Parental Responsibility Zones*

*Official determination of the PRZs can only be done through the Knox County Schools Transportation and Zoning Office. PRZs depicted are Elementary and Middle Schools.



Section 3:

Five- and Fifteen-Year Improvement Plans

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

<i>Project or Program</i>	<i>5-Year</i>	<i>15-Year</i>	<i>Responsible Agency</i>
LAND USE			
Pursue rezonings of the neighborhood and community centers.	X		City/MPC
Revise neighborhood commercial zoning to reflect uses neighborhoods desire within their community.	X		City/MPC
Revise parking ordinance to reduce off-street parking requirements and require landscaping.	X		City/MPC
Create a new zoning district: Corridor Overlay or similar tool for commercial corridors.	X		City/MPC
Work with community to apply Corridor Overlay zoning to commercial corridors.	X	X	City/MPC
COMMUNITY FACILITIES			
Fourth Creek Greenway – Phase 2: Construct greenway trail from Weisgarber Greenway to Jean Teague Greenway.	X		City
West Knoxville Greenway: Construct greenway trail from Weisgarber Greenway to Victor Ashe Park and Greenway.	X	X	City
Third Creek Greenway – North Extension: Construct greenway from Sutherland Avenue / Third Creek Greenway to Victor Ashe Park.	X	X	TDOT/City
Expand and connect Papermill Bluff Greenway.	X	X	City
Develop Pond Gap Greenway.		X	City
Expand Pleasant Ridge Greenway.	X		City
Expand Inskip Ballfields.	X	X	City
Create a master plan for the Cumberland Estates Recreation Area and expand the opportunities for outdoor recreation.	X	X	City
GREEN INFRASTRUCTURE			
Amend off-street parking standards to include parking lot landscaping standards and achieve stormwater infiltration benefits.	X		City/County/MPC
Amend “Floodway” zoning district and “Flood fringe area” supplemental regulations to reflect updated flood and stormwater requirements.	X		City/County/MPC
Develop a tree planting plan and program for Clinton Highway.	X		City/TDOT
Adopt conservation subdivision and courtyard development ordinances to provide incentives for creation of common open space that can be used for community gardens and urban agriculture practices.	X		City/County
Allow gardening and urban agriculture practices by right in all zone districts.	X		City/County
Seek grant funding to enable food desert populations to have the means to create community garden and agricultural programs.	X	X	City/County/MPC

<i>Project or Program</i>	<i>5-Year</i>	<i>15-Year</i>	<i>Responsible Agency</i>
HISTORIC PRESERVATION			
Update the inventory of historic resources.	X		MPC/City
Knott-York House at 4810 Middlebrook Pike: Support nomination to the National Register of Historic Places.	X		MPC/Knox Heritage
Middlebrook at 4001 Middlebrook Pike: Ensure that the owner is aware of Federal rehabilitation income tax credits that are available for approved restoration and maintenance projects.	X		MPC/Knox Heritage
Hotpoint House at 509 West Hills Road: Ensure that the owner is aware of Federal rehabilitation income tax credits that are available for approved restoration and maintenance projects.	X		MPC/Knox Heritage
TRANSPORTATION			
Implement multimodal improvements to Merchant Drive and Clinton Highway Intersection.	X		City
Pleasant Ridge Road/ Merchant Drive widening, Phase 2: Add a center turn lane from Knoxville City Limits (Country Book Lane) to Merchant Drive / Pleasant Ridge Road to Wilkerson Road.	X		City/TDOT
Schaad Road widening: Widen from 2-lanes to 4-lanes.	X		City/County
Construct I-75 at Merchant Drive interchange improvements.	X		City/TDOT
Construct 4,300 linear feet of sidewalk on Sheffield Drive between Wesley Road and existing sidewalk near Portsmouth Road.	X		City
Construct a complete sidewalk system in all the neighborhood and community centers identified within the sector plan.	X	X	City/TDOT
Construct sidewalk connections greenways, consistent with the community facilities plan.	X	X	City/TDOT
Implement the traffic calming program.	X		City
Improve transit service and stops.	X	X	City/KAT
Continue to prioritize PRZ sidewalk installation.	X	X	City/TDOT