

RESOLUTION NO. 31640

A RESOLUTION ADOPTING THE MOUNTAIN CREEK
CORRIDOR STUDY.

WHEREAS, the Chattanooga City Council requested the Chattanooga-Hamilton County Regional Planning Agency (RPA) to conduct a study focused on traffic, stormwater, and recent development trends in the Mountain Creek Corridor; and

WHEREAS, a public meeting was held on June 16 and a survey was distributed to gather community input about the key issues; and

WHEREAS, the study addressed traffic counts, speeds, and safety issues, stormwater management and floodplains, slope protection, zoning, the density of existing development, available housing options, and school capacities; and

WHEREAS, two more public meetings were held on September 22, 2022 and February 6, 2023 to present the findings and recommendations of the study back to the community; and

WHEREAS, the Mountain Creek Corridor Study provides policy recommendations for new zoning requests in the corridor; and

WHEREAS, the Mountain Creek Corridor Study provides recommendations for subsequent studies of floodplain and slope protection, parks and greenways, and elements to address in the Zoning Code Update; and

WHEREAS, this Study is advisory only, and as such, does not guarantee future land development changes, funding for projects, or other recommendations contained therein; and

WHEREAS, the findings of this Study will be incorporated in the Area 2 Hixson/Red Bank Area Plan which will kick off in 2023;

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF CHATTANOOGA, TENNESSEE, That the Mountain Creek Corridor Study, a copy of which is attached hereto, is hereby adopted.

ADOPTED: June 6, 2023

/mem



April 10, 2023

MOUNTAIN CREEK CORRIDOR STUDY

TABLE OF CONTENTS

1.0	INTRODUCTION AND SCOPE	3
1.1	Study Area	3
1.2	What is a Corridor Study?	3
1.3	Coordination	3
2.0	COMMUNITY PROFILE	5
2.1	History	5
2.2	Corridor Demographics	6
3.0	COMMUNITY ENGAGEMENT / SURVEY RESULTS	7
3.1	Survey Demographics	7
3.2	New Development	9
3.3	Environmental Conditions	14
3.4	Transportation	16
4.0	ANALYSIS	17
4.1	Current Land Use and Zoning	17
4.2	Natural Areas, Park, and Greenways	17
4.3	Transportation	23
4.4	Housing and Development Potential	29
5.0	CONCLUSIONS AND NEXT STEPS	33
5.1	New Housing Development & Density	33
5.2	Interim Place Types	35
	Place Types Map	37
	Countryside Residential (CR)	38
	Suburban Residential (SR)	40
	Mixed Residential (MR)	42
	Suburban Corridor (CS)	44
	Neighborhood Center (NC)	46
	Village Center (VC)	48
	Neighborhood Node (NN)	50
	Agriculture (AG)	52
	Campus (CA)	54
	Industrial (IN)	56
	Industrial Hybrid (IH)	58
	Preserve (PR)	60
	Natural Resources Overlay (NR)	62
5.3	Summary of Recommendations Table	64
	SOURCES	68

1.0 INTRODUCTION AND SCOPE

This Mountain Creek Corridor Study evaluates the potential for new development in order to help guide growth, zoning, and decisions about new capital projects. This study includes a summary of the community input received, an analysis of some key issues, and related conclusions. It also identifies small actionable projects and provides insights to guide future planning projects in the study area.

1.1 Study Area

This Corridor Study centers on the 5-mile Mountain Creek Road from its intersection with Signal Mountain Road in the south to its intersection with US-27 in the northeast. The slopes below the W Road and US-27 are the western and eastern boundaries.

Due to the length of this study area, the maps in this report are divided into two sections: north and south of Morrison Springs Road.

1.2 What is a Corridor Study?

Corridor studies are more narrowly focused in geographic area, and in the issues analyzed, than the more comprehensive area plans that the Regional Planning Agency (RPA) will be coordinating in 2023. One of those larger area plans—the Hixson/Red Bank (Area 2) Plan—will include the Mountain Creek corridor. (Figure 1-1) Recommendations from this corridor study will be incorporated in that area plan.

1.3 Coordination

The following city and state departments, and other agencies, provided information on current conditions and key issues in the Mountain Creek corridor.

- Transportation: Chattanooga Department of Transportation, (CDOT) Chattanooga-Hamilton County/North Georgia Transportation Planning Organization (TPO)
- Parks and Greenways: Chattanooga Parks and Outdoors Department, Trust for Public Land (TPL)
- Sewers: Hamilton County Water and Wastewater Treatment Authority (WWTA)
- Floodplains: Tennessee Department of Environment and Conservation (TDEC), Federal Emergency Management Agency (FEMA)

Figure 1-1

12 Planning Areas for Chattanooga and Hamilton County



2.0 COMMUNITY PROFILE

2.1 History

The Mountain Creek Corridor began to develop in the 1800s. Until the mid-1960s, it remained a largely rural area with many active livestock farms, one of which remained until at least 2001.

The first non-agricultural development in the area was the North American Royalties manufacturing plant (then Wheland/Gordan Street Inc.) in 1952, which produced munitions to support Korean War operations. In the mid-1960s, development started on the first residential subdivision at Spring Valley Road. At that time, the local population was less than 1,200. Then, in 1966, Lockheed Martin (at the time, just “Lockheed”) purchased the plant and requested the City of Chattanooga to annex the area so it could connect the plant to the best available utilities.

The Mountain Creek community was largely opposed to the annexation, while Chattanooga considered it an opportunity to facilitate access to a nearby area that could support future suburban growth beyond the city’s burgeoning downtown. The City of Red Bank was also considering annexing the Mountain Creek area. Chattanooga’s annexation passed by majority vote at City Hall in 1966, presided over by then-Mayor Ralph Kelly and the City Council amid strong opposition. Over 100 Mountain Creek residents sued to block the annexation, but the Chancery Court upheld it in 1967.

This early annexed area extended the City of Chattanooga’s limits from Moccasin Bend up Pineville Road and Mountain Creek Road to Reads Lake Road. The area north of Reads Lake Road was not annexed until 1972. Following the 1966 annexation, developers began building more in the area, starting with the Mountain Creek Apartments which opened in 1971 and continuing with Quail Hollow, the Montclair Golf Course and its associated multi-family complex, and several others. Even amid this spate of new development, the City Council denied others such as a large residential development proposed for the site of the present-day Red Bank Elementary.

While the Lockheed plant had spurred the annexation, it did not last long itself and was sold to another manufacturer in 1972 before becoming Komatsu in 1985, now a 37-year tenant in the area. The Four Squares shopping center opened in 1980 and in its heyday, featured a movie theater and at the time, the city’s only hibachi-style Japanese restaurant. From the mid-1980s onward, the Mountain Creek Corridor began to fill in with single-family, multi-family, and commercial developments that characterize the area today.

In support of the natural qualities throughout the Mountain Creek Corridor, residents formed an interest group called Friends of Mountain Creek in 2000. In 2003, through the combined efforts of the Regional Planning Agency, Friends of Mountain Creek, the Tennessee Valley Authority, and the National Park Service, the City Council adopted a plan for a Mountain Creek Greenway that would run along part of the creek and up to the intersection of Valley Bridge and Mountain Creek Road. Although the greenway was not actually built, some community interest in it still exists. (See Section 4.2)

2.2 Corridor Demographics

The population of the study area as of 2019 was 3,504. The median age was 47 years old, and median household income was \$59,322. For comparison, in 2019 the median age for the City of Chattanooga was 37 and the median household income was \$55,065. According to the 2019 census, the population breakdown across racial and ethnic groups in the study area was as follows:

- 4.2% Black,
- 4.8% Asian,
- 4.9% persons identifying as two or more races,
- 9.1% Hispanic or Latino, and
- 77% White.



Mountain Creek Corridor community meeting on June 16, 2022 at Red Bank High School

3.0 COMMUNITY ENGAGEMENT / SURVEY RESULTS

In March 2022, a group of business owners, homeowners, community volunteers, and a representative from Friends of Mountain Creek, shared insights on the history of development, environmental management, and natural resources around Mountain Creek.

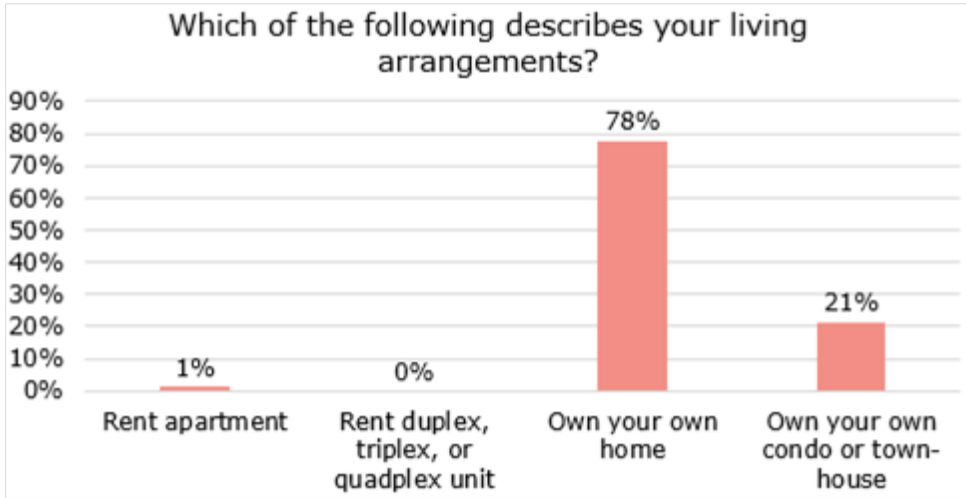
The Regional Planning Agency then held a public meeting on June 16, 2022, at Red Bank High School to present an overview of the issues. Over 80 people attended the two presentations (conducted at 4:30 and 6:30 PM), and the discussion sessions which followed. The community was invited to provide feedback on maps and to complete a survey.

The following summarizes the results of the **87 completed surveys, which account for 2.4% of the population of the area.**

3.1 Survey Demographics

Most respondents live in the study area and own their own home. A few people from outside the study area participated in the survey. They may have had an interest in the creek, local natural resources, schools, or may commute through the study area. **Only 1% of respondents were renters, even though renters represent 38.6% of people living in the study area** (Figure 3-1). A modest number of respondents own a condo or townhome.

Figure 3-1



Two-thirds of respondents are retired (Figure 3-2). Of the remaining third who are still working, half indicated that they work in the study area (Figure 3-3). Sixty percent have household incomes of \$90,000 or more (Figure 3-4). The age of respondents correlates with employment status with over 80% in the 55 and older age group (Figure 3-5).

Figure 3-2

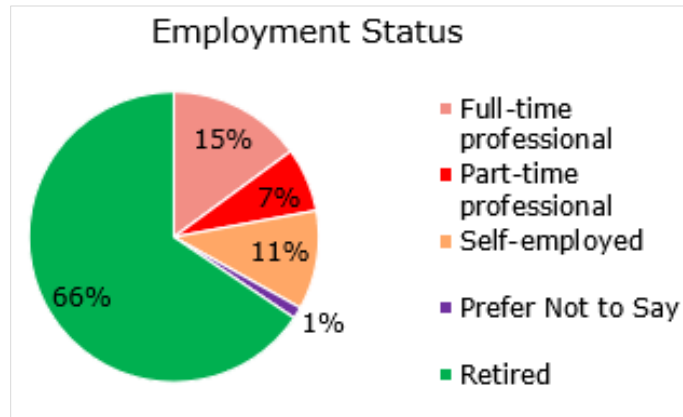


Figure 3-3

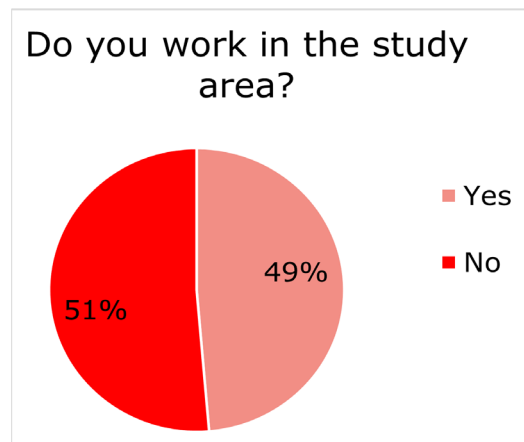


Figure 3-4

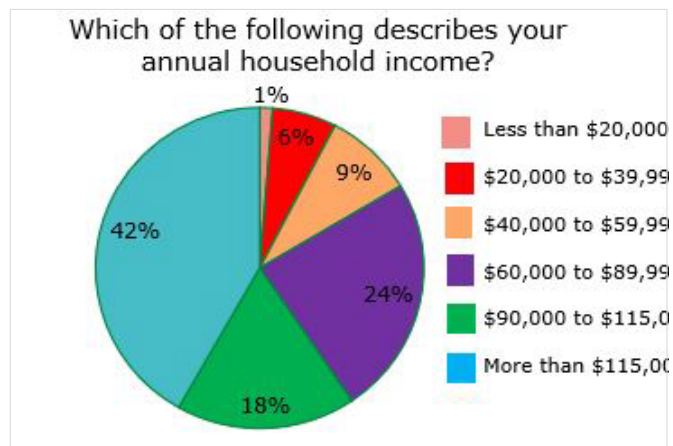
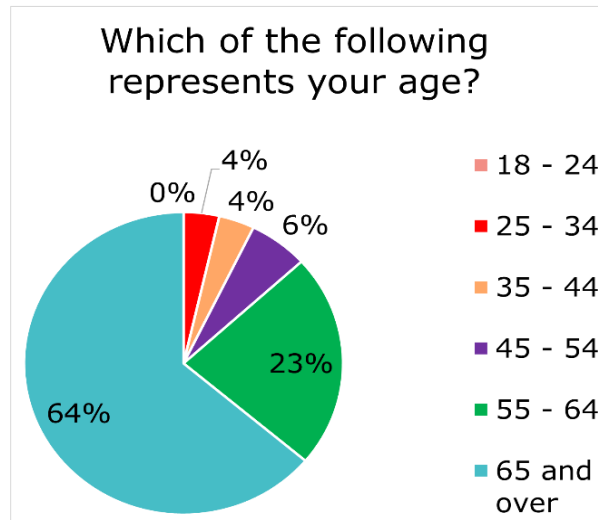


Figure 3-5



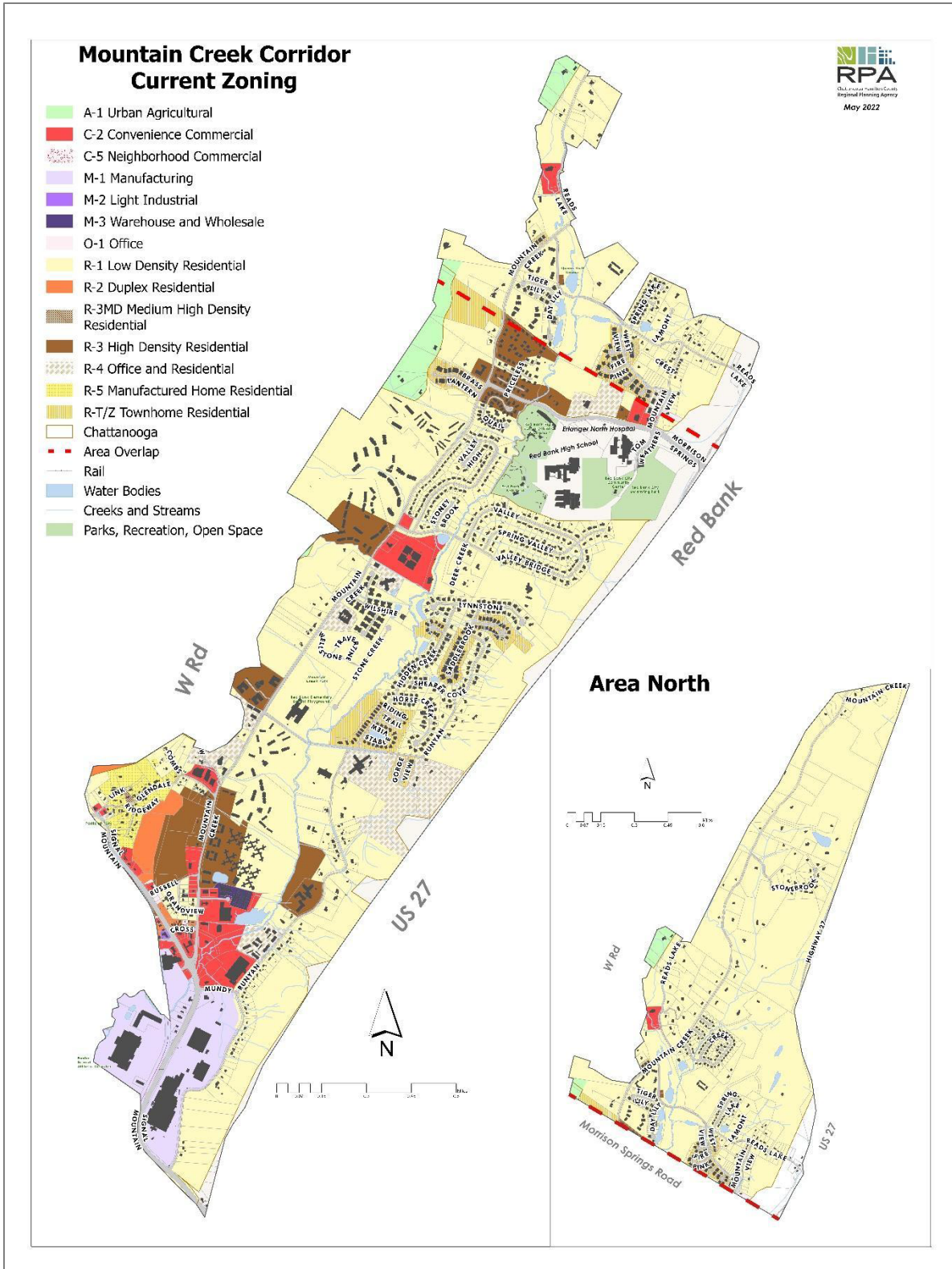
These survey results therefore reflect the opinions of mostly one segment of the population in the Mountain Creek Corridor that are largely older, retired homeowners or working professionals earning above median income. **If more renters had participated in the survey, these results may have been quite different across all the following categories.**

3.2 New Development

The Mountain Creek Corridor is attractive for residential development due to the location of three schools in the area, the natural beauty of Walden’s Ridge and Mountain Creek, and the proximity to downtown. However, those features also come with flood plains and steep slopes which, combined with a limited number of through streets, causes concern from existing residents when new developments are proposed.

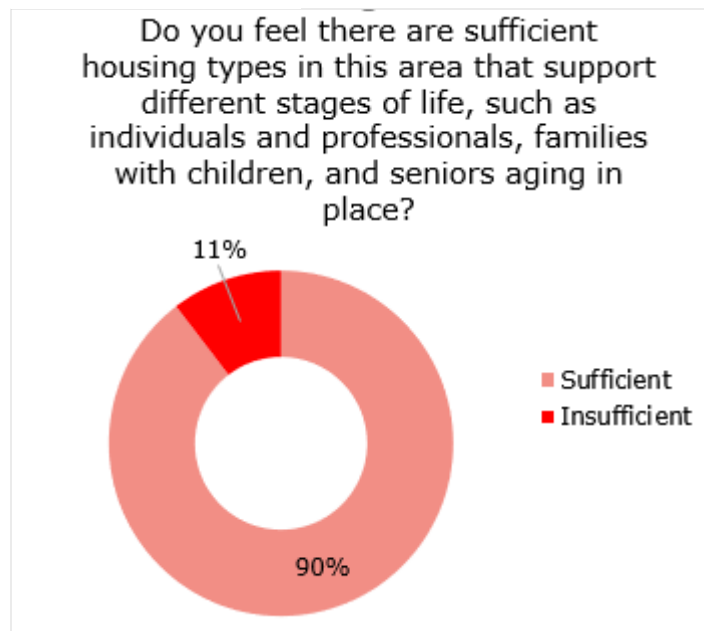
Ninety percent of the land in the corridor is zoned for single-family residential, as shown in light yellow in Figure 3-6. Although many of those lots are already built out, the potential for the redevelopment of some parcels always exists. Survey questions therefore focused on the types of development that existing residents might want to see in the future.

Figure 3-6



As people age, they sometimes choose to downsize and minimize the amount of property upkeep they are responsible for. One survey question therefore asked whether residents felt the Mountain Creek study area included enough housing options to support them through different stages of life. Ninety percent of the respondents said the housing types are sufficient (Figure 3-7).

Figure 3-7



When asked about other housing types that could be added to the area, 38% of respondents preferred to limit any new housing to single-family homes, while another 37% wanted to see no new development at all (Figure 3-8). Townhomes (attached single-family homes) and condos garnered a few votes, but apartments and other unit types typically associated with renters scored very low. This reinforces a preference among the demographic represented in this survey for single-family homes.

Future planning efforts should try to engage more renters as greater participation among this demographic could produce different results in response to this question. A more diverse sampling of Mountain Creek residents could indicate, for instance, more interest in rental units or different preferences for housing types, such as townhomes or “Missing Middle” housing.

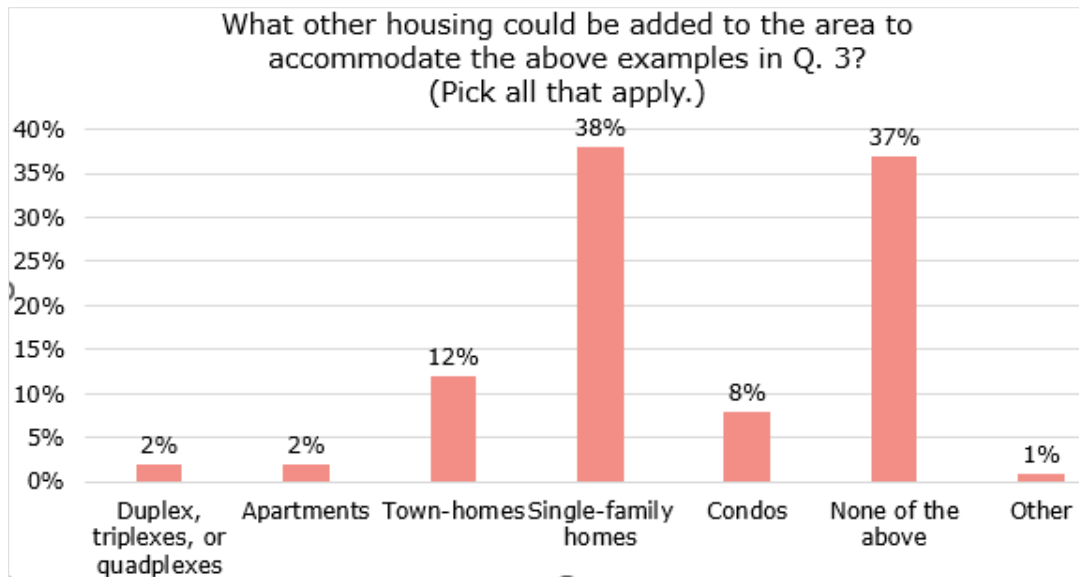
Missing Middle Housing

Missing Middle Housing is a range of house-size buildings with multiple units that are compatible in scale and form with detached single-family homes. <https://missingmiddlehousing.com/>



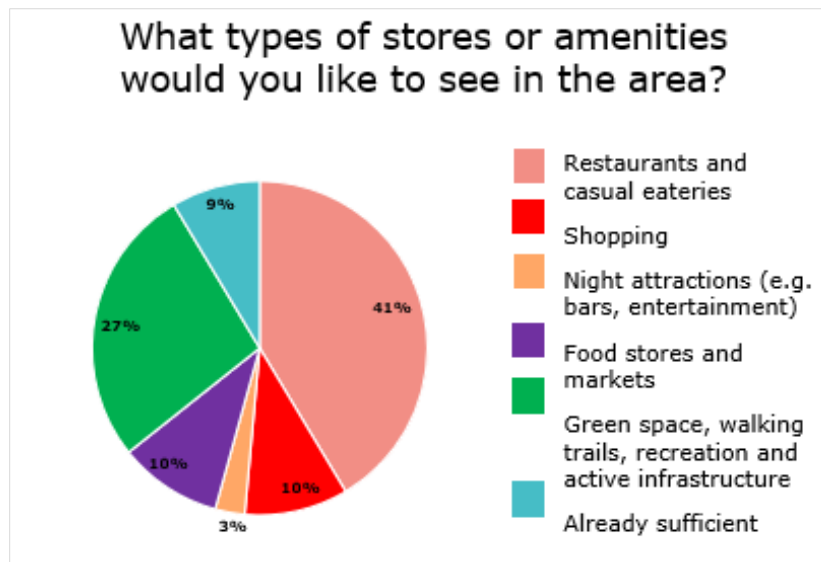
These building all contain from 2 to 6 units. The middle right photo is an Accessory Dwelling Unit built on the same lot as the primary house.

Figure 3-8



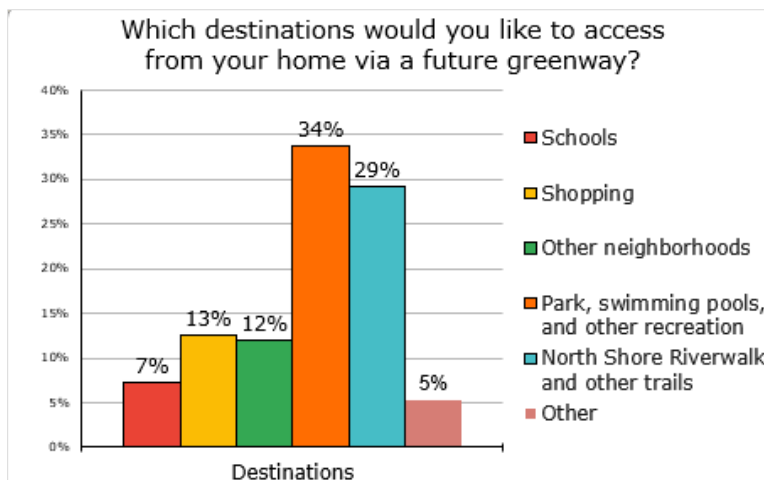
Residents often like to have retail, services, or recreation facilities nearby. When asked about other types of stores or amenities they might like to see in the future, the top response (41%) was restaurants. The next highest response (27%) was for green space, walking trails, and recreation (Figure 3-9). Residents provided a variety of additional comments, ranging from interest in a casual eatery to a fine dining establishment.

Figure 3-9



The survey also asked what destinations people might want to access via a future greenway (Figure 3-10). Thirty-four percent of respondents indicated they would like to access parks, swimming pools, and other recreation assets, while 29% elected for connectivity to the North Shore Riverwalk and other trails. Shopping and schools received less interest (13% and 7% respectively). This suggests that survey respondents would be unlikely to use alternative transportation methods for school, commuting, or shopping but may support a future greenway project to access local recreational resources. Once again, a greater diversity in survey respondents might indicate more interest in using a greenway for getting to school, shopping, or commuting to work.

Figure 3-10



3.3 Environmental Conditions

The survey also asked about the importance the community places on protecting floodplains and steep slopes. Seventy-four percent consider it very important to regulate floodplains (Figure 3-11) and 70% consider the regulation of steep slopes to be very important (Figure 3-12).

Figure 3-11

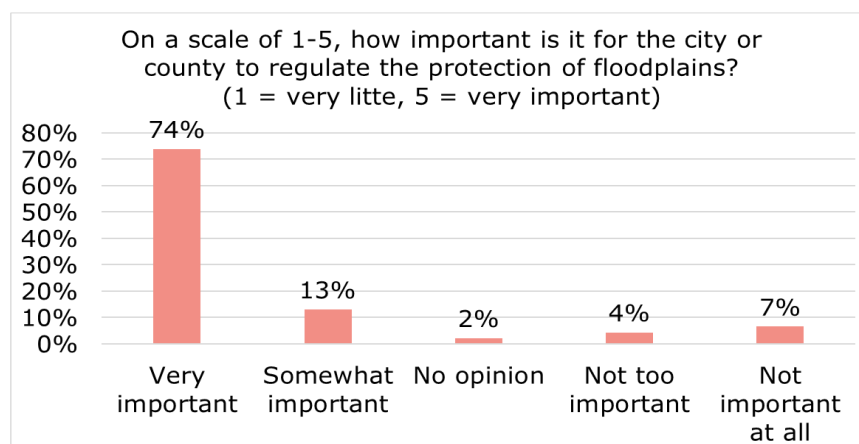
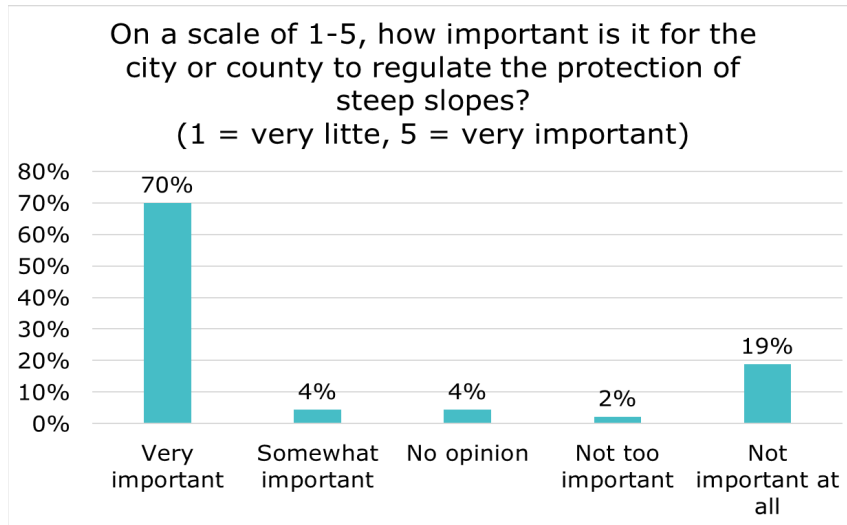


Figure 3-12



Mountain Creek

3.4 Transportation

Community members expressed significant concern over traffic. Survey questions, therefore, addressed their perception of the challenges with speeding, turning onto a main road, congestion, and pedestrian and bike crossings on a scale ranging from easy to very difficult. Of these four traffic-related issues, turning onto a main road during “rush hour” was viewed as the most problematic with 52% describing it as “very difficult” (Figure 3-13). Speeding and congestion delays were seen as less of an issue with only 35% and 34%, respectively, of respondents indicating a level of “very difficult” (Figure 3-14, Figure 3-15). Most people did not see bike and pedestrian crossings as problematic, as the “neutral” response received the most votes in this question (Figure 3-16). That could be due to a low number of respondents who walk or cycle regularly. **Of the following four questions, 13-39% of respondents indicated that traffic issues were either “easy” or “not too difficult.”**

Figure 3-13

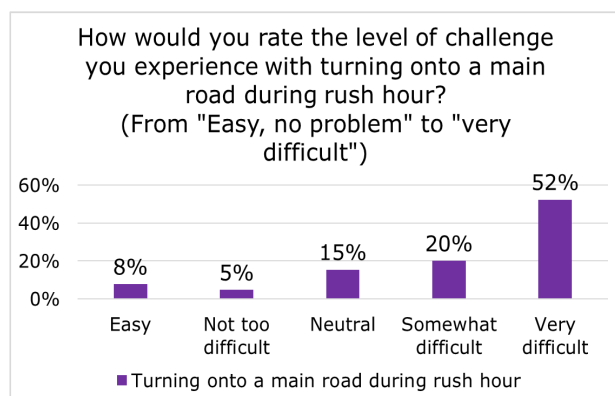


Figure 3-14

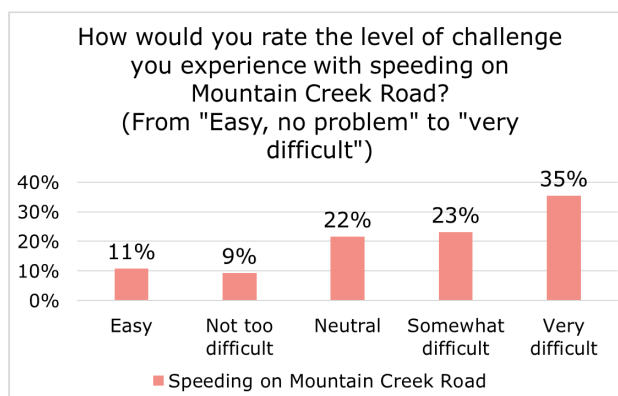


Figure 3-15

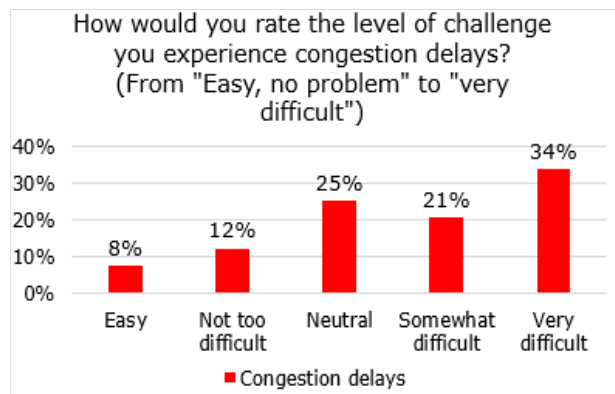
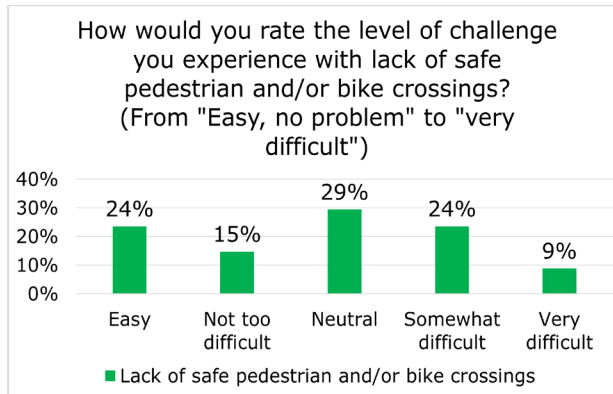


Figure 3-16



4.0 ANALYSIS

4.1 Current Land Use and Zoning

Figure 3-6 shows the current zoning for the Mountain Creek Corridor. Zoning regulates what type of development can be built, which throughout this study area, generally falls into three categories: residential, commercial, and industrial.

Residential

Most of the land is zoned R-1 Residential, featuring primarily low-density, single-family detached housing. Some land is zoned R-2 Residential, which allows two-unit dwellings (often called duplexes), and some is zoned R-T/Z Townhouse/Zero Lot Line.

Of the seven parcels zoned R-3 Residential for multi-family/apartments, six are already built out, while one is vacant but could be developed with a density of 18-20 dwelling units per acre.

Two unique parcels contain multi-family housing even though part of each is zoned R-1 Residential. This was done in 1986 through the approval of a Planned Unit Development (PUD) which allows multi-family development in a single-family zone, depending on the acreage and number of units.

Commercial

Except for the Four Squares office development and a gas station, commercial zoning is mostly clustered around the intersection of Mountain Creek and Signal Mountain Roads. This intersection serves as the primary commercial node for the community. A few commercial lots in the study area are either vacant or underutilized. Any additional commercial development would require rezoning and would be best suited adjacent to the areas already zoned commercial.

4.2 Natural Areas, Parks, and Greenways

The area retains aspects of its agricultural roots and rural nature, characterized by the preservation of the forested, steep slopes of Walden's Ridge to the northwest and the slopes below US-27 to the east.

Tree Canopy

Many of the single-family residential lots throughout the main corridor retain modest tree canopy. Mountain Creek itself, for which the area is named, still retains much of its protective tree canopy as it winds through the developed areas. Beyond Reads Lake Road, lots are generally larger and more wooded.

Based on information from the community, the world's tallest documented Post Oak tree (*Quercus Stellata*) is found on the former Quarry property off Reads Lake Road. Estimated at 200 years of age and over 100 feet tall, this tree "was recognized as a state treasure in Joint Senate Resolution 546, which was signed by Tennessee Governor Lee in April 2019." Source: *Let's Create Much Needed Park Space*, provided by Bob Geier, Mountain Creek Corridor resident

Floodplains

The floodplain of Mountain Creek runs through the backyards of many apartment buildings and single-family subdivisions (Figure 4-1). The floodplain is broken down into the Floodway (the central channel of the waterway—in this case Mountain Creek) and the Special Flood Hazard Area (SFHA)—commonly referred to as the 100-year and 500-year floodplains—established by the Federal Emergency Management Agency (FEMA).



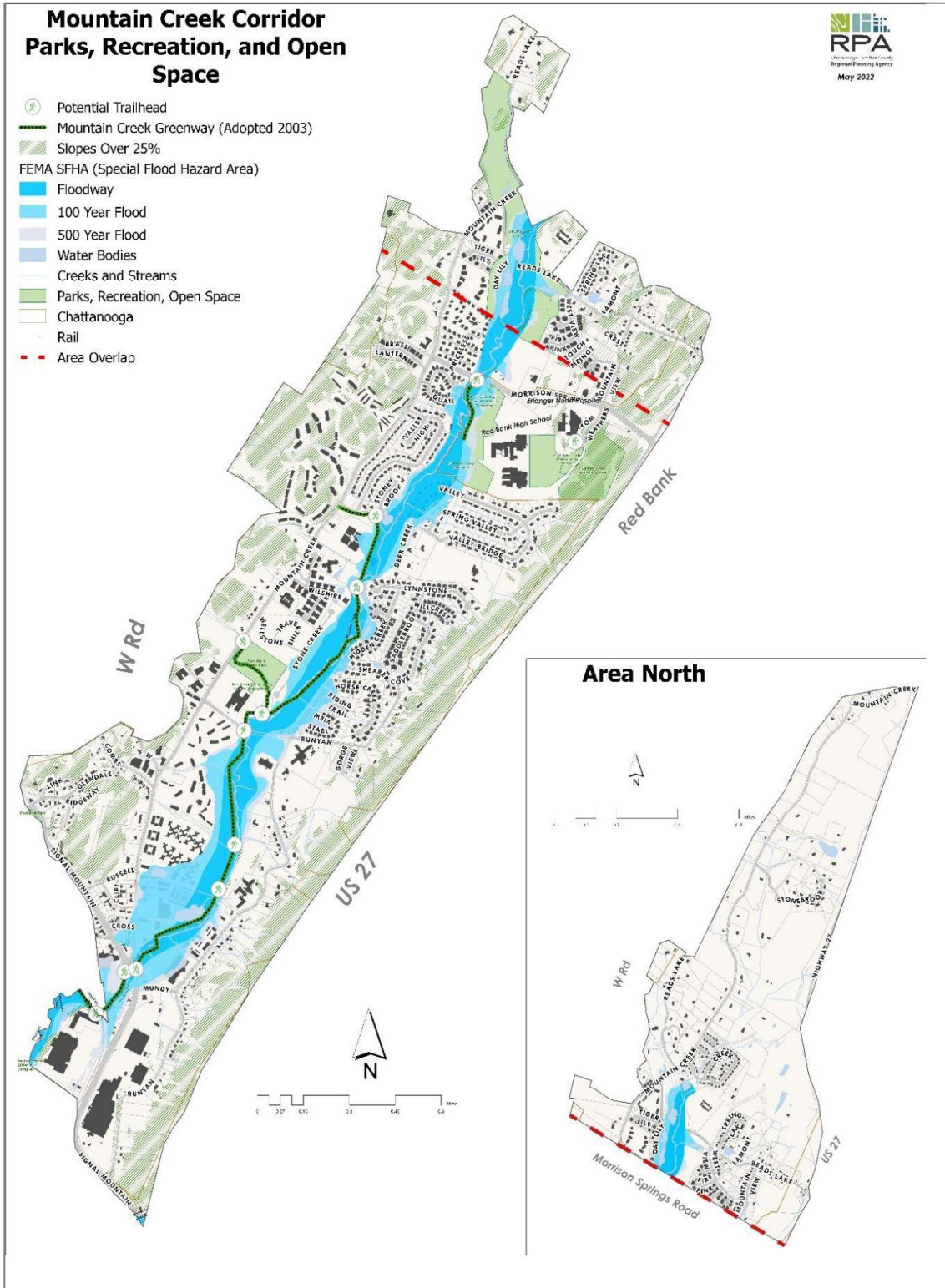
Flooding on Mountain Creek Road near Signal Mountain Road, Source: Times-Free Press, May 7, 2003

The Federal Emergency Management Agency is currently updating the Flood Hazard Area maps, and Flood Insurance Rate Maps (FIRM) for this area, which may be released in 2023. Their maps highlight “all property which is considered to be below the elevation of the ‘High Water Stage’ for the Tennessee River and its tributaries and any area included or added by the Tennessee Valley Authority study” (Chattanooga Code of Ordinances, 2022). Preliminary data from FEMA suggests that the only change to the floodplain maps in this area may be an expansion of the Flood Hazard Area a little further north of Reads Lake Road.

Currently FEMA floodplain maps only show the floodplain extending to just north of Reads Lake Road and south of Creek Drive. No floodplains are mapped northwest of Mountain Creek Road near Morrison Spring or Read Spring. Information from the community indicates that Reads Lake was not “constructed as an amenity to the golf course in 1980,” but that USGS topo maps from 1936 show “Reads Lake as it exists today.” Information from the community also states that springs and subterranean waters flow throughout the “Quarry” area, and that homeowners have experienced significant stormwater issues as a result. They have requested development restrictions for this area and its designation as a public park. Source: *Let’s Create Much Needed Park Space*, provided by Bob Geier, Mountain Creek corridor resident.

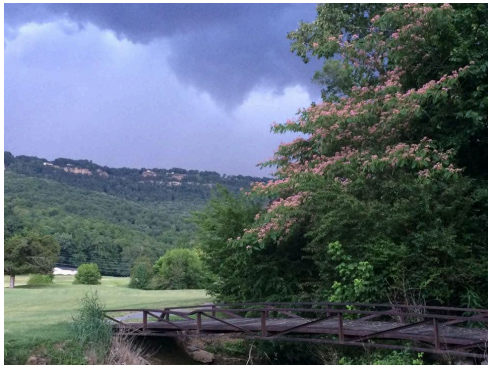
It is important to note, however, that this property is currently privately owned and the property owner has existing entitlements, such as zoning, that enable the future development on this site.

Figure 4-1



For any property within a Special Flood Hazard Area, flood insurance is required, and development regulations apply. The nine regulations are summarized in the City of Chattanooga’s Code of Ordinances in Division 24 - Flood Hazard Zone Regulations, Sections 38-363 through 378. In essence, all new construction or substantial improvements must be designed and constructed to minimize flood damage. Where Base Flood Elevation (BFE) data is published, the lowest floor of a building, including basements, must be elevated two feet above the BFE (if constructed of wood) or one foot (if constructed of concrete.) Other specific standards for non-residential construction are specified in Section 38-366.

Future area planning processes should investigate the extent to which low-impact development standards can mitigate stormwater run-off and enhance stormwater infiltration in the areas adjacent to the floodplain.



Reads Lake and the surrounding Quarry property. *Source: Bob Geier*

Slopes

Figure 4-1 also identifies the steep slopes throughout the corridor. Some may remember the mudslide that destroyed the Subway restaurant on Signal Mountain Road in 2019. With the potential for these types of erosion, introducing steep slope regulations in the area is recommended. The survey also indicated strong community support for such regulation.



Mudslide that destroyed the former Subway restaurant on Signal Mountain Road in 2019.

Due to topographical differences, including the existence of steep slopes, development on the west side of Mountain Creek Road usually takes a different form than that on the east side. Buildings on the west side of Mountain Creek Road are generally clustered around the base, or on the tops, of knolls due to the topography. Buildings on the east side of Mountain Creek Road are typically more spread out across each development site because the terrain is generally more flat.

Several vacant parcels, and some large parcels with one single-family home on them, are located along the base of Walden's Ridge. These properties contain slopes ranging from approximately 26-45% grade. In 2016, the property at 1105 Mountain Creek Road was rezoned from R-1 Residential to R-3 with conditions, one of which was "no mass grading or mass clearing above the 780-foot topo line, as identified on the Hamilton County GIS map." Staff recommended a similar condition for a proposed rezoning at 1145, 1149, and 1157 Mountain Creek Road, however this case was later withdrawn by the applicant.

In order to preserve the view shed of Walden's Ridge for the Mountain Creek community and to address concerns about development on steep slopes, any future development should similarly be clustered at the base of the ridge with grading limited to the areas closest to Mountain Creek Road.

Greenways and Parks

As mentioned in Section 2.1, the Mountain Creek Greenway Plan was adopted by the Chattanooga City Council in 2003. (https://chcrpa.org/wp-content/uploads/2017/12/MtnCreekGreenwayfinal_plan_document.pdf)

The coordinated efforts of the City of Chattanooga, the Trust for Public Land, and the Friends of Mountain Creek facilitated its research and adoption. Since then, no progress has been made on implementation, however the survey results indicated an interest in accessing local amenities via a greenway. With the city undertaking a Parks and Outdoors Plan in 2022, it may be an appropriate time to revive the Mountain Creek Greenway Plan for consideration. The Hixson/Red Bank (Area 2) Plan, which will encompass the Mountain Creek Corridor, should also include the greenway within its scope.

Mountain Creek Park, located next to Red Bank Elementary School, is the only official park in the area. The Quarry (formerly the Montclair Golf Course, along with an apartment/condo complex) has been the subject of several development proposals in recent years. However, in the absence of an active use on this property, much of the local community unofficially uses the open greenspace and pond as a park. While Figures 4.1, 4.2, and 4.4 show this property as Parks/Open Space, that is merely an indication of how the property is currently being used and not an official park designation. Figure 3-6 shows that this property is currently zoned R-1 Residential with some C-2 Commercial zoning.

As part of the 2023 Parks & Outdoors Plan (in development as of this writing), the Chattanooga Parks & Outdoors Department is considering a new park somewhere in the Mountain Creek area, but an exact location has not yet been determined and the Plan has not yet been adopted.



Mountain Creek Elementary School and Park

4.3 Transportation

Strong community concern has been voiced about any additional development in this corridor and its potential impact on traffic, due in part to perceptions of the flow and volume of traffic on Mountain Creek Road. In response, the RPA and City transportation staff studied traffic volumes, speed, and crash statistics for this corridor in recent years.

However, the Mountain Creek Corridor Study is a land use study, not a formal traffic study. Additional study of traffic issues along this corridor and others will be considered during the Hixson/Red Bank Area 2 Plan, which will kick off in 2023. A more detailed traffic study, focused on Mountain Creek Road only, may need to be undertaken in the future.

Traffic Crashes

Data shows only one to three crashes reported per year at the intersections of Mountain Creek Road at Morrison Springs and at Runyan Drive, which is a low level of traffic risk for the corridor. While residents say more crashes take place, the City has no way of confirming the number if they are not reported to the police. Also, *Motor Vehicle Crash Reports* from the Police Department sometimes show a different number of crashes than the City's Transportation Department, but that may be because the Police Department does not "scrub" non-road related incidents as the Transportation Department does. For instance, if a motorist hits a deer running across the road, that incident is not considered related to a design issue with the roadway. Another source of data for crashes is the TPO Crash Data Dashboard. <https://chcrpa.maps.arcgis.com/apps/dashboards/>

Traffic Congestion and the Causes

As with many corridors, the amount of traffic on Mountain Creek Road is largely attributable to the three factors described below.

1. **Lack of Connecting Streets** - The slopes on Signal Mountain and U.S. 27, and the floodplain and Mountain Creek itself, constrain connectivity in the corridor. These elements limit the possibility of extending or creating additional east-west through streets. In fact, between Signal Mountain Road, at the southern end, and U.S. 27 to the north, only two east-west through streets exist: Morrison Springs Road and Runyan Drive (Figure 4-2). Runyan Drive is a narrow two-lane road with speed humps and no traffic signal at its intersection with Signal Mountain Road. A traffic signal is present at Mundy Street, but that intersection is very close to the Mountain Creek/Signal Mountain Road intersection and motorists must still negotiate the speed humps on Runyan to get there. Because of these limited east-west connections, almost all traffic generated by development in the Mountain Creek Corridor must travel on Mountain Creek Road.

The lack of connecting streets between subdivisions, schools, and stores also requires almost every car trip made to use Mountain Creek Road. While adding new connecting streets is the best long-term solution to alleviate traffic congestion, doing so would be very expensive, and it typically meets resistance from existing residents.

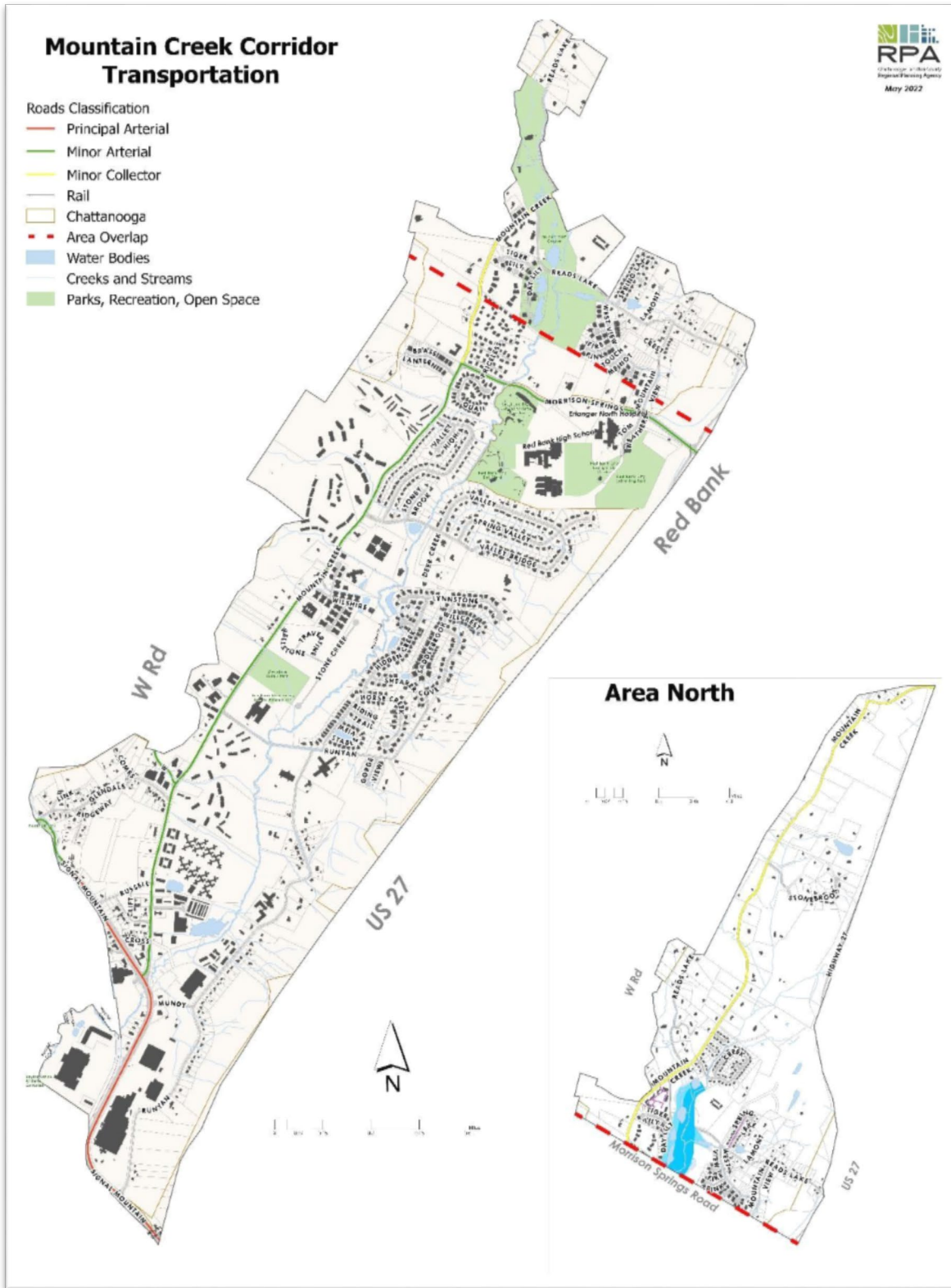
2. **Commute Patterns** - The presence of three schools—Red Bank High, Middle, and Elementary—within the corridor creates elevated traffic volumes at certain times of

the day. Additionally, most commuter traffic is traveling on these same roads at the same time.

3. **Spread Out Development** - The current zoning throughout the City and County tends to segregate different uses, with lots of space between buildings and high requirements for parking spaces, which results in many large surface parking lots. This pattern of development—common in suburban areas—also contributes to traffic as most everyone must use their car to get from one destination to another.

Zoning that allows a reduced number of parking spaces, and promotes more mixed-use development with higher density housing around clustered, walkable commercial centers, should be used in the future. This clustered development pattern will allow more people to walk or ride a bike to work or other destinations.

Figure 4-2



Traffic Counts and Speeding

The Chattanooga Department of Transportation conducted two traffic counts along Mountain Creek Road in recent years. The first occurred following the installation of the roundabout at North Runyan Drive in 2019 with the following results for daily traffic counts:

- 14,000 vehicles at the W Road
- 11,000 vehicles at Valley Bridge Road
- 1,600 vehicles at Morrison Springs Road

Another volume and speed count was conducted on June 13, 2022. The results indicated that, at the Morrison Springs intersection, the average speed was 42 mph, but most people are driving 40 mph (mode speed). Of all vehicles, less than 5% exceeded 55 mph. Further south along Mountain Creek Road, most people were driving 35 mph, with less than 2% of vehicles exceeding 55 mph. While the posted speed limit is 35 mph throughout the corridor (except near the roundabouts), these observed speeds are not considered critical.

Turning onto Mountain Creek Road

Community input and traffic analysis identified that the primary challenge is the difficulty of making left turns onto Mountain Creek Road. This challenge can be influenced by the speed of traffic, the limited sight distance caused by hills and road-side vegetation in some locations, and a lack of traffic signals that interrupt the continuous flow of traffic. Even during non-peak times, traffic can be continuous with few breaks which makes turning onto the road more difficult. However, based on the recent counts, the traffic volume is not considered high enough to warrant a traffic signal.

Roundabouts

Concern was also expressed over the roundabout at the intersection of Mountain Creek Road and North Runyan Drive, citing the perception that it does not adequately slow traffic. It is designed to enable school buses and large trucks to safely navigate the roundabout. Motorists following the rules of the road should take the roundabout at a slower speed. In fact, the posted speed drops from 35 mph to 15 mph on all approaches to the roundabout (Figure 4-3). The City's Transportation Department recently studied this roundabout and found no issues with its design or function.

Figure 4-3



Potential Traffic Improvements

The most appropriate traffic improvements are interventions that are cost-effective and directly address the nature of the traffic issue. While various projects have been suggested by residents, the city transportation department does not support most of them. The following are the drawbacks associated with the projects most often suggested:

- The current volume of traffic on Mountain Creek Road is acceptable for a two-lane road, therefore **additional travel lanes are not warranted. However, adding turn lanes in strategic locations could alleviate the difficulties** of turning left from, or onto, Mountain Creek Road. Turn lanes could be required as part of new development projects.
- **Roundabouts** are expensive and, since two are already installed, additional roundabouts are not appropriate to the amount of traffic anywhere else along the road.
- **Traffic signals** are also expensive (\$250,000 for installation, and roughly \$8,000 in yearly operating costs) and are currently not warranted based on the traffic counts.
- **Speed bumps** would achieve less in benefits than the negative impacts they would create by interrupting regular traffic flow.

To address the difficulty of turning left onto Mountain Creek Road, the first intervention that should be considered is trimming vegetation that blocks the driver's sightline at key points.

A traffic signal may be appropriate at the most difficult intersections if new traffic counts indicate higher levels of traffic. If any intersections were to be considered, it would most likely be at the intersection of Valley Bridge Road and Mountain Creek Road.

Lastly, the city operates a Neighborhood Traffic Management Program through the Transportation Department. Neighborhoods can work with the department to further identify any necessary or beneficial transportation improvements in their area.



Sidewalks and Bike Lanes

The survey results indicated neutral sentiment on the difficulty of bike or pedestrian crossings, however CDOT was consulted on the feasibility of adding pedestrian crossings. Sidewalks are only present along one side of Mountain Creek Road, and do not extend north past Morrison Springs Road, and there are no dedicated bike lanes anywhere in the corridor.

In order to add pedestrian crossings on Mountain Creek Road, both sides of the road need a paved, cleared area to receive the pedestrian foot-traffic and meet the Americans with Disabilities Act (ADA) standards. In considering whether crosswalks are feasible, future planning processes should evaluate how much foot-traffic would be likely to occur at specific locations. Another obstacle to creating pedestrian crossings is the limited amount of right-of-way on either side of Mountain Creek Road. City transportation policy does not currently provide for marked crosswalks outside of the urban, downtown area. It costs \$2,000 to install a crosswalk, and about the same amount annually to maintain the striping and the plastic plates used to mark the entrance of the crosswalk, at the edge of the road, for detection by those with disabilities.



Americans with Disabilities Act (ADA)

The Americans with Disabilities Act (ADA) prohibits discrimination against people with disabilities in several areas, including employment, transportation, public accommodations, communications and access to state and local government programs and services.

Design standards for building access, sidewalks, curb ramps, and pedestrian signals at intersections are all included in the ADA regulations.

https://www.ada.gov/2010_regs.htm

4.4 Housing and Development Potential

The Mountain Creek community has strongly opposed new multi-family housing. In recent years, some housing projects proposed in the corridor were either withdrawn or denied by the Planning Commission, including the former quarry property off Reads Lake Road.

While there is no guarantee of approval, an owner has the legal right to request to rezone their property at any time. The RPA therefore investigated the actual remaining development capacity of single-family and multi-family housing in the corridor. Figure 4-4 illustrates the current land use. Much of the multi-family housing is older stock dating back to the 1980s and 1990s. The 2021 American Community Survey's 5-year estimates for the census tracts in the Mountain Creek corridor showed a total of 3,548 renter-occupied units in the area. This represents 57% of the total 6,210 housing units in the area. These existing multi-family properties may present opportunities for renovation or redevelopment in the future without the need for rezoning.

Most of the parcels in the Mountain Creek corridor have been developed. However, some large parcels in the corridor only have one single-family home. The RPA typically considers any such single-home lot with three acres or more as developable land as they can often be redeveloped as subdivisions with multiple homes or rezoned for other housing types.

Most of the vacant parcels in the area are located on the slopes beneath U.S.27, as shown in Figure 4-5, and are zoned for low-density residential. Slopes can make the cost of development more expensive and constrain the amount of buildable area but do not eliminate the potential for development.

The solid red lines on Figure 4-5, indicate that sewer service extends throughout the southern area, but only services some of the parcels in the northern area. Some of the vacant parcels in the southern portion are separated from the existing streets or sewer network by existing development, which presents additional complications for providing connections.

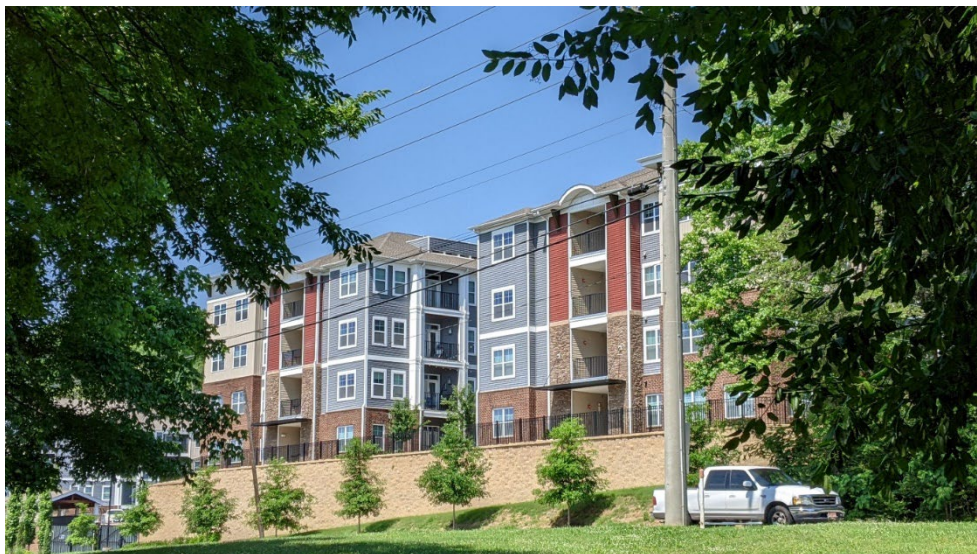


Figure 4-4

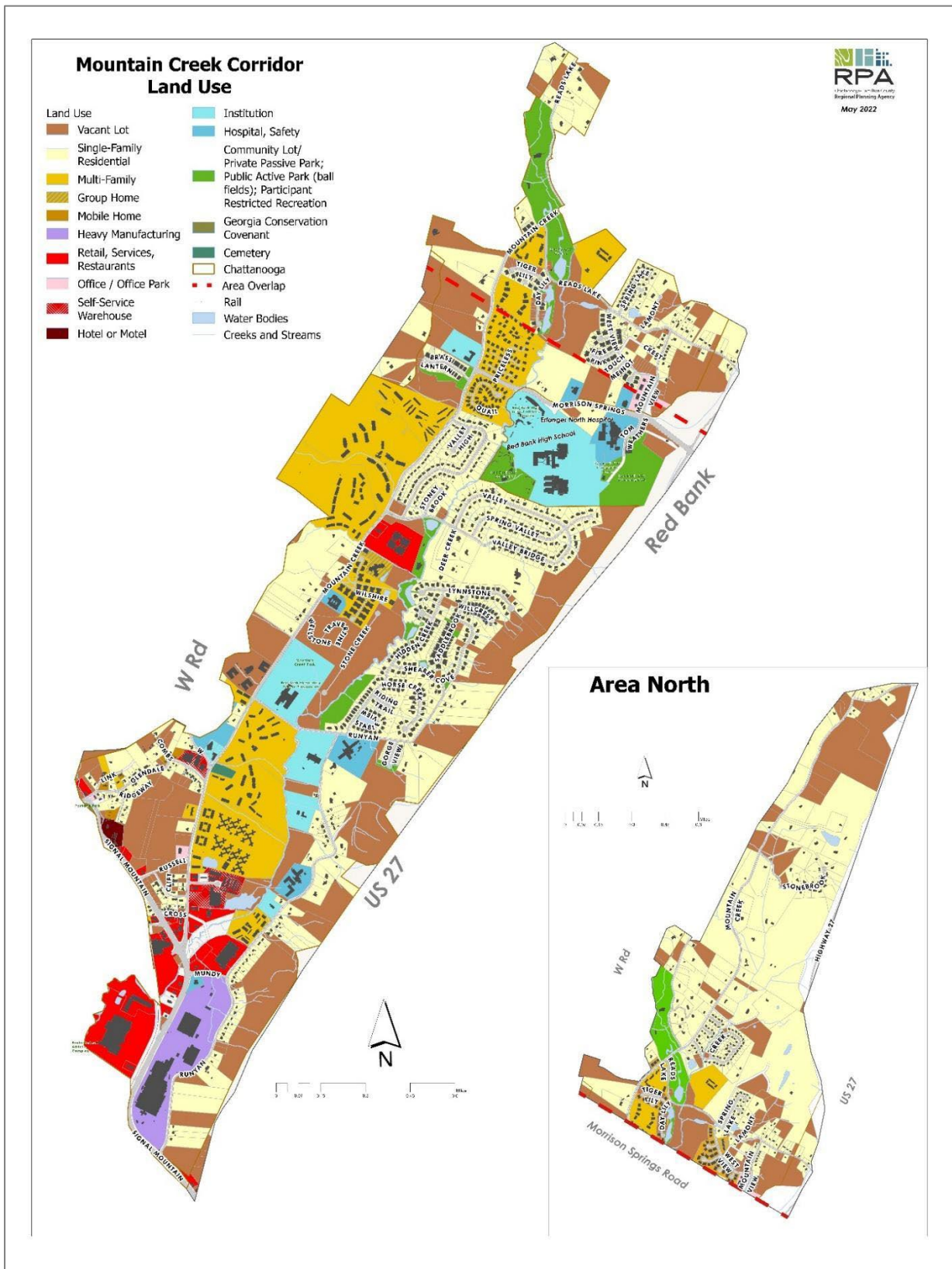
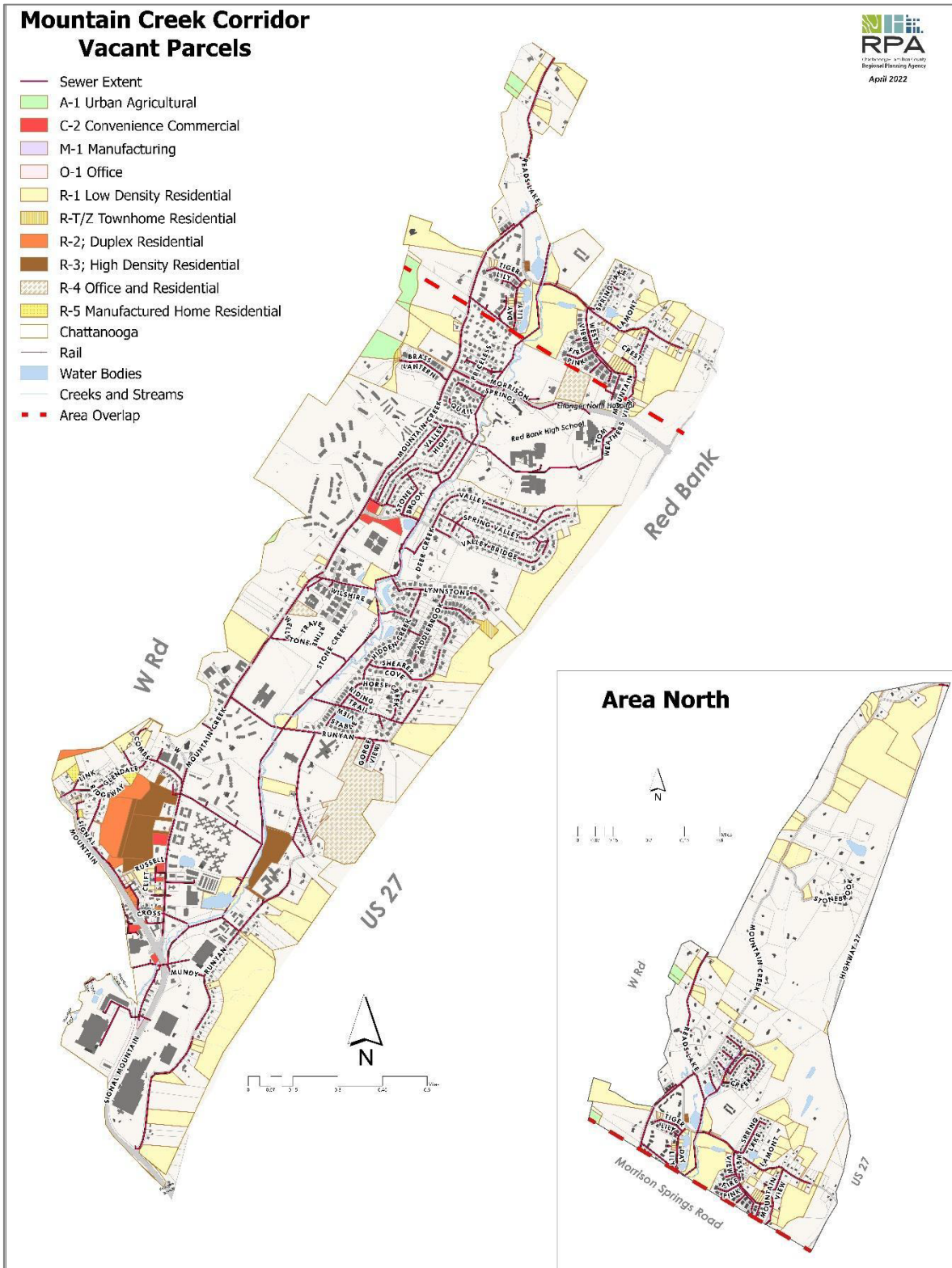


Figure 4-5



School Capacity

Another factor to consider for growth potential is the capacity of the local schools. All three public schools in this corridor have sufficient capacity for additional students.

<i>SCHOOL</i>	<i>CAPACITY</i>	<i>ENROLLMENT (approximate)</i>
<i>Red Bank Elementary</i>	702	600
<i>Red Bank Middle</i>	839	520
<i>Red Bank High</i>	1,147	820



5.0 Conclusions & Next Steps

5.1 New Housing Development & Density

While the analysis of zoning and vacant land described in this report indicates a potential to accommodate new housing development, other considerations must be considered:

- The Mountain Creek Corridor has limited opportunities for new through streets.
- While the capacity of Mountain Creek Road (south of Reads Lake Road) is adequate for the existing development, adding many more units could push the corridor toward capacity.
- North of Reads Lake Road, the lack of sewers, the topography, and the narrow winding road, limit the feasibility of higher density development.
- While more housing is needed in Chattanooga, the Mountain Creek area already has a significant share of apartment complexes. Fifty-seven percent of all housing units in the corridor are rental units. More apartment complexes could change the residential character of the area. While it is important to provide a robust and diverse range of housing options in an area, it is also important to support an appropriate balance between rental and owner-occupied housing. Therefore, ~~facilitating the construction of additional apartment complexes may not serve the best public interest~~ **additional rezoning for apartment complexes in the Mountain Creek Corridor is not recommended.**

For these reasons, the Regional Planning Agency recommends not exceeding the densities allowed by the current zoning in the Mountain Creek Corridor. It should be noted however, that some rezoning can maintain the existing density as described in the common examples below.

- 1) A property owner whose land is zoned R-1 Residential may request a permit for a Planned Unit Development (PUD) which might include some townhomes or apartments along with single-family units. The overall density of the development could be the same as if the land were developed with all single-family detached homes. This type of zoning can be beneficial as it allows the clustering of homes in a portion of the site, while leaving other areas with steep slopes or floodplains undeveloped.
- 2) A fairly new zoning/development tool is the Horizontal Property Regime (HPR) where the owners separately own portions of the property and then together own other portions of the property. Even though this type of development looks like single-family detached homes it currently requires R-3 zoning.
- 3) The Wellstone/Creekside development just north of the Red Bank Elementary School is an example of an attached residential development with a condominium ownership. This property is zoned R-1 with a special permit that allows this development form.
- 4) Another common rezoning request is for a different development form with less density. For instance, the rezoning request could be for a townhouse development with a density of four dwelling units per acre that would be less dense than what the existing R-1 zoning would already allow.

Property owners have the right to request a rezoning of their property at any time. Ultimately, decisions about the rezoning of property fall to the Chattanooga City Council. Therefore, residents should always monitor rezoning requests in their area and contact their Council representatives with any concerns.

A list of monthly rezoning requests can be found on the RPA's website under "Planning Commission Agenda Items."

<https://chcrpa.org/zoning-subdivisions/agendas-case-information/>



View of the Mountain Creek area from Signal Mountain

5.2 Interim Place Types

Place Types are a tool used by city planners to help people visualize the different forms that development can take, and to help residents describe the future they envision for their community. **Place Types are NOT zoning.** Place Types do not necessarily describe what exists today, but rather the desired vision of what a place is to become. **The elements described for each of the Place Types in this section are not standards; they merely serve as a description of what development should look like in each Place Type.**

Zoning, on the other hand, legally regulates what can be built on each piece of property. After a plan, with a Place Types map, has been adopted, zoning designations for that area should be studied to determine if they support and promote the desired vision. If they do not, the zoning for some properties may need to be changed.

Every place leaves an impression on the people who live there, work there, or visit. Think about popular vacation destinations. Those places typically have a “sense of place” that makes them memorable. They have a strong identity and character that is deeply felt by local residents and visitors. Placemaking is a way to shape the future of our communities by focusing on the look and feel of places—their form and character—instead of focusing only on land use.

What makes a place unique, memorable, and loved by the community? Often it’s a mix of natural, cultural, and man-made elements in the landscape. Some key elements that contribute to the Mountain Creek corridor’s sense of place include

the creek itself meandering through the valley, with the forested slopes of the Walden Plateau and U.S. 27 on the west and east. The mixture of apartment complexes, townhomes, and single-family homes also contribute to this sense of place.

Place Types do not necessarily describe what exists today, but rather the desired vision of what a place is to become.

To promote good placemaking, the RPA uses Place Types to influence the form and character of development across the entire county—from the most urban, to suburban, to the most rural places—and to guide different types of development to the best locations.

Current zoning categories, however, do not always align with the Place Type descriptions, therefore new citywide zones are needed to allow new or different development forms. Over the next year, the RPA will be working on a Zoning Code Update to create these new zones.

Additionally, beginning in 2023, the RPA will be undertaking 12 new Area Plans that will cover all of Hamilton County. The Hixson/Red Bank-Area 2 Plan—which will kick off in 2023—will include the Mountain Creek Corridor. Once adopted, it will become the guiding policy for new development. The recommendations and Place Types map included in this Corridor Study will inform that Area Plan.

In the interim, the RPA recommends the Place Types map included in this document (Figure 5-1) be used to inform any new rezoning requests in the Mountain Creek Corridor.

Detailed descriptions of each Place Type recommended for this corridor follow the Place Types map. Each Place Type description includes two pages. (NOTE: The Place Types listed in the following section are only those recommended for the Mountain Creek Corridor. Additional Place Types may be found in other Area Plans.)






COUNTRYSIDE RESIDENTIAL Place Type

General Description: Countryside Residential Place Types have a very rural character and consist primarily of single-family homes on large lots. A few scattered subdivisions with smaller lots may be found in the area. Countryside Residential may include open fields, woodlands, and streams or lakes, as well as accessory buildings, such as barns and greenhouses. Residences in this Place Type are typically on septic systems. Residences are generally further from key destinations than other residential Place Types therefore, a personal vehicle is needed to reach daily needs. Fixed-route transit is not feasible, and sidewalks are not likely, due to the low density of these areas.

PRIMARY

Primary Uses
(Predominant)

Single-family detached



SECONDARY

Secondary Uses
(Less Common)

Single-family attached, non-commercial farming activities, accessory buildings (barns, greenhouses, etc.) manufactured homes, accessory dwelling units (ADUs), short-term vacation rentals, event facilities, golf courses



Development Pattern: Densities can range from 0–2 dwelling units per acre depending on a variety of factors (such as infrastructure capacity or proximity to schools or parks).



Image Sources: Dover, Kohl and Partners, Town Planning, Opticos Design, Genesis Studios, Depiction Illustration

Date Created:
07/07/22

 See chrpa.org for the most current Place Type designations in each Area Plan.

ADVANCING GREAT PLACES



Example of an Accessory Dwelling Unit (ADU) built to the rear of a property. ▼



Typical street design found in the CR Place Type. ▼



The photos shown here are illustrative examples of primary uses typically found within the CR Place Type. Actual development varies depending on existing zoning regulations.



(CR) Place Type

Location & Block Pattern

- Countryside Residential developments are typically located in outer suburban or rural areas on Minor Collector streets.
- The road network is sparse, and streets are often winding and curvilinear.

Site & Buildings

- Single-family houses are situated on lots of one acre or more with a great degree of separation among buildings.
- Front setbacks are deep, typically 25 feet or more.
- Buildings typically range between 1–2-1/2 stories. Some agricultural-related accessory buildings (i.e. barns, silos) could exceed three stories.
- Houses are typically accessed from the street, with parking in the front, side or rear.

Transportation & Infrastructure

- Pedestrian and bike facilities, when they exist, are typically walking trails or regional bike routes.
- Due to the very low density of this Place Type, sewer service is typically not available.

chcrpa.org

SR

SUBURBAN RESIDENTIAL Place Type

General Description: The Suburban Residential Place Type has a predominantly low intensity, single-family detached, residential development pattern, especially within the same block. Some moderate density residential development, such as small lot houses or attached townhomes, may exist, but are typically located on a major street or near a transit route or school. Moderate intensity infill development on sites adjacent to existing residential uses should maintain the existing rhythm and feel of the street. Factors that play into this rhythm and feel include lot width, setbacks, and building massing and height. Open spaces are typically private (back yards), but greenways may provide connectivity.

PRIMARY

Primary Uses
(Predominant)

Single-family detached



SECONDARY

Secondary Uses
(Less Common)

Townhomes (with limited massing of up to 4 units per building), multi-family 2-4 units per building, accessory dwelling units (ADUs), short-term vacation rentals, golf courses



Development Pattern: Densities can range from 3–10 dwelling units per acre, depending on a variety of factors (such as infrastructure capacity or proximity to schools or parks).

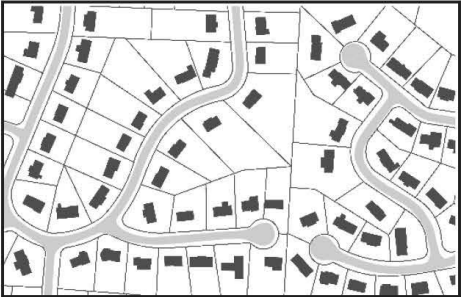


Image Sources: Dover, Kohl and Partners, Town Planning, Opticos Design, Genesis Studios, Depiction Illustration

Date Created:
07/07/22

⚠ See chcrpa.org for the most current Place Type designations in each Area Plan.

ADVANCING GREAT PLACES

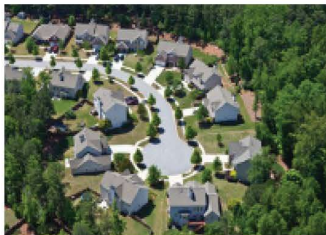


Chattanooga-Hamilton County
Regional Planning Agency

Example of an Accessory Dwelling Unit (ADU) built to the rear of a property. ▼



Typical street design found in the SR Place Type. ▼



The photos shown here are illustrative examples of primary uses typically found within the SR Place Type. Actual development varies depending on existing zoning regulations.



(SR) Place Type

Location & Block Pattern

- Large Suburban Residential subdivisions are accessed from a Major Collector street.
- While currently the predominant pattern is long blocks, with dead-end cul-de-sacs and a single point of access from a subdivision to a major street, new development provides for future connections to adjacent streets and properties to help reduce traffic congestion on the major roads.

Site & Buildings

- Buildings typically have moderate setbacks of 10 to 25 feet.
- Parking may be located to the front, side or rear, but is typically accessed from the front.
- Driveways that directly access collector or arterial streets are minimized to reduce potential traffic conflicts.

Transportation & Infrastructure

- Residences in this Place Type are generally further from key destinations than those in other Place Types therefore, a personal vehicle is needed to reach daily needs and employment.
- Fixed-route transit service is typically not feasible due to the low density of this Place Type.
- Pedestrian and bike connections may be present if the residential development is adjacent to a commercial center, school, or major job site.
- Residences in this Place Type are on sewer systems, but some older neighborhoods may have septic systems.

chcrpa.org

MR

MIXED RESIDENTIAL Place Type

General Description: The Mixed Residential Place Type is intended to provide a wide range of housing options for residents at various stages of life, and walkable destinations in close proximity. Due to their intensity, Mixed Residential developments are located along major streets, or within walking distance (1/4-mile) of a transit route. In contrast to the other residential Place Types, the Mixed Residential Place Type includes moderate to higher intensity housing (multi-story apartment buildings, condos, etc.) at densities that support transit, and other neighborhood-serving businesses (restaurants, pubs, etc.).

PRIMARY

Primary Uses
(Predominant)

Multi-family 5–12 units per building, cottage courts, townhomes



SECONDARY

Secondary Uses
(Less Common)

Multi-family of over 12 units per buildings (on an "A" street only), small retail shops, bed & breakfasts, short-term vacation rentals, live/work, dormitories, boarding houses, accessory dwelling units (ADUs), single-family narrow lot houses



Development Pattern: Densities can range from 12–20+ dwelling units per acre, depending on a variety of factors (such as infrastructure capacity or proximity to schools or parks).



Image Sources: Dover, Kohl and Partners, Town Planning, Opticos Design, Genesis Studios, Depiction Illustration

Date Created:
07/07/22

⚠ See chrpa.org for the most current Place Type designations in each Area Plan.

ADVANCING GREAT PLACES



Chattanooga-Hamilton County
Regional Planning Agency

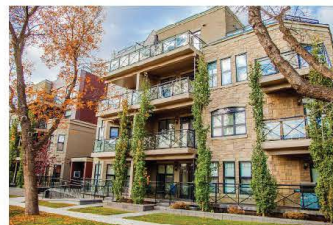
Example of a 6-unit apartment building designed to look like a single-family home. ▼



Typical street design found in the MR Place Type. ▼



The photos shown here are illustrative examples of primary uses typically found within the MR Place Type. Actual development varies depending on existing zoning regulations.



(MR) Place Type

Location & Block Pattern

- Mixed Residential developments are typically located along, or within walking distance of "A" streets.
- Lot sizes vary within blocks.
- Developments on larger sites (typically over four acres) have a connected internal street network.

Site & Buildings

- Building setbacks are shallow, typically 15 feet or less.
- Taller multi-family buildings are located along "A" streets, with shorter buildings on local streets to provide a transition to any less intense residential uses.
- Parking is generally located to the rear with access from an alley or secondary street.

Transportation & Infrastructure

- Residences in this Place Type are generally closer to key destinations than those in the Suburban Residential Place Type, therefore, a variety of transportation modes (auto, bike, pedestrian, transit) provide access to daily needs, employment and recreation.
- Average densities of 12–20 dwelling units per acre, or more, support frequent transit service.
- This Place Type is served by sewer systems.

chcrpa.org



SUBURBAN CORRIDOR Place Type

General Description: Suburban Corridors have a linear configuration because they are located along major commercial streets, however they differ from Mixed-use and Urban Corridors in that the development along them tends to be more spread out, and they are not typically served by frequent transit. Businesses along Suburban Corridors serve a large geographic area and are primarily accessed by car. Buildings tend to be single-story and house a single use with deep setbacks from the street. Some have a horizontal mix of uses within a larger site. The types of businesses found along Suburban Corridors range from stand-alone restaurants or stores, to “strip” shopping centers with multiple tenants, to regional malls, medical centers, and multi-story office buildings and hotels.

PRIMARY

Primary Uses (Predominant)

Multi-family, offices, restaurants, personal services, medical facilities, auto-oriented services, lodging, small artisanal industry (such as studios, work spaces, breweries, and other low impact production)



SECONDARY

Secondary Uses (Less Common)

Retail, self-storage, outdoor storage, recreation and entertainment (such as bowling, mini golf, conference centers, theaters), short-term vacation rentals



Development Pattern: Densities can range from 7–20 dwellings per acre (20+ if transit exists), depending on a variety of factors (such as infrastructure capacity or proximity to schools or parks).



Image Sources: Dover, Kohl and Partners, Town Planning, Opticos Design, Genesis Studios, Depiction Illustration

Date Created:
07/20/22

See chcrpa.org for the most current Place Type designations in each Area Plan.

ADVANCING GREAT PLACES



Chattanooga-Hamilton County
Regional Planning Agency

Example of an apartment complex that may be found along a Suburban Corridor. ▼



Typical street design found in the SC Place Type. ▼



The photos shown here are illustrative examples of primary uses typically found within the SC Place Type. Actual development varies depending on existing zoning regulations.



(SC) Place Type

Location & Block Pattern

- Suburban Corridors are located on arterial streets.
- Block lengths are typically long, ranging from 400–1,300 feet.

Site & Buildings

- Commercial development varies greatly, from 1–3 acres, to 10–50 shopping centers, to malls & regional centers of 50+ acres.
- Building coverage on the lot is typically low (10–60%).
- Buildings typically have deep setbacks to accommodate parking in the front and often include “outparcels”.
- Building heights are typically 1 or 2 stories. Hotels, hospitals, apartments and office buildings may exceed that height, but still step down to within one story of adjacent residential uses.
- Curb cuts are numerous. As new development occurs, curb cuts are consolidated to alleviate traffic congestion and reduce conflicts with pedestrians.
- Parking locations vary (front, side, rear). Internal drives connect to adjacent properties providing access to shared parking.
- Parking lots are screened with trees and plantings. In contrast to UC or MC, Suburban Corridors typically have deeper “street yards” of 8–10 feet or more with landscaping.
- Pedestrian walkways provide access from the parking lots to the buildings, and the street, especially where transit exists.

Transportation & Infrastructure

- Streets are typically 3–5 lanes with no on-street parking.
- Only the most intensely developed sections of SC residential developments have densities that support transit.
- Medians and pedestrian refuges provide safe street crossing opportunities.

chcrpa.org



NEIGHBORHOOD CENTER Place Type

General Description: Typically found in suburban locations, Neighborhood Centers are shopping centers of 5–15 acres that provide goods and services primarily to the surrounding neighborhoods. Neighborhood Centers differs from the SC Place Type as they are not part of a continuous “strip” of commercial uses along a corridor, but rather are typically limited to a single quadrant of an intersection and are surrounded by residential development. They usually have large, shared parking lots in the front with a few outparcel buildings that face the street. Some Neighborhood Centers include smaller commercial properties on the other corners of the intersection. Neighborhood Centers differ from Town or Village Centers in that they often have one large building that houses multiple stores, deeper building setbacks, an emphasis on vehicle access, and limited civic services. Neighborhood Centers often include an anchor business, such as a grocery store or drugstore. Neighborhood Centers may be redeveloped as VC or TC over time as they become more walkable with a more urban form.

PRIMARY

Primary Uses
(Predominant)

Grocery stores, retail and restaurants, offices, personal services, small artisanal industries (such as studios, work spaces, bakeries, breweries, or other low impact production)



SECONDARY

Secondary Uses
(Less Common)

Auto service/repair, civic services, single-family attached townhomes, multi-family, short-term vacation rentals



Development Pattern: Densities can range from 1–10 units per acre, depending on a variety of factors (such as infrastructure capacity or proximity to schools or parks).

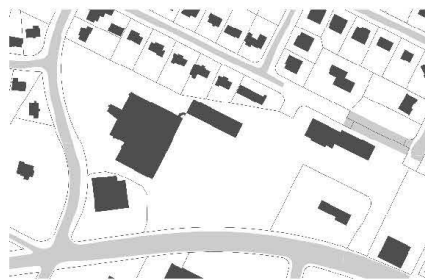


Image Sources: Dover, Kohl and Partners, Town Planning, Opticos Design, Genesis Studios, Depiction Illustration

Date Created:
07/20/22

See chcrpa.org for the most current Place Type designations in each Area Plan.

ADVANCING GREAT PLACES

NC often features businesses that depend on higher traffic volumes, such as restaurants and service providers, more so than pedestrian access. ▼

Typical interior street design found in the NC Place Type. ▼



The photos shown here are illustrative examples of primary uses typically found within the NC Place Type. Actual development varies depending on existing zoning regulations.



Chattanooga-Hamilton County
Regional Planning Agency

(NC) Place Type

Location & Block Pattern

- Neighborhood Centers are typically located on arterial streets.
- Buildings are organized around a single intersection.

Site & Buildings

- Buildings heights are typically one or two stories.
- Building setbacks are deep, typically 70–600 feet for the anchor store, but outparcel buildings may front directly on a street or sidewalk.
- The predominant size of stores is moderate (1,500–6,000 SF) with a larger anchor store of 20,000–60,000 SF.
- Parking lots are screened from the street with trees and understory plantings.
- Pedestrian walkways provide access within the site — from the parking lots to the buildings — and to sidewalks along the street.

Transportation & Infrastructure

- Curb cuts are minimized to alleviate traffic congestion and to reduce conflicts with pedestrians; however, properties that front multiple streets have access on each street.
- Due to their location in low-density suburban areas, Neighborhood Centers do not typically have transit service, but pedestrian and bike connections may exist when adjacent to schools, parks, or other community destinations.

chcrpa.org



VILLAGE CENTER Place Type

General Description: Larger than Neighborhood Nodes, but smaller than Town Centers, the Village Center (generally 2–10 acres) is a pedestrian-oriented cluster of medium footprint buildings, with a mixture of commercial and residential uses. Due to their intensity, Village Centers are typically located along transit routes. Village Centers primarily serve local residents. Village Centers are often organized around a central public square or park. They may strongly correlate with community identity and history, and often include historic buildings and civic uses. Village Centers may, over time, grow into Town Centers.

PRIMARY

Primary Uses
(Predominant)

Civic institutions, public square or park, retail, restaurants, offices, grocery stores, personal services, lodging, upper floor apartments



SECONDARY

Secondary Uses
(Less Common)

Small artisanal industries (such as studios, work spaces, bakeries, breweries, or other low impact production), multi-family, single-family attached (townhomes), short-term vacation rentals



Development Pattern: Densities can range from 24–60 units per acre, depending on a variety of factors (such as infrastructure capacity or proximity to schools or parks).



Image Sources: Dover, Kohl and Partners, Town Planning, Opticos Design, Genesis Studios, Depiction Illustration

⚠ See chrpa.org for the most current Place Type designations in each Area Plan.

Date Created:
07/20/22

ADVANCING GREAT PLACES

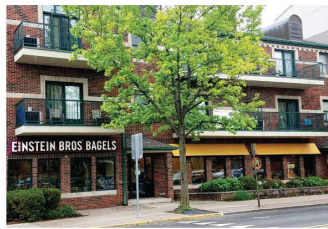
Sidewalks and outdoor dining animate the public realm while also creating a destination and center of activity. ▼



Typical street design found in the VC Place Type. ▼



The photos shown here are illustrative examples of primary uses typically found within the VC Place Type. Actual development varies depending on existing zoning regulations.



(VC) Place Type

Location & Block Pattern

- Village Centers are typically located on "A" streets.
- VC are compact with short, walkable block lengths, and street and sidewalk connections to surrounding neighborhoods.

Site & Buildings

- Lot sizes may vary, but lot widths are based on 25-foot increments to accommodate multiple storefronts and generate pedestrian activity.
- Buildings range from 1–4 stories, but step down in height when adjacent to residential uses. If a VC is located along a designated Corridor, heights are comparable with the Corridor Place Type.
- Buildings front directly onto the sidewalks and occupy most of the street frontage.
- Residential uses over retail or offices are common.
- Parking is located on the street, or to the rear and accessed from alleys or secondary streets. It is shared among multiple businesses to minimize the number of surface lots. Where fronting a street, parking is screened with landscaping and understory plantings.
- Buildings fronting primary streets include pedestrian entrances, with transparency at the ground floor, and uses that provide interest for pedestrians.
- Sidewalks are wide, leaving adequate space for pedestrian lighting, street trees, benches, and bike racks.

Transportation & Infrastructure

- VC prioritize walking, biking and transit over auto use.
- Densities of 24 dwelling units per acre, or more, support higher frequency transit.
- Curb cuts along primary streets are minimized to reduce potential conflicts with pedestrians.

chcrpa.org



NEIGHBORHOOD NODE Place Type

General Description: Generally a total of two acres or less, Neighborhood Nodes are smaller than Village or Town Centers. Smaller footprint buildings frame a single intersection or extend a short distance from the intersection. This small cluster of businesses provides services and goods, such as hardware stores, small convenience stores, restaurants and other neighborhood-serving commercial uses, to the immediate surrounding community in urban or suburban areas. Residential uses over retail or office are common.

PRIMARY

Primary Uses (Predominant)

Small retail and restaurants, convenience or hardware stores, personal services, offices, farmers' markets



SECONDARY

Secondary Uses (Less Common)

Small artisanal industries (such as studios, work spaces, bakeries, breweries, or other low impact production), multi-family, short-term vacation rentals



Development Pattern: Densities can range from 10–24 units per acre, depending on a variety of factors (such as infrastructure capacity or proximity to schools or parks).



Image Sources: Dover, Kohl and Partners, Town Planning, Opticos Design, Genesis Studios, Depiction Illustration

Date Created:
07/20/22

See chcrpa.org for the most current Place Type designations in each Area Plan.

ADVANCING GREAT PLACES



Example of a traditional cornerstore that is focused on customers within walking distance. ▼



Typical street design found in the NN Place Type. ▼



The photos shown here are illustrative examples of primary uses typically found within the NN Place Type. Actual development varies depending on existing zoning regulations.



(NN) Place Type

Location & Block Pattern

- The existing block and lot pattern of the surrounding residential area is maintained within the Neighborhood Node.
- The entire Neighborhood Node is typically two acres or less.

Site & Buildings

- Lot sizes range from 5,000–10,000 square feet.
- Buildings are one or two stories (unless they are located along a designated Corridor Place Type, in which case building heights are often taller and comparable with that Corridor Place Type).
- Buildings address the street with shallow setbacks of 15 feet or less and minimal spacing between buildings to promote pedestrian activity.
- Shared parking is located to the side or rear, or on the street. Parking lots are screened from the street with trees and understory plantings.

Transportation & Infrastructure

- Pedestrian and bike connections are present, especially when near schools, parks, or job sites.
- Curb cuts are limited to avoid conflicts with pedestrian traffic.
- Transit service exists when located on "A" streets or adjacent to other Place Types served by transit.
- This Place Type is served by sewer systems.

chrpa.org

AG

AGRICULTURAL Place Type

General Description: Agricultural Place Types are for the production of crops, the raising of livestock, forestry uses and processes, agricultural service businesses and supporting residences, such as a farmhouse. They are typically large properties (5+ acres) located in rural areas, but smaller ones may be found in suburban, or even urban areas.

PRIMARY

Primary Uses (Predominant)

Agriculture fields and grazing pastures, equestrian facilities, accessory agriculture-related structures, forestry processes, and agriculture-related businesses (such as boarding stables, riding academies), farm stands, estate homes, single-wide manufactured homes



SECONDARY

Secondary Uses (Less Common)

Non-noxious and non-nuisance light industrial, accessory dwelling units (ADUs)



Development Pattern: Densities can range from 0–1 dwelling units per acre, depending on a variety of factors (such as infrastructure capacity or proximity to schools or parks).

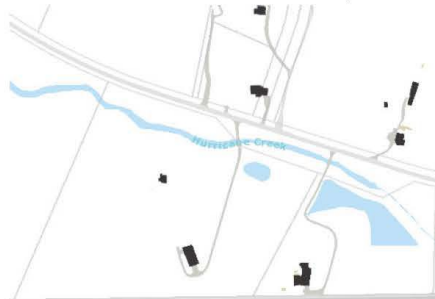


Image Sources: Dover, Kohl and Partners, Town Planning, Opticos Design, Genesis Studios, Depiction Illustration

Date Created:
07/20/22



See chcrpa.org for the most current Place Type designations in each Area Plan.

ADVANCING GREAT PLACES

Typically AG uses range from estate homes, to dairy production, to vineyards, as well as farming, with fields and forested areas often set aside as open space. ▼



The photos shown here are illustrative examples of primary uses typically found within the AG Place Type. Actual development varies depending on existing zoning regulations.



Typical street design found in the AG Place Type. ▼



Chattanooga-Hamilton County
Regional Planning Agency

(AG) Place Type

Location & Block Pattern

- Agricultural Place Types are usually located on local streets, but may be located on any street type.
- Because Agricultural Place Types are often large properties with limited streets, typical block patterns are absent.

Site & Buildings

- Lots are typically five acres or more in size and are characterized by an abundance of open space and a great degree of separation between buildings.
- Buildings are typically 1–2 stories, but some accessory structures (i.e. barns, silos) can exceed three stories.

Transportation & Infrastructure

- Streets are generally paved rural roads without curbs and gutters.
- Sidewalks and transit service are not present.

chcrpa.org

CA

CAMPUS Place Type

General Description: Campus Place Types are typically characterized by one major activity such as educational, office, industrial, medical, or religious. Campuses are based on a master plan that incorporates buildings, open spaces, streets, pedestrian networks, and parking in a unified manner. Campuses have clearly defined edges — often delineated with gateway structures and landscape — that distinguish them from adjacent Place Types. Residential buildings and small convenience services often support the predominant use. Campuses function as major employment and activity centers and are often served by public or private transit.

PRIMARY

**Primary Uses
(Predominant)**

Institutions (such as academic, medical, religious or research facilities), offices, clubhouses/meeting halls, athletic facilities, non-noxious/non-noisance manufacturing and industrial, open space, multi-family (residence halls and dormitories)



SECONDARY

**Secondary Uses
(Less Common)**

Retail and food services, single-family detached & attached, accessory dwelling units (ADUs)



Development Pattern: Densities can range from 6–18 dwelling units per acre, depending on a variety of factors (such as infrastructure capacity or proximity to schools or parks).

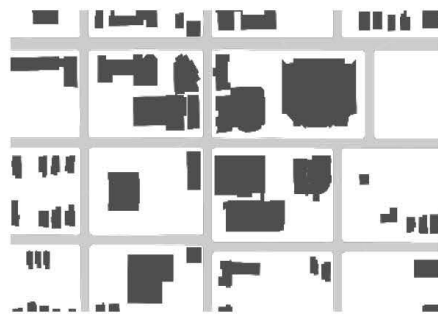


Image Sources: Dover, Kohl and Partners, Town Planning, Opticos Design, Genesis Studios, Depiction Illustration

Date Created:
7/20/22

 See chrcpa.org for the most current Place Type designations in each Area Plan.

ADVANCING GREAT PLACES

Whether a school or corporate headquarters, a campus often features green space, lawns and walkways. ▼



Typical pedestrian walkways found in the CA Place Type. ▼



The photos shown here are illustrative examples of primary uses typically found within the CA Place Type. Actual development varies depending on existing zoning regulations.



(CA) Place Type

Location & Block Pattern

- Campuses are 10 or more acres and are typically accessed from major arterial streets.
- Urban campus settings are organized by a connected street grid, but may also include pedestrian-only corridors for internal circulation.

Site & Buildings

- Building heights range from 1–5 stories. Buildings on the edge of a Campus step down in height when adjacent to residential uses.
- While setbacks vary, buildings are oriented to frame the streets, pedestrian paths, and open spaces.
- Parking is typically internal to the campus. Where parking abuts a residential neighborhood, or fronts a street, it is screened.

Transportation & Infrastructure

- Campuses incorporate multi-modal facilities for bicyclists, pedestrians, and transit users.

chcrpa.org

IN

INDUSTRIAL Place Type

General Description: The Industrial Place Type supports a variety of manufacturing uses. Unlike the Industrial Hybrid Place Type, the Industrial Place Type includes both non-noxious operations (no hazardous materials or pollution) such as warehousing, industrial parks, and light manufacturing, and noxious industries (heavy industrial production). The latter are not located near residential areas. The size of lots (2+ acres) and buildings are often larger than those in the Industrial Hybrid Place Type.

PRIMARY	<p>Primary Uses (Predominant)</p> <p>Light manufacturing and industrial facilities, assembly, offices, distribution, warehousing, and wholesaling</p>	
SECONDARY	<p>Secondary Uses (Less Common)</p> <p>Heavy manufacturing and industrial facilities, retail specifically related to the primary use, workforce lodging</p>	

Development Pattern: Densities are not applicable since residential is typically not found in IN.

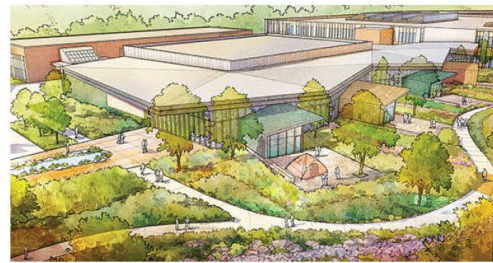
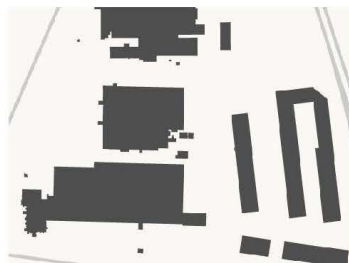


Image Sources: Dover, Kohl and Partners, Town Planning, Opticos Design, Genesis Studios, Depiction Illustration

 See chcrpa.org for the most current Place Type designations in each Area Plan.

Date Created:
7/20/22

ADVANCING GREAT PLACES

This clean industry features greening elements designed to enhance the visitor's experience and foster employee wellness.



Vehicular access in the IN Place Type typically accommodates loading docks or warehousing.



The photos shown here are illustrative examples of primary uses typically found within the IN Place Type. Actual development varies depending on existing zoning regulations.



**Chattanooga-Hamilton County
Regional Planning Agency**

(IN) Place Type

Location & Block Pattern

- Due to their potential for adverse traffic impacts, Industrial Place Types are not located in residential areas or on local streets.
- Because many Industrial facilities are very large, block patterns vary, although large sites with multiple buildings have an internal network of streets.

Site & Buildings

- Lot sizes and building setbacks vary greatly.
- Industrial Place Types are generally buffered from surrounding development by transitional uses or landscaped areas that screen the view of buildings, loading docks, or outdoor storage from adjacent properties. Additional mitigating elements are incorporated when activities may have significant adverse impacts, such as noxious odors, loud noises, and heavy truck traffic, on nearby uses.
- Parking locations vary, however in urban locations, parking does not directly front the primary street.

Transportation & Infrastructure

- Industrial Place Types are often located close to major transportation corridors such as rail, shipping ports, highways, and airports.
- Large industrial facilities may include internal transit circulators and bike routes.

chcrpa.org



INDUSTRIAL HYBRID Place Type

General Description: Industrial Hybrid Place Types are live-work districts where housing and workplaces are located in close proximity to each other, providing residents with convenient access to employment. They typically include a mix of light manufacturing, assembly, and contractor businesses, along with multi-family residential and commercial uses. Older industrial structures that have been adaptively reused for new purposes are frequently found here. Industrial facilities in this Place Type are non-noxious (no hazardous materials or pollution), and non-nuisance (no odors, excessive light, or heavy truck traffic). The Industrial Hybrid Place Type has smaller buildings than the Industrial Place Type. Parks, plazas, and neighborhood-serving retail enhance the character and livability of the area.

PRIMARY

Primary Uses (Predominant))

Non-noxious, non-nuisance light manufacturing, assembly, distribution, small artisanal industry (such as studios, work spaces, bakeries, breweries, or other low impact production), contractor's offices, live/work, multi-family residential



SECONDARY

Secondary Uses (Less Common)

Retail, offices, restaurants, short-term vacation rentals, accessory dwelling units (ADUs)



Development Pattern: Densities can range from 12–24 dwelling units per acre, depending on a variety of factors (such as infrastructure capacity or proximity to schools or parks).

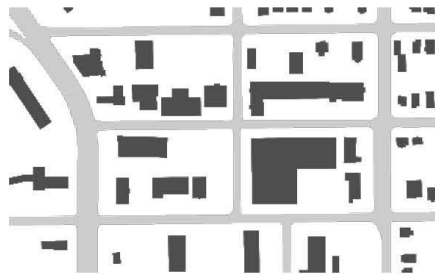


Image Sources: Dover, Kohl and Partners, Town Planning, Opticos Design, Genesis Studios, Depiction Illustration

Date Created:
07/20/22

See chcrpa.org for the most current Place Type designations in each Area Plan.

ADVANCING GREAT PLACES



This rehabilitation of an old warehouse provides workshops for local craftsmen as well as studio spaces for artists. ▼



Typical street design found in the IH Place Type. ▼



The photos shown here are illustrative examples of primary uses typically found within the IH Place Type. Actual development varies depending on existing zoning regulations.



(IH) Place Type

Location & Block Pattern

- In contrast to the Industrial Place Type, Industrial Hybrid Place Types can be located on local streets due to their smaller size buildings and lower intensity uses.
- Industrial Hybrid areas are walkable due to smaller buildings, short blocks, and a well-connected street network.

Site & Buildings

- Building heights range from 1–4 stories, but step down to within one story of adjacent residential uses.
- In urban locations, buildings have shallow setbacks (15 feet or less.) Buildings with deeper setbacks include a park, plaza or other landscaped space to maintain an attractive pedestrian environment.
- Loading docks and outdoor storage are located to the rear of buildings and screened from abutting residential uses.
- Parking is located to the side or rear and is screened from the street and from abutting residential uses.

Transportation & Infrastructure

- Depending on the location, transit service may be nearby.
- Bicycle and pedestrian connections provide access from homes to workplace, schools and parks.

chcrpa.org

PR


PRESERVE Place Type

General Description: Preserves are typically large expanses of forest, floodplains and other natural resources, as well as public parks and recreation areas that have been set aside as places where general development is not allowed. Preserves may also include privately-owned land that is permanently protected by conservation easements and remains in a largely undeveloped state. Some Preserves may be used for passive recreation, while others are largely off limits to human use due to sensitive natural resources or their remote location. Development and land disturbance within the Preserve is minimized, to protect natural resources, and limited to cultural or educational uses.

PRIMARY

Primary Uses
(Predominant)

Undisturbed open space, visitors' centers/nature centers, public parks, passive recreation, trails, cemeteries, heritage educational facilities



SECONDARY

Secondary Uses
(Less Common)

Active recreation fields, accessory structures, such as private concessions, outdoor firing ranges, equipment storage



Development Pattern: Density range is not applicable since residential is typically not found in PR.

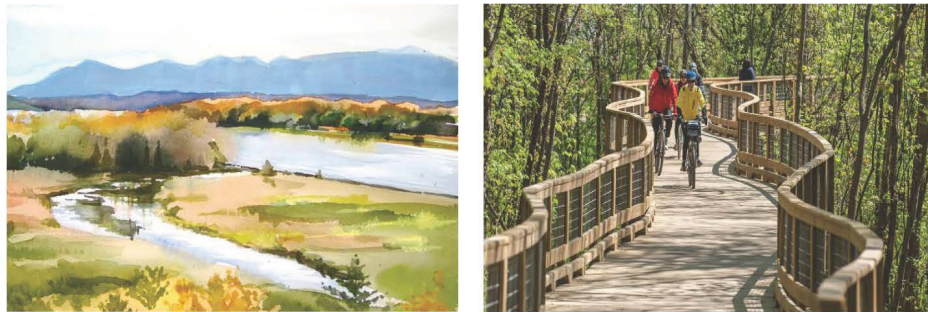


Image Sources: Dover, Kohl and Partners, Town Planning, Opticos Design, Genesis Studios, Depiction Illustration

Date Created:
07/20/22

 See chrpa.org for the most current Place Type designations in each Area Plan.

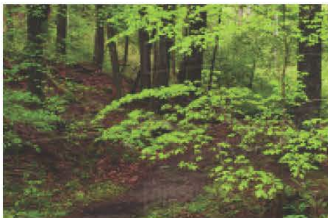
ADVANCING GREAT PLACES



Examples of multi-use trails often found in Preserve areas. ▼



The photos shown here are illustrative examples of primary uses typically found within the PR Place Type. Actual development varies depending on existing zoning regulations.



PR may feature historical sites such as the National Park Service memorial on Orchard Knob that is located within an urban neighborhood. ▼



(PR) Place Type

Location & Block Pattern

- Preserves may be located on any street type.
- Preserves are primarily natural areas with limited streets.

Site & Buildings

- Building coverage is very low and is limited to recreational support structures (restrooms, visitor centers) or single-family homes.
- Parking, access, and paving are sited to minimize disturbance of the site's natural resources (waterways, topography, trees, and culturally significant features).

Transportation & Infrastructure

- Internal streets are typically parkways or narrow lanes.
- Bike and pedestrian paths are incorporated to promote multi-modal access, where consistent with the protection of a site's natural resources. Transit opportunities vary and may include internal shuttle service.

chcrpa.org



NATURAL RESOURCES Overlay

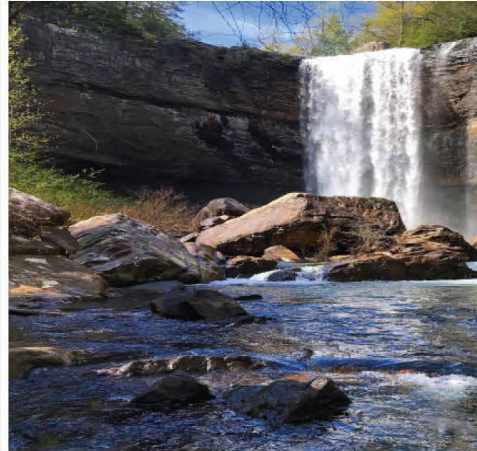
General Description: The Natural Resources Overlay is not a Place Type in and of itself. It is an Overlay on top of the underlying Place Type that identifies areas considered sensitive due to the presence of steep slopes, floodplains or wetlands. Unlike Preserves, sites within the Natural Resource Overlay are not protected from development by law. The purpose of the Natural Resources Overlay is to identify these sensitive areas so that they are given consideration for protection or incorporated as amenities within new developments. Some of these sites are already developed. This designation does not mean development cannot expand in these areas; it merely identifies the location of floodplains, wetlands, and steep slopes.

OVERLAY

Ultimately, the underlying zoning of a property determines what can be built within a Natural Resources Overlay. When considering rezoning requests, this overlay supports concepts that balance development with protection of the environmentally sensitive resources.

Primary Uses (Predominant)

Uses are defined by the underlying Place Type.



POTENTIAL IMPACTS



The impacts resulting from a heavy rain event can be severe. Depending on the amount of impervious surfaces, lack of vegetation or underlying geology, flooding, erosion and soil subsidence may occur. Low Impact Development (LID's) and other mitigation techniques may be needed when building in these areas.

Development Pattern: Densities are reflected by the underlying Place Type, but are adjusted based on the presence of sensitive resources.



Image Sources: Dover, Kohl and Partners, Town Planning, Opticos Design, Genesis Studios, Depiction Illustration

 See chcpa.org for the most current Place Type designations in each Area Plan.

Date Created:
07/20/22

ADVANCING GREAT PLACES

Low lying wetlands are often used for farming or as parks since they only provide limited use due to seasonal flooding issues. ▼



The NR Overlay hatch indicates a flood plain, steep slope or other sensitive areas. ▼



The photos shown here are illustrative examples of the resources typically found within the NR Overlay. Actual development varies depending on existing zoning regulations.



**Chattanooga-Hamilton County
Regional Planning Agency**

(NR) Place Type

A variety of legal tools are available to protect natural resources, including conservation easements, land trusts, and park designations. Conservation-based subdivisions and Planned Unit Developments (PUDs) are recommended zoning tools for these areas because they allow the clustering of development in portions of the property to protect the sensitive natural resources in other locations.

If sites within a Natural Resources Overlay become legally protected through conservation easements or government purchases, they are then re-designated as Preserves. Ultimately, the underlying zoning of a property determines what can be built within a Natural Resources Overlay. When considering rezoning requests, this overlay supports concepts that balance development with protection of the environmentally sensitive resources. Densities are reflected by the underlying Place Type, but are adjusted based on the presence of sensitive resources.

Site & Buildings

- Land under the Natural Resources Overlay has the same transportation and access conditions as its underlying Place Type, however because sensitive resources are present, parking, access, and paving are sited to minimize disturbance of these resources (waterways, topography, culturally significant features).

Transportation & Infrastructure

- Bike and pedestrian paths are often incorporated to promote multi-modal access, where consistent with the protection of a site's natural resources.

chcrpa.org

5.3 Summary of Recommendations Table

The following table summarizes the recommendations in this report.

Most of these recommendations were presented during the February 6, 2023 public Open House event, which was attended by approximately 50 people. Each person was given an opportunity to add comments to the table, and to vote on the recommendations they considered most important. The two columns on the right include the number of votes each recommendation received and the comments provided. Some recommendations received no additional comments from the community.

TOPIC	RECOMMENDATION	LEAD AGENCY	VOTES	COMMUNITY COMMENTS
Natural Resources	Review floodplain and steep slope protections during the Area 2 planning process.	RPA, Federal Emergency Management Agency (FEMA)	19	<i>There is almost nothing to "review". Chattanooga has very few ordinances compared to other cities in our region that address rules for steep slopes. John Bridger recommended a review be performed to baseline our ordinances which was completed in 2020. Chattanooga needs ordinances to protect our environmental character and features vs. clear cutting and destruction of green space.</i>
	Investigate the extent to which low-impact development can mitigate stormwater runoff in areas adjacent to the floodplain.	RPA	6	<i>Research larger scale infrastructure projects to mitigate the large amount of water runoff coming off of Signal Mountain. Divert before it floods Mountain Creek Rd & homes.</i> <i>Runoff across from the school park - low point - holds water.</i>
	Cluster future development on slopes to areas where the grades are less than 25%.	RPA	1	

TOPIC	RECOMMENDATION	LEAD AGENCY	VOTES	COMMUNITY COMMENTS
Zoning	Address parking requirements & promote walkable, mixed-use development during the City Zoning code Update.	RPA	2	
	Do not exceed the densities allowed by current zoning in the corridor.	RPA	39	<p><i>Is there a minimum # of acres required for zone changes? This could rearrange "spot zoning" in Chattanooga. No, rezoning requests have no minimum acreage requirement.</i></p> <p><i>Are there minimum spacing requirements for access management on Mt Creek Rd? Yes, all streets have standards for the spacing of intersections and driveways.</i></p> <p><i>We are so disappointed that this is being re-visited as to putting more developments on Mt Creek. Please do not rezone for suburban or mixed residential, enough!</i></p>
	Use the Interim Place Types Map (in the report) to inform rezoning recommendations.	RPA		<i>Please change the zoning of the former Quarry Golf Course from mixed residential to match the surrounding area of suburban residential.</i>
	Limit any additional commercial zoning to the area around the intersection of Mountain Creek Road and Signal Mountain Road.	RPA	9	

TOPIC	RECOMMENDATION	LEAD AGENCY	VOTES	COMMUNITY COMMENTS
Parks & Recreation	Explore the potential for new parks and greenways in the Mountain Creek Corridor during the Area 2 planning process and in the Chattanooga Parks & Outdoors Plan.	Chattanooga Parks & Outdoors Dept, Trust for Public Land	26	<p><i>Rare Boulders – “Apartment boulders”</i></p> <p><i>Mt Creek is a “go-between” community of Signal Mt & Red Bank with zero public green space. As a mother of 5 children who frequents this corridor, a usable flat green space for children to play would be useful and much appreciated. We have always enjoyed watching geese at the lake & fishing & exploring. I hope a park to maintain the green space for public use is the highest priority.</i></p> <p><i>Need promised Pratt park</i></p>
Traffic	Consider turn lane requirements as part of new development projects.	City Transportation Dept	21	<p><i>Lower and enforce speed limits on Morrison Springs Road.</i></p> <p><i>Please do not lower speed limits.</i></p> <p><i>Retrofit old developments to include turn lanes.</i></p> <p><i>1.5 accidents per year on Mt Creek Rd is very under the true # of accidents. There are regularly accidents at the little traffic circle. The guardrail between Southwood Drive & Ascension Living needs to be replaced again due to damage from accidents. See Traffic Crashes in Section 4.3.</i></p> <p><i>Check the number of accidents - reference police dept. report - 6 months 2019 – 48. See Traffic Crashes in Section 4.3.</i></p>
	Study the need for traffic signals with any future development projects of significant size.	City Transportation Dept	6	<p><i>Add sidewalks on roads: Reeds Lake Rd, West View Rd, Mt View Rd for pedestrian safety.</i></p> <p><i>Add sidewalks on Mt Creek Rd from Morrison Springs Rd north.</i></p>

TOPIC	RECOMMENDATION	LEAD AGENCY	VOTES	COMMUNITY COMMENTS
	Trim vegetation that blocks the driver’s sightline at intersections.	Property owners	6	<p><i>Vegetation needs maintenance at areas other than at intersections.</i></p> <p><i>Should be a city responsibility; city has greater equipment resources than homeowners.</i></p> <p><i>The city-owned sidewalk on the south side of Morrison Springs Rd— from Mt Creek Rd to where it crosses Mt Creek—is in need of regular maintenance and needs to be cleared to its original width. There is a lot of foot traffic by adults and school children, but the sidewalk is seldom maintained.</i></p>
	Continue to study traffic issues as part of the Hixson/Red Bank Area 2 Plan, which will kick off in 2023.	Public Works Department, RPA		
	During the Area 2 (Hixson/Red Bank) planning process, coordinate with the Safe Streets For All (SS4A) grant to improve walking and biking safety to public schools. https://www.transportation.gov/grants/SS4A	RPA		

The RPA will be starting Area Plans that will cover Chattanooga and the unincorporated portions of Hamilton County in 2023. The Hixson/Red Bank (Area 2) Plan will encompass the entirety of the Mountain Creek Corridor and community input will be an important part of that process.

Residents are encouraged to be involved and can sign up for the Area Plan email list at the RPA’s website:

<https://chcrpa.org/join-our-mailing-list/>

Sources

- City of Chattanooga. (2022). *Code of Ordinances; DIVISION 24. - F/H FLOOD HAZARD ZONE REGULATIONS*. Municode. Retrieved September 14, 2022, from https://library.municode.com/tn/chattanooga/codes/code_of_ordinances?nodeId=C H38ZO_ARTVZORE_DIV24FHFLHAZORE
- Geier, Bob. *Let's Create Much Needed Park Space, circa 2019-2023*
- Shearer, J. (2001, October 17). *The old Mountain Creek and the new*. The Chattanooga. Retrieved July 29, 2022, from <http://The Old Mountain Creek and The New>.
- Strong Towns. (2020, January 27). *How Much Does a Mile of Road Actually Cost?* Strong Towns . Retrieved August 9, 2022, from <https://www.strongtowns.org/journal/2020/1/27/how-much-does-a-mile-of-road-actually-cost>
- U.S. Census Bureau. (2021). *2017-2021 American Community Survey 5-year Estimates Detailed Tables: B25008 Total Population in Occupied Housing Units by Tenure* [Online digital table]. Retrieved from https://data.census.gov/table?t=Housing+Units&g=0400000US47_1400000US47065010904,47065010905&tid=ACSDT5Y2021.B25008
- U.S. Census Bureau. (2019). *2019 American Community Survey 5-year Data*. Retrieved from <https://data.census.gov>
- U.S. Census Bureau. (2020). 2020 Census - Census Tract Reference Map: Hamilton County, TN. Retrieved from https://www2.census.gov/geo/maps/DC2020/PL20/st47_tn/censustract_maps/c47065_hamilton/DC20CT_C47065.pdf



Mountain Creek Corridor community meeting on June 16, 2022 at Red Bank High School