

ALBEMARLE ROAD/I-485 INTERCHANGE STUDY



VOLUME I: CONCEPT PLAN

ADOPTED BY CHARLOTTE CITY COUNCIL
FEBRUARY 10, 2003

VOLUME 2: IMPLEMENTATION PLAN AS OF FEBRUARY 2003



CHARLOTTE

CHARLOTTE-MECKLENBURG
PLANNING COMMISSION

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INTRODUCTION

BACKGROUND

In October 2001 the Charlotte City Council adopted the *Eastside Strategy Plan*. That plan recommended that a specific study be completed to determine the most appropriate land use and transportation future for the Albemarle Road/I-485 Interchange area. This plan updates the *East District Plan*, adopted by the Charlotte City Council in 1990. The primary focus of this study is on land use, development design and transportation.

The study area boundaries for this analysis are generally defined by Camp Stewart Road to the north, Rocky River Church Road and Blair Road to the east, Truelight Church Road to the south and developed residential neighborhoods to the west. **(Map 1)** The portion of the study area on the north side of Albemarle Road is within Charlotte-Mecklenburg's jurisdiction. South of Albemarle Road, the study area is within the Town of Mint Hill's jurisdiction. Therefore, while the analysis looks at the entire area, the study provides recommendations only for the northern portion.

While the study area was confined to land around the interchange, the proposed land uses were considered in the context of the entire Charlotte-Mecklenburg area. The Albemarle/I-485 interchange is just one of thirty-four interchanges planned for the outer loop. Most, if not all of these interchanges, experience significant development pressure as they near construction. It is therefore important that a vision be developed for the area.

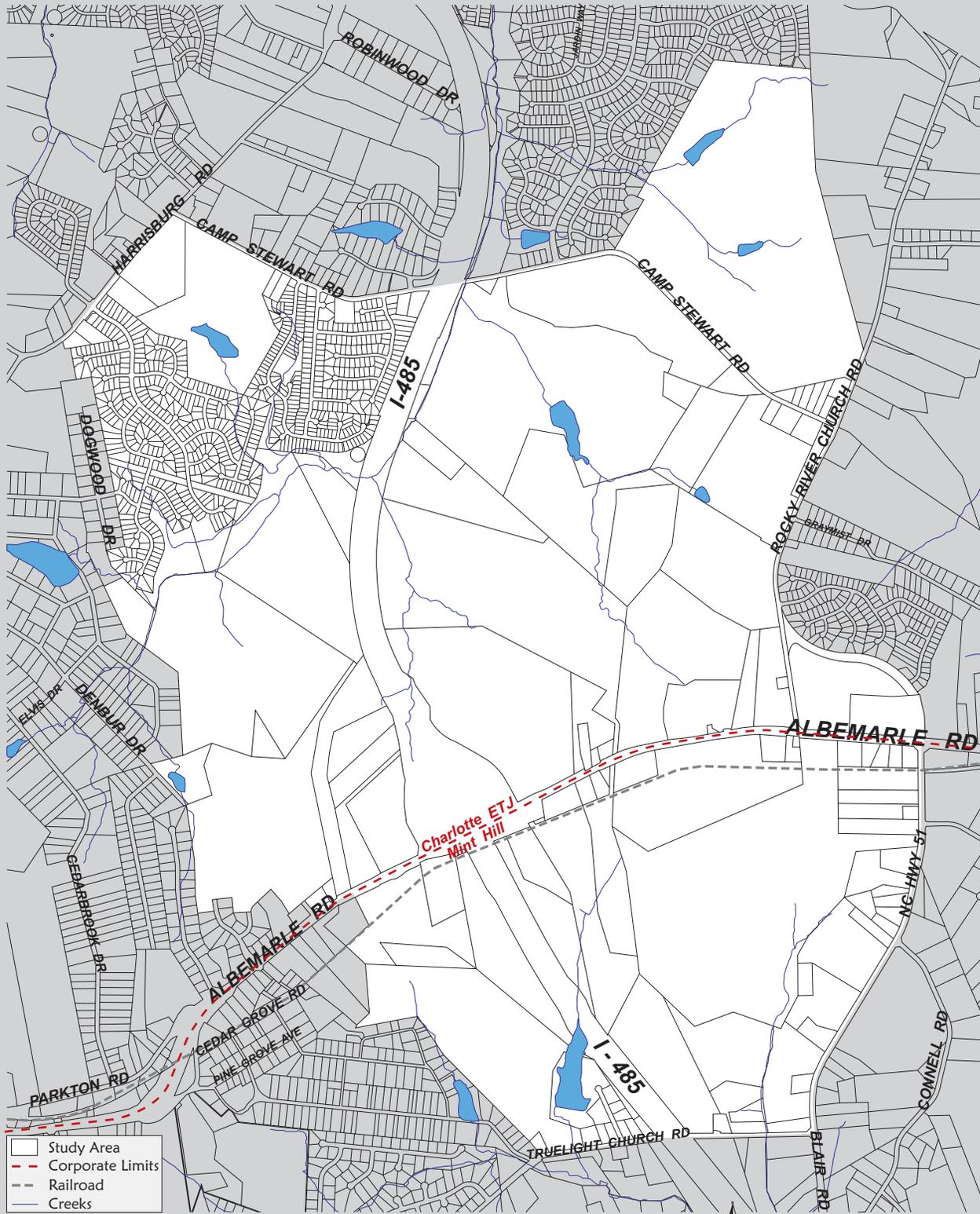
PLAN PURPOSE AND FORMAT

The purpose of the *Albemarle/I-485 Interchange Study* is to provide land use, transportation and design guidance for the northeast and northwest quadrants of the Albemarle/I-485 interchange area. More specifically, the Study is intended to define the intensity and arrangement of appropriate land uses, identify infrastructure needs and provide design guidelines for development, all within the context of an adopted Smart Growth policy framework. Ultimately, the Study serves as a guide for property owners, developers and elected officials making land use and development decisions around the interchange.

The Study is divided into two volumes. *Volume I: The Concept Plan* describes the existing conditions, discusses existing policy framework and provides land use, transportation and design recommendations. *Volume II: The Implementation Program* identifies specific strategies that will assist in implementing the recommendations in the *Concept Plan*.

Albemarle Road / I-485 Interchange Study

Map One: Study Area Boundaries



Produced by the Charlotte-Mecklenburg Planning Commission.



Date: March 04, 2003

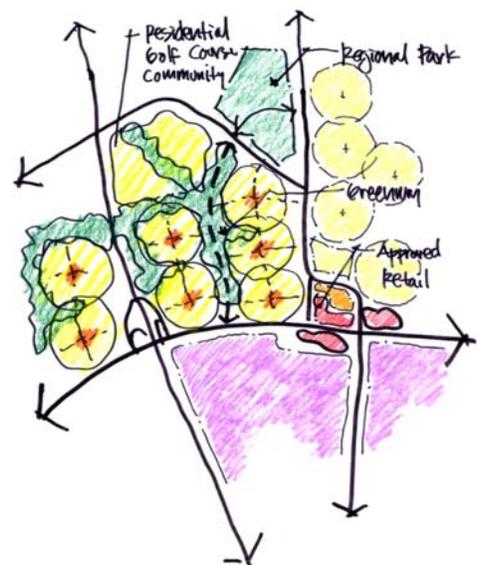
PLAN DEVELOPMENT AND ADOPTION PROCESS

The study process began in January 2002 when interviews were conducted with key stakeholders, including representatives from the Town of Mint Hill, Cabarrus County, property owners, neighborhood organizations, and Charlotte-Mecklenburg City and County agencies. The information gathered in the stakeholder interviews was compiled and used in an intensive three-day charrette held in February 2002. A core group of approximately 12 - 15 people, consisting of landowners, residents and other stakeholders, participated in three daytime sessions. Additionally, a larger group of approximately 65 people participated in two evening meetings during the charrette process. A range of preliminary development concepts were created during the charrette to reflect the views of the various stakeholder groups.

The range of concepts developed during the charrette process are shown below.

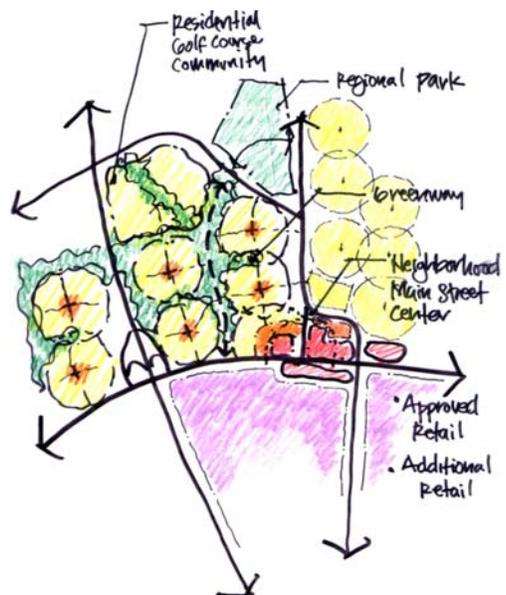
Concept 1: Town Center

- **Town Center**
170,000 sq ft retail and 300 multi-family units on east side of Rocky River Church Road.
- **Neighborhoods**
Single family and multi-family integrated with parks, trails and open space, golf course communities, and strong connections to proposed regional park.



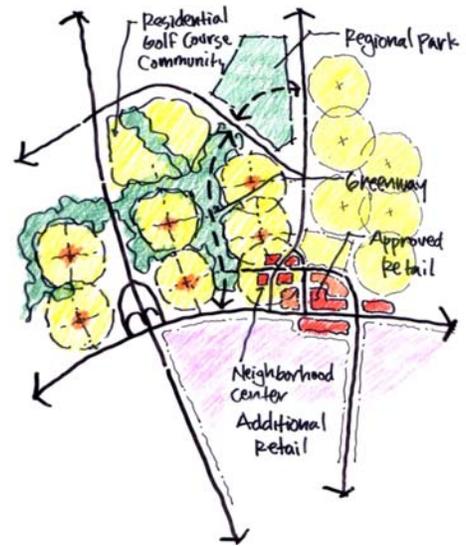
Concept 2: Mixed Use Community Center

- **Community Center**
220,000 sq ft retail, 30,000 sq ft office, and 500 multi-family units east and west of Rocky River Church Road.
- **Neighborhoods**
Single family and multi-family integrated with parks, trails and open space, golf course communities, and strong connections to proposed regional park.



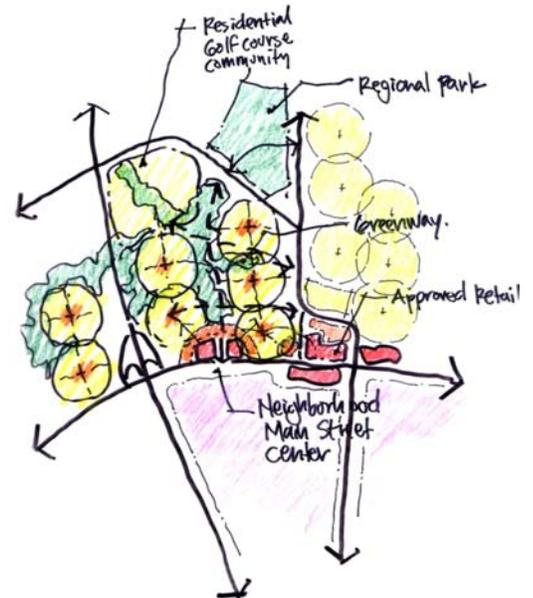
Concept 3: Mixed Use Community Center

- **Community Center**
220,000 sq ft retail, 30,000 sq ft office and 500 multi-family units, partially on the east side of Rocky River Church Road and partially internal to the neighborhood west of Rocky River Church Road.
- **Neighborhoods**
Single family and multi-family integrated with parks, trails and open space, golf course communities, and strong connections to proposed regional park.



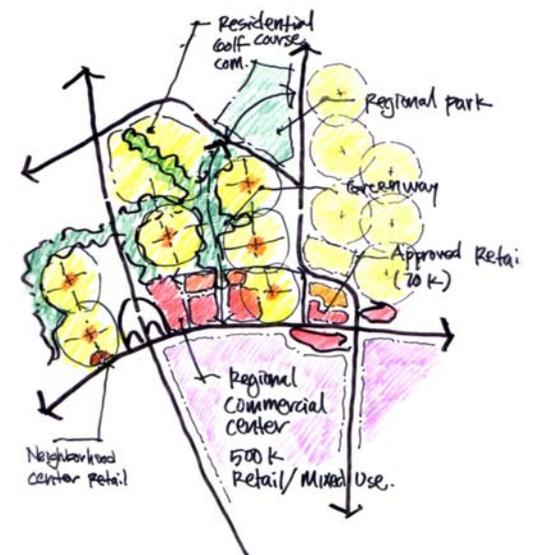
Concept 4: Mixed Use Town Center and Neighborhood Center

- **Town Center**
170,000 sq ft retail and 300 multi-family units.
- **Neighborhood Center**
100,000 sq ft retail, 30,000 sq ft office and 200 multi-family units.
- **Neighborhoods**
Single family and multi-family integrated with parks, trails and open space, golf course communities, and strong connections to proposed regional park.



Concept 5: Mixed Use Regional Center, Town Center and Neighborhood Center

- **Regional Center**
500,000 sq ft retail and supporting office in the northeast quadrant of I-485 and Albemarle Road.
- **Town Center**
70,000 sq ft retail and 300 multi-family units east of Rocky River Church Road.
- **Neighborhood Center**
80,000 sq ft retail and 200 multi-family located west of interchange.
- **Neighborhoods**
Single family and multi-family integrated with parks, trails and open space, golf course communities, and strong connections to proposed regional park.



Following the charrette, an interdepartmental staff team was convened to analyze the concepts, particularly with respect to their impact on land use and transportation. The team met from February through June 2002 to discuss the impacts of the various concepts and develop a recommendation based on public input, adopted City policy and an analysis of land use and transportation impacts.

In June, a public meeting was held to present the staff recommendation and receive feedback. These comments were compiled and taken forward to the Planning Committee. The Planning Committee held a public meeting on June 18, 2002 to receive public comments and made a recommendation on September 17, 2002. The Planning Committee recommendation differed substantially from staff's recommendation in regard to the proposed intensity and location of commercial development. Therefore, both the staff's and the Planning Committee's recommendations were taken forward for City Council Review. City Council received comments on the draft study on September 23, 2002. The Economic Development and Planning Committee of City Council made a recommendation on the Study on January 15, 2003. City Council adopted the plan as proposed by staff on February 10, 2003.

POLICY FRAMEWORK

The recommendations for the Albemarle Road/I-485 Interchange Study were developed in the context of a comprehensive policy framework reflecting the City of Charlotte's adopted Centers and Corridors vision and smart growth principles, as well as relevant adopted plans and policies. In particular, the recommendations strive to balance the need to provide for greenfield development at outer loop locations with efforts to revitalize aging commercial and employment areas closer to Center City Charlotte. Also of key concern is carrying out the intent of the I-485 Interchange Analysis (1999) and respecting the plans and visions of surrounding jurisdictions. The following ten principles summarize the policy framework in which the Albemarle Road/I-485 recommendations were developed:

1. Implement the Centers and Corridors vision.
2. Strengthen the economic vitality of core municipal areas.
3. Design for livability (compact, safe, mixed-use, pedestrian friendly development that incorporates open space).
4. Safeguard the environment.
5. Provide for a broad range of housing opportunities.
6. Increase mobility for all (transit, walking, cycling, etc.).
7. Take a regional approach to land use and transportation planning.
8. Manage land uses around interchanges to ensure the functionality of the roadway and safeguard the public investment.
9. Integrate land use, transportation, infrastructure and design.
10. Build and maintain healthy neighborhoods.

Adopted Plans

In addition to the ten principles, the following adopted plans provide direction for developing the Albemarle Road I-485 recommendations.

East District Plan

The Albemarle Road /I-485 Study area is part of the *East District Plan*, adopted in 1990. The *East District Plan* currently provides the land use guidance for this area as shown on **Map 2**. Note that Map 2 shows the adopted future land use for not only the Albemarle Road/I-485 study area, but also for a much larger geography, providing a broader context for the area under study. Key points to note regarding the adopted future land use include:

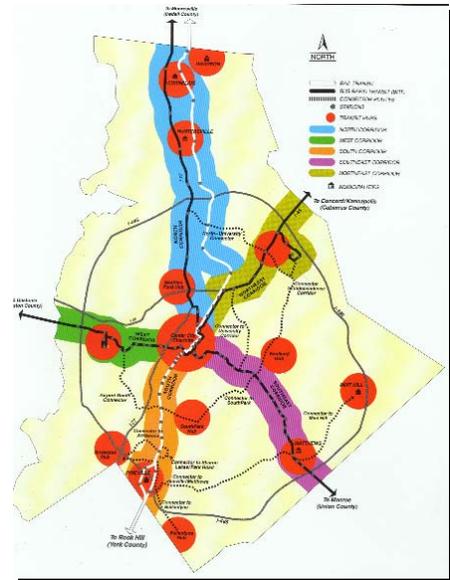
- Central location of a future retail concentration at the intersection of Albemarle Road and the proposed realignment and extension of Blair Road, in relation to residential development in both Charlotte-Mecklenburg and Mint Hill.
- Concentration of future multi-family land uses in the northeast quadrant of the interchange.
- Concentration of light industrial/business park uses in Mint Hill's jurisdiction in the southeast quadrant of the interchange.
- Proximity of the retail conglomeration approximately 2.5 miles west of the interchange.
- Proximity of proposed retail and mixed-use development in Downtown Mint Hill, approximately 3 miles south of the study area.

Centers and Corridors Land Use Vision

The Centers and Corridors Land Use Vision, adopted in 1994, delineates five rapid transit corridors for Mecklenburg County. The land use vision called for the majority of higher density development to be located within the identified transit corridors and key activity centers. The Albemarle Road/I-485 study area is located well outside of any transit corridor or activity center. For such areas, typically referred to as "wedges," the vision called for lower density development.

Eastside Strategy Plan

The *Eastside Strategy Plan*, adopted in 2001, provides land use, transportation and streetscape recommendations for 11 major corridors on the Eastside, including Albemarle Road. During the Eastside Strategy planning process, some of the key issues that were identified related to the large amount of strip commercial development and the aging commercial areas on the Eastside. Evidence of decline or disinvestments can be found in a number of retail locations throughout the Eastside. An increasing number of businesses in older shopping areas have either closed or moved to newer centers further out in the suburbs, leaving behind vacant stores and buildings.



One of the key developments discussed in the *Eastside Strategy Plan* is Eastland Mall. This retail center has shown signs of decline that has caused concern about the future of the mall, the surrounding area, and the Eastside in general. Development of a plan for revitalizing the Eastland area was recommended in the *Eastside Strategy Plan* and is currently underway. Further, the City of Charlotte has committed resources to spur revitalization efforts in the Eastland area. It is important to note that the relationship of additional retail at the outer loop will have a significant impact on the existing retail closer in to the Center City, particularly efforts to revive the Eastland Mall area.

It is from this policy context that staff undertook a thorough analysis of the alternatives developed during the charrette process and using this framework developed the recommendations provided in this document.

Insert Map 2: Adopted Land Use

LAND USE AND TRANSPORTATION INTEGRATION ANALYSIS

An important element in the planning process for this area was to consider the possible effects of land use on the transportation system. Consideration of the following issues was essential in developing the study recommendations:

- An outer loop interchange makes the surrounding area highly accessible and, therefore, likely to experience a great deal of development pressure and high levels of regional through-traffic.
- Access to intensive land uses should be located away from the immediate interchange area to reduce congestion and enhance safety at the interchange itself.
- The half cloverleaf design of the interchange, and the high level of regional traffic through the area, affects development of the northwest quadrant more seriously than the northeast quadrant.
- Most trips from residential land uses will travel westbound in the morning, across the interchange, and into Center City Charlotte or north through the interchange toward the University Area.
- Albemarle Road is currently an active thoroughfare for express and local transit services and multi-family housing is more transit-oriented than single family housing.
- Multi-family development should be located closest to Albemarle Road, internal spine streets, and commercial uses to encourage pedestrian travel, transit use, and reduction of internal vehicle trips.

As part of the transportation analysis, forecasts of daily traffic volumes were developed for several land use concepts, including some of the concepts developed during the charrette process. This analysis included three steps: trip generation (how many trips would occur), trip distribution (where those trips would likely come from and go to), and trip assignment (the resulting volumes on the different road segments).

The results of this analysis showed that although there were some differences between the various development concepts when considering trip generation and trip distribution, there was no significant difference in the assignment of daily traffic. The transportation analysis suggested that a well-integrated mixture of land uses and the addition of employment and higher density residential uses could help to balance traffic flows, support transit use and reduce automobile trips on the thoroughfare system.

EXISTING CONDITIONS AND RECOMMENDATIONS

This Existing Conditions and Recommendations section is divided into two main topics: Land Use and Design, and Transportation. First, an overview of the existing conditions is provided for each topic, with the analysis focusing primarily on existing land use and transportation infrastructure at both a local and a more regional level. Specific recommendations follow the discussion of existing conditions for each topic.

EXISTING LAND USE CONDITIONS

Existing Land Use

As shown in Table 1, the study area includes approximately 1,600 acres within Charlotte’s jurisdiction and 644 acres within Mint Hill’s jurisdiction. No recommendations are provided for the area within Mint Hill. A majority of the study area is currently vacant or comprised of large lots with scattered single-family homes (**Map 3**). The only areas that have been more intensely developed consist of newer single-family neighborhoods including Stewarts Crossing, Avensong and Turtle Rock (all located in the upper northwest corner of the study area), the Larkhaven Golf Course in the northeast quadrant of the study area, and a driving range on Albemarle Road at the interchange with I-485.

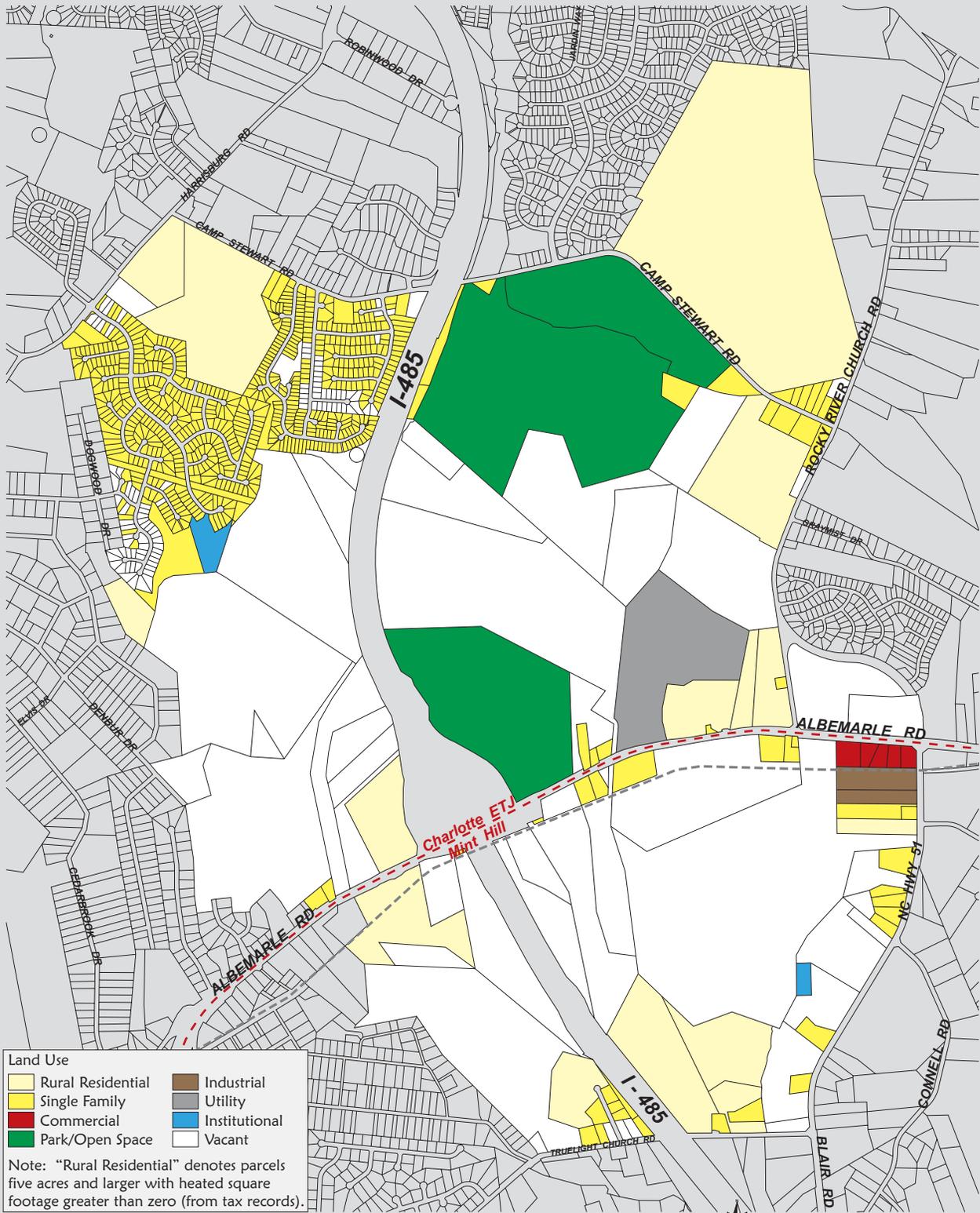
Table 1
Albemarle Road/I-485 Study Area Existing Land Use
 Source: Charlotte-Mecklenburg Planning Commission, May 2002

Charlotte			Mint Hill		
Existing Land Use	Acreage	% of Total	Existing Land Use	Acreage	% of Total
Single Family	238.8	14.9	Single Family	69.2	10.75
Rural Residential*	381.5	23.8	Rural Residential*	106.8	16.60
Open Space	278.2	17.4	Open Space	0	0
Vacant	640.0	40.0	Vacant	457.8	71.02
Utility	55.3	3.5	Utility	0	0
Commercial/Warehouse	0.8	0	Commercial/Warehouse	7.9	1.23
Multi-Family	0	0	Multi-Family	0	0
Institutional	5.7	.4	Institutional	2.0	.40
Total	1600.3	100	Total	643.7	100

* **Note:** Rural Residential is defined as parcels that are 5 acres or greater that have some heated square footage according to the Tax Records.

Albemarle Road / I-485 Interchange Study

Map Three: Existing Land Use



Land Use

 Rural Residential	 Industrial
 Single Family	 Utility
 Commercial	 Institutional
 Park/Open Space	 Vacant

Note: "Rural Residential" denotes parcels five acres and larger with heated square footage greater than zero (from tax records).



Of the 2,244 acres in the study area 1,098 acres are currently vacant, accounting for nearly 50 percent of the study area. An additional 488 acres are developed as rural residential, which in this plan is defined as single parcels five acres or greater, developed with some “heated area” according to Mecklenburg County tax records. Much of the study area has not developed due to the lack of sewer service. Service to the majority of this area is dependent on a bi-county agreement between Cabarrus and Mecklenburg Counties, which according to Charlotte-Mecklenburg Utilities (CMU) is at least 8-10 years from completion. The lack of sewer will likely delay much development here for the short term. However, with the completion of this section of I-485 and the opening of the Albemarle Road interchange scheduled for July 2003, development demand may speed up the provision of sewer service.

Existing Zoning

A majority of the study area (97%) in Charlotte’s jurisdiction is zoned for single-family development (**Table 2 and Map 4**). Retail zoning occurs at the eastern edge of the study area along Albemarle Road between Rocky River Church Road and Blair Road. In Mint Hill a large portion of the area is zoned for general industrial uses (34.8%) with the remainder zoned for residential (63%).

Table 2
Albemarle Road/I-485 Study Area Existing Zoning
 Source: Charlotte-Mecklenburg Planning Commission, May 2002

Charlotte			Mint Hill		
Zoning Classification	Acreage	% of Total	Zoning Classification	Acreage	% of Total
Single-Family	1711.5	97.0	Single-Family	447.1	63.0
Multi-Family	30.7	1.6	General Industrial	247.6	34.8
Business/Retail	22.8	1.4	Retail	16.3	2.2
Total	1765	100	Total	711	100

Zoning Category Key

Single Family

Charlotte
 R-3 up to 3 units per acre
 R-4 up to 4 units per acre
 R-4(CD) up to 4 units per acre with conditions
Mint Hill
 R Residential/minimum lot size of 20,000 sf

Multi Family

Charlotte
 R-12MF up to 12 units per acre
 R-17MF(CD) up to 17 units per acre with conditions

Business

Charlotte
 B-1(CD) neighborhood retail and professional services with conditions
Mint Hill
 B-G General Business

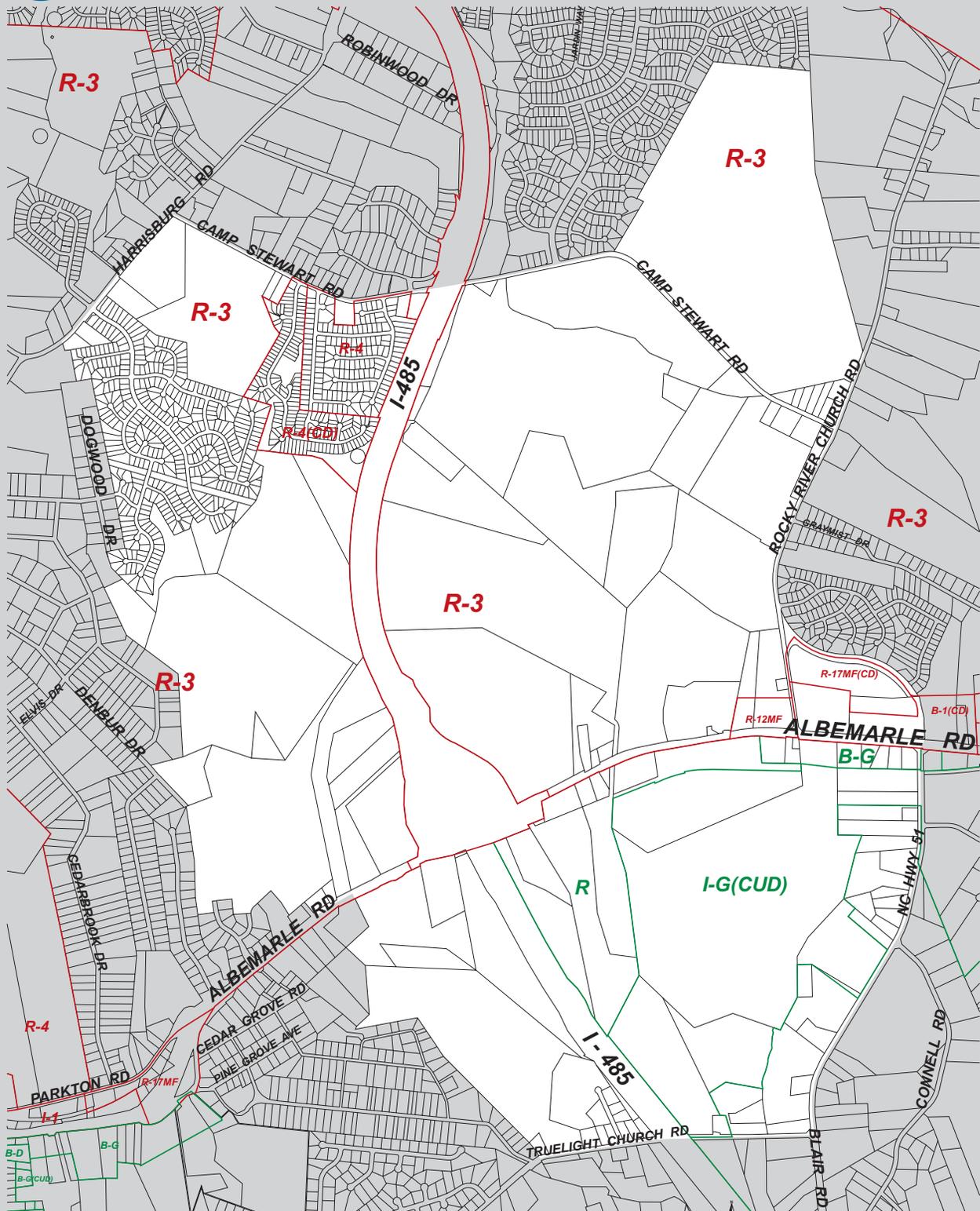
Industrial

Mint Hill
 I-G (CUD) General Industrial

Albemarle Road / I-485 Interchange Study



Map Four: Existing Zoning Designations



Produced by the Charlotte-Mecklenburg Planning Commission.



Date: March 12, 2003

Retail Development

Outer loop interchanges are often popular locations for new retail development. In order to appropriately plan for any future retail development at the Albemarle Road/I-485 interchange, an analysis of existing and proposed retail development for the surrounding area was undertaken, providing a broader planning context. The location of existing retail and areas currently zoned for retail development are shown on **Map 5**.

Currently, as of September 2002, there is 529,000 square feet of retail built within a three-mile radius of the study area. An estimated additional 1.7 million square feet of retail could be built on land that is already zoned for such within this three-mile radius. (This estimate is based on what has typically occurred throughout the community of commercial development averaging 10,000 square feet per acre.) Thus, with three miles of the study area, there is a potential for approximately 2.3 million square feet of retail development.

The following list highlights some of the existing and proposed retail development, and corresponds to **Map 5**.

1. **170,000** square feet of approved retail in two conditional district plans. On the west side of the proposed realignment of Rocky River Road, 80,000 square feet of retail intended to be a neighborhood service center has been approved. The travel shed for this type of center is typically 3 – 5 miles.
2. **550,000** square feet of proposed retail in Downtown Mint Hill. The Town has just completed and adopted a new master plan that promotes a mixture of uses with medium density residential, office and retail development.
3. **1,000,000** square feet of built and/or approved retail located in the vicinity of Albemarle Road and its intersection with Harrisburg Road. This area includes an existing Wal-Mart and Home Depot and would allow for additional big box development. The travel shed for these types of retailers is typically 6-8 miles.
4. **1,400,000** square feet of retail that could be developed along Albemarle Road near Harris Boulevard and Lawyers Road. Over 139 acres is currently zoned for retail development in this area. (Using a typical value of 10,000 square feet of retail per acre, this calculates to approximately 1.4 million square feet of retail.)
5. **1,500,000** square feet near Eastland Mall. The mall includes 1.1 million square feet with an additional 400,000 square feet in the surrounding parcels.
6. **50,000** square feet of retail could be developed at this node on Albemarle Road.
7. **126,000** square feet exists in neighborhood retail with Food Lion as anchor tenant.

Map 6 shows, in finer detail, the amount and location of retail development that is approved or developed along the Albemarle Road Corridor within three miles of the study area.

INSERT Map 5: Retail Development Context

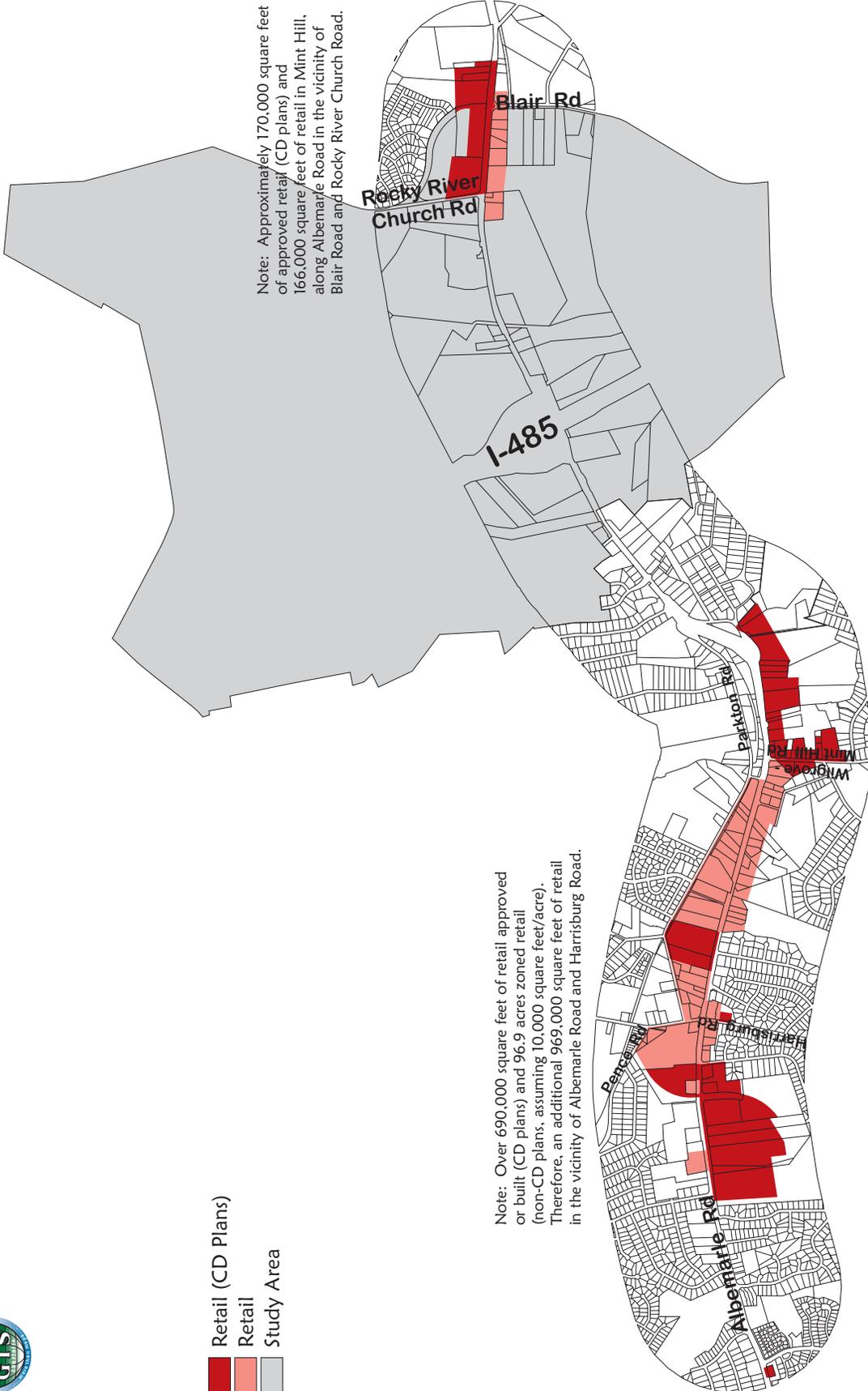
Albemarle Road / I-485 Interchange Study

Map Six: Existing Retail and Retail Zoning Detail



- Retail (CD Plans)
- Retail
- Study Area

Note: Approximately 170,000 square feet of approved retail (CD plans) and 166,000 square feet of retail in Mint Hill, along Albemarle Road in the vicinity of Blair Road and Rocky River Church Road.



Note: Over 690,000 square feet of retail approved or built (CD plans) and 96.9 acres zoned retail (non-CD plans, assuming 10,000 square feet/acre). Therefore, an additional 969,000 square feet of retail in the vicinity of Albemarle Road and Harrisburg Road.

LAND USE AND DESIGN RECOMMENDATIONS

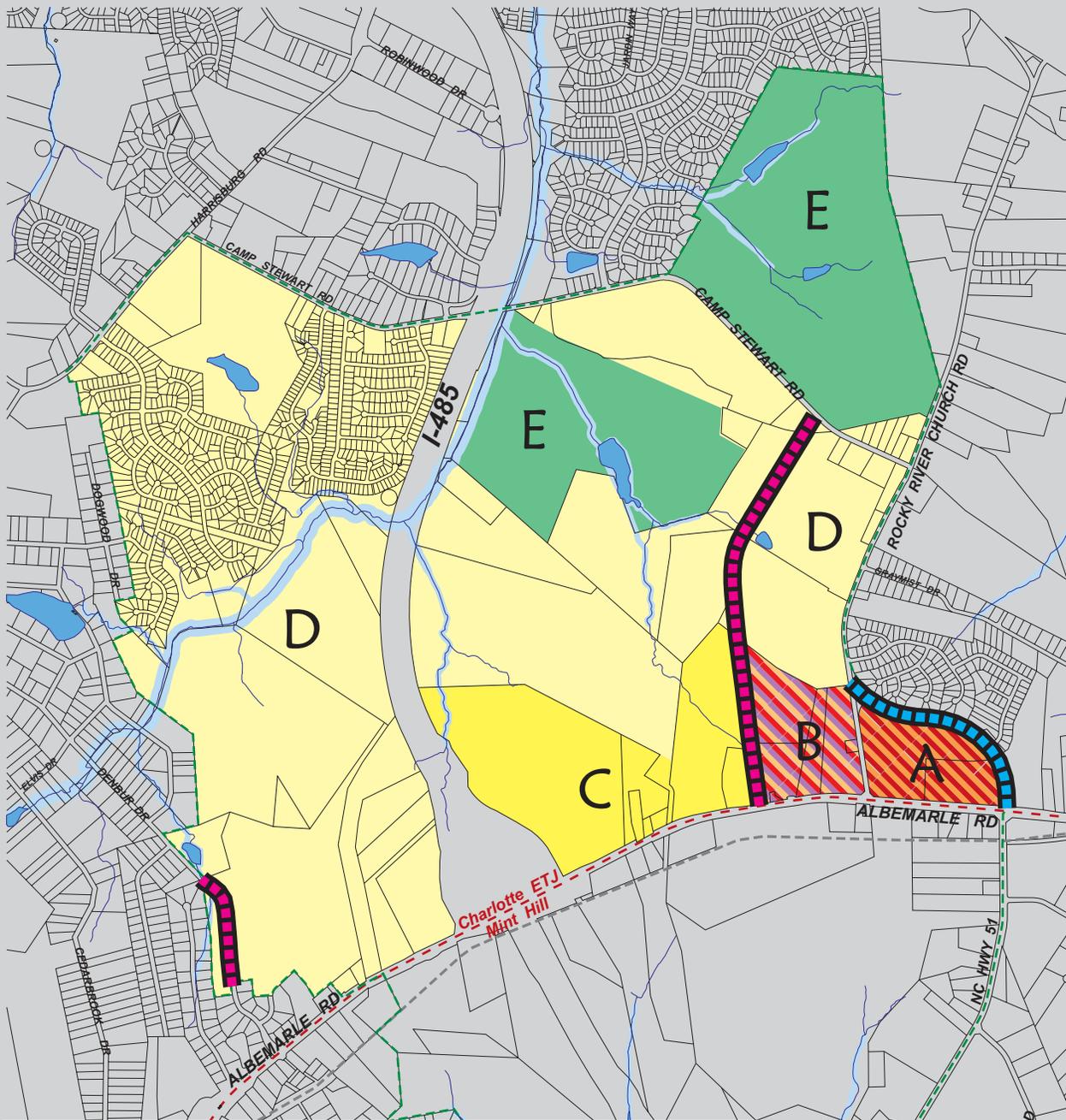
The adopted future land use, illustrated on **Map 7**, represents a hybrid of the five concepts developed during the charrette process. In general, the land use plan provides for a mixture of integrated, appropriately scaled uses creating a town center at the intersection of Albemarle and Rocky River Roads. Residential densities are highest near the town center and where access to transit is greatest. Design recommendations emphasize walkability, integration of useable open space, connectivity and appropriate street design.

The recommended future land uses include less intensive retail development than some of the charrette concepts. In particular, the retail component recognizes the already approved retail development in the area and builds on it. The recommended land use also includes a more intensive office component than the charrette concepts. The increase in office land uses would provide additional employment opportunities and a more balanced traffic flow in the area.

Specific land use and design recommendations are provided for each of the five areas labeled on Map 7 as A - E. Design recommendations for each of these areas are presented according to three major categories: building placement and massing, pedestrian realm, and parks and open space. Street design recommendations are provided as part of the transportation recommendation section.

Albemarle Road / I-485 Interchange Study

Map Seven: Adopted Future Land Use



	Multi-Family/Commercial		Proposed Major Collector
	Multi-Family/Office/Commercial		Proposed Minor Thoroughfare
	Residential <= 8 DUA		Study Area Boundary
	Residential <= 4 DUA		Corporate Limits
	Park/Open Space		Railroad
	SWIM Buffers		Creeks
	Lakes		

Produced by the Charlotte-Mecklenburg Planning Commission.

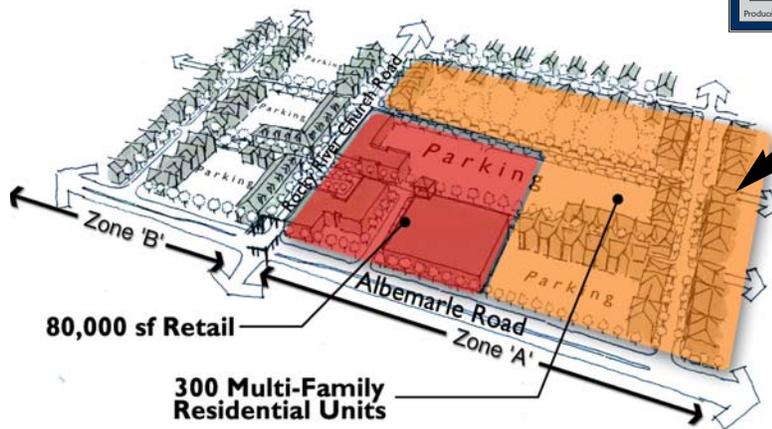
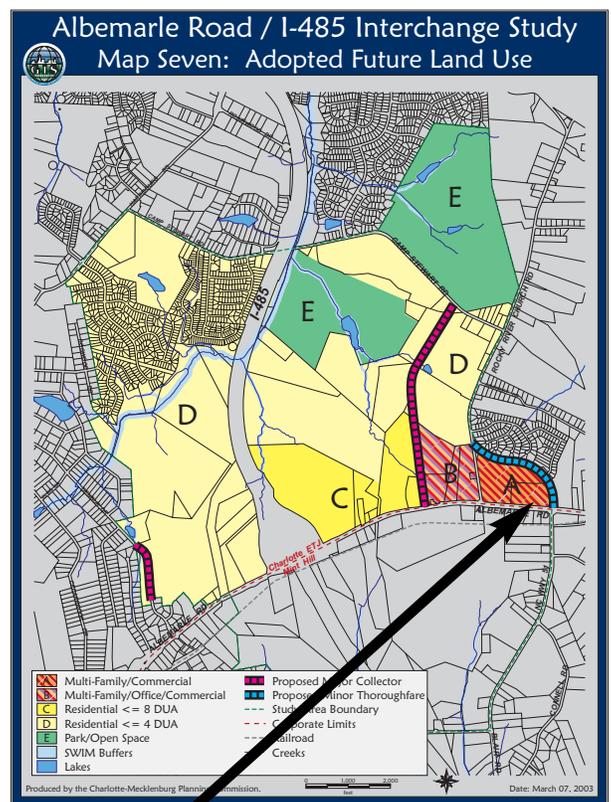


Date: March 07, 2003

Land Use Recommendations Zone A

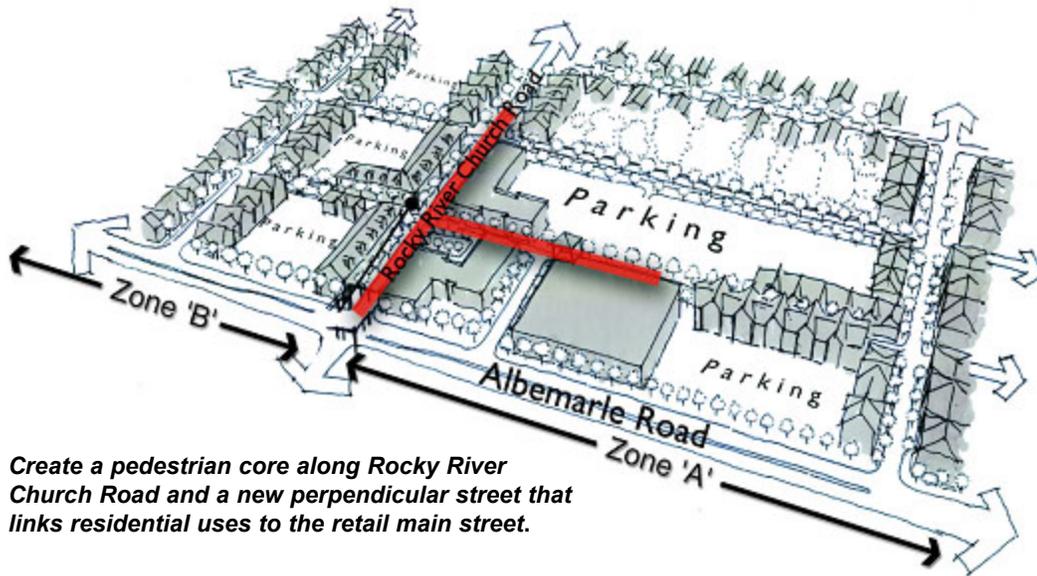
Land uses in Zone A consist of 80,000 square feet of retail uses and 300 multi-family residential uses. This area is currently zoned as a Conditional District plan. The currently approved site plan should be revised to comply with design guidelines provided herein for Zone A development.

- Retail and multi-family uses are to be primarily oriented to the existing section of Rocky River Church Road between Albemarle Road and the realigned section of Rocky River Church Road.
- Uses should be mixed either vertically or horizontally. A vertical mix of uses is strongly encouraged.
- A horizontal integration of uses may be accomplished through a connected network of grid streets, pedestrian pathways/sidewalks and through building scale and positioning that encourages a walkable community.
- Unconnected “pod” development that segregates the retail uses from adjacent residential uses is strongly discouraged.



Design Recommendations: Building Placement & Massing Zone A

The intent of Zone A is to create a pedestrian-oriented retail and residential mixed-use neighborhood. The placement of buildings is critical to realizing this intent.



- Buildings should front the street for at least 75 percent of the length of Rocky River Church Road.
- Retail building facades should generally be placed at the back edge of the sidewalk unless the entire setback area is created as plaza space with appropriate landscape and hardscape elements such as seating, fountains, formal gardens etc.
- Residential building facades may be located up to 15 feet from the back of the sidewalk. The entire setback area should be landscaped appropriately.
- All buildings should have primary, direct access from a street. Other secondary entrances may be provided from parking areas.
- Parking should be located internally on the site and not adjacent to Rocky River Church Road.
- Retail parking lots adjacent to residential uses should be screened with a finished wall and/or landscaping that complies with “Crime Prevention Through Environmental Design” (CPTED) regulations and zoning codes.

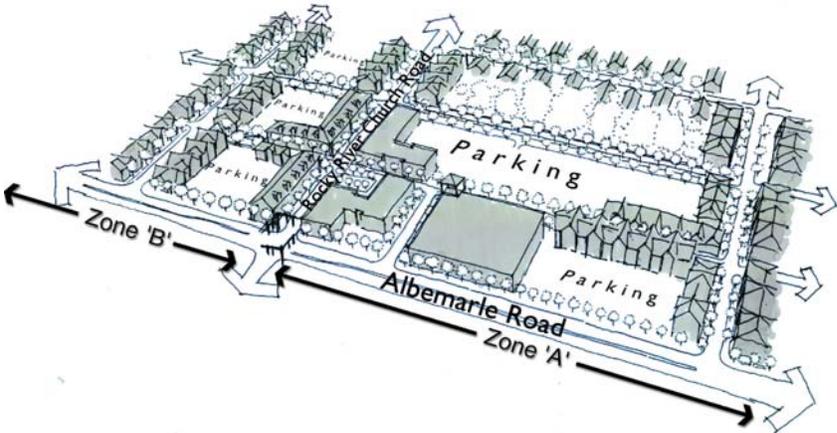


A building may be set back to create a pedestrian plaza.

Design Recommendations: Pedestrian Realm Zone A

The pedestrian realm should be designed to maximize the comfort and safety of those on foot. This should be done through direct pedestrian routing, appropriate street design, and the provision of pedestrian amenities. Direct pedestrian paths make it easier for people to walk throughout the community as well as to and from transit stops.

- Sidewalks should be incorporated into the design of all streets, parking facilities and public spaces, and they should connect to building entrances.
- The sidewalk should be a minimum of 5 feet wide in less traveled areas and 10 to 15 feet in heavily traveled residential, commercial and office areas.
- As many pedestrian connections as possible should be provided, whether they are linking adjoining buildings, sites or neighborhoods.
- Streets should be designed to accommodate pedestrians comfortably.
- The speed of vehicular traffic should be managed through traffic calming measures including the use of such features as street trees, landscaped strips, bicycle lanes or on-street parking.
- Pedestrian amenities, such as street trees, benches, and proper lighting, should be provided as appropriate.



Design sidewalks to provide the most direct route.

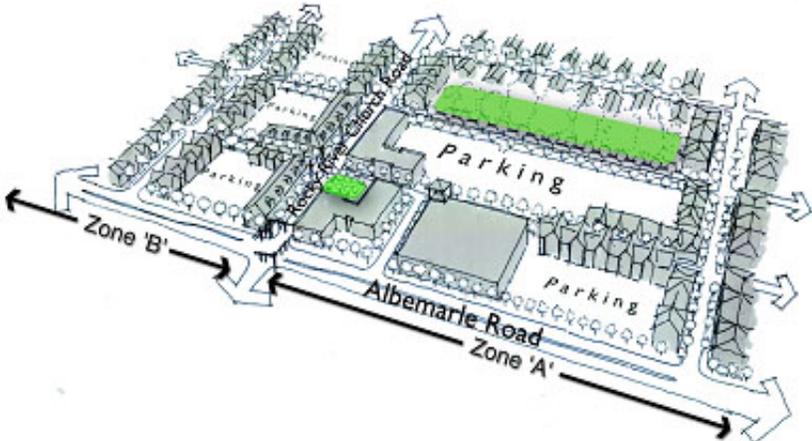


Pedestrian amenities create an interesting and inviting environment.

Design Recommendations: Parks and Open Space

Zone A

Parks and plazas can encourage social interaction and create an environment designed for people. In addition, these places often serve as community landmarks and focal points, making them ideal locations for transit stops.



- Development in Zone A should incorporate a public space that is framed on at least three sides by buildings. (A typical size for such a space could be about 10,000 square feet).
- Where appropriate, a natural area should be maintained as parkland or open space that is accessible to residents of Zone A.

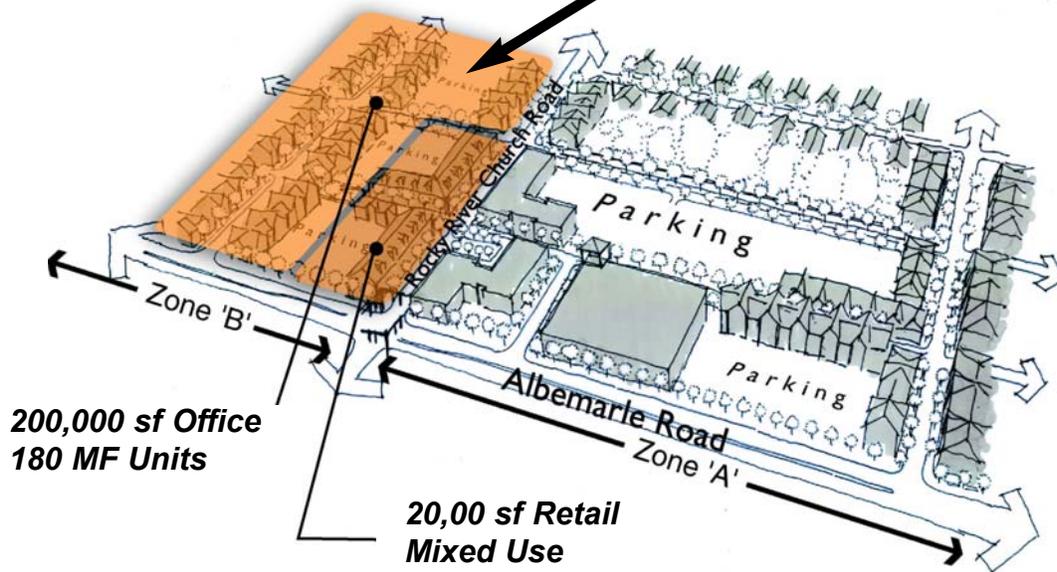
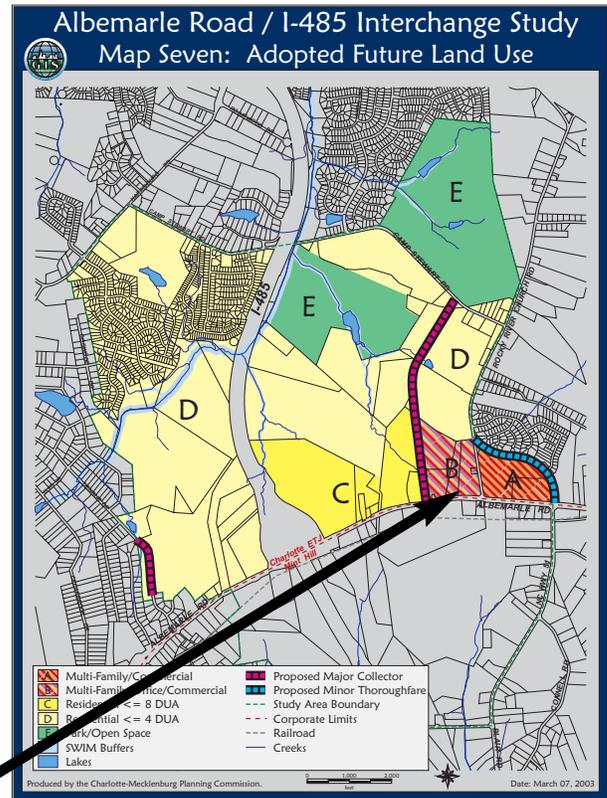


A public park or square can activate an area, providing a focal point for development, a gathering place, and a community landmark.

Land Use Recommendations Zone B

The land uses in Zone B could consist of 200,000 square feet of office, up to 180 multi-family units, and up to 20,000 square feet of retail uses.

- The retail uses should be located in a building that contains either multi-family or office uses. Retail uses should not be stand-alone.
- Retail uses should be located on Rocky River Church Road adjacent to the retail uses in Zone A.
- Horizontal integration of uses should be accomplished through a connected grid of streets and architectural design.
- Conventional unconnected “pod” development that segregates the retail and/or office uses from adjacent residential uses, including those uses in Zones C and D is strongly discouraged.



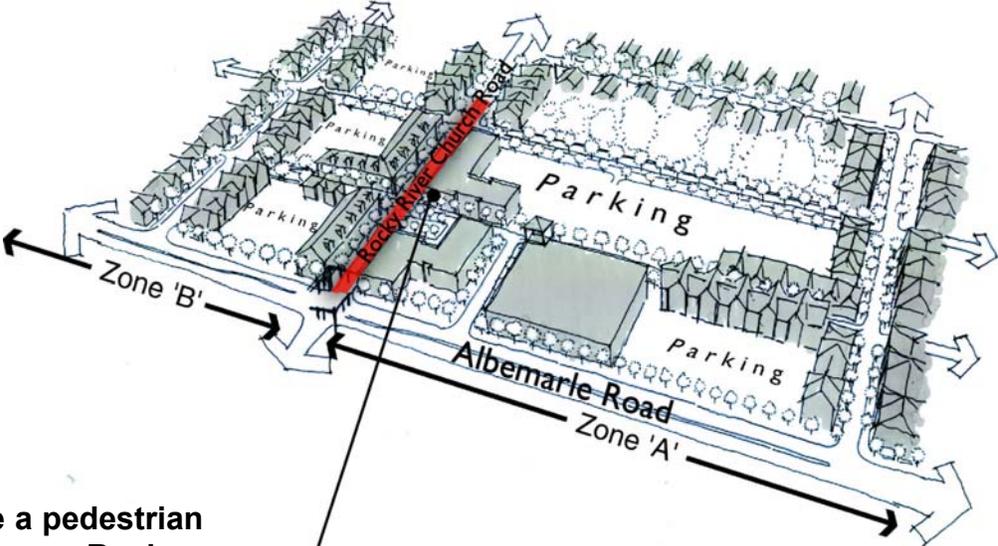


Development along Rocky River Church Road in Zone B should be mixed-use, with retail uses on the ground floor and office or residential uses on upper floors.



In the remainder of the area, development should be office or multi-family units that address the street rather than a parking lot.

Design Recommendations: Building Placement & Massing Zone B



Create a pedestrian corridor on Rocky River Church Road

The intent of Zone B is to create a pedestrian-oriented neighborhood. The placement of buildings helps create this type of development. To create a viable pedestrian environment:

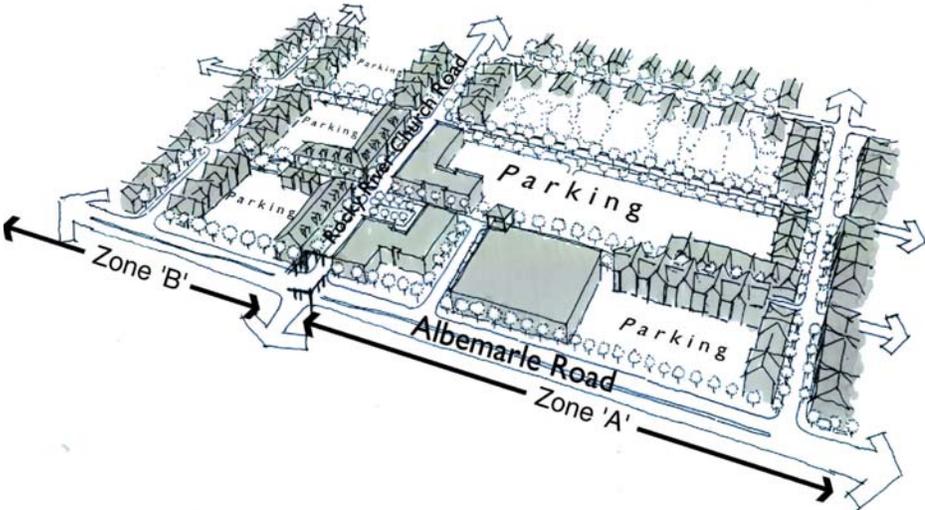
- Retail development should be oriented along Rocky River Church Road.
- Buildings should front the street for at least 75% of the length of Rocky River Church Road.
- Office building facades in the remainder of Zone B should generally be placed at the back edge of the sidewalk unless the entire setback area is created as plaza space with appropriate landscape and hardscape.
- Residential building facades should be located up to 15 feet from the back of curb. The entire setback area should be landscaped appropriately.
- Parking should be located internal to the site and not adjacent to Rocky River Church Road.
- All buildings should be oriented to the street with a primary access from the street. Other secondary entrances may be provided from parking areas.



Mixed-use buildings with retail on the ground floor should be placed on Rocky River Church Road to take advantage of and reinforce its pedestrian nature.

Design Recommendations: Pedestrian Realm Zone B

The pedestrian realm should be designed to maximize the comfort and safety of those on foot. This should be done through direct pedestrian routing, appropriate street design, and the provision of pedestrian amenities. Direct pedestrian paths make it easier for people to walk throughout the community as well as to and from transit stops.



- Sidewalks should be incorporated into the design of all streets, parking facilities and public spaces, and they should connect to building entrances.
- The sidewalk should be a minimum of 5 feet wide in less traveled areas and 10 to 15 feet in heavily traveled residential, commercial and office areas.
- As many pedestrian connections as possible should be provided, whether they are linking adjoining buildings, sites or neighborhoods.
- Streets should be designed to accommodate pedestrians comfortably.
- The speed of vehicular traffic should be managed through traffic calming measures including such features as street trees, landscaped strips, bicycle lanes or on-street parking.
- Pedestrian amenities, such as street trees, benches, and proper lighting should be provided as appropriate.

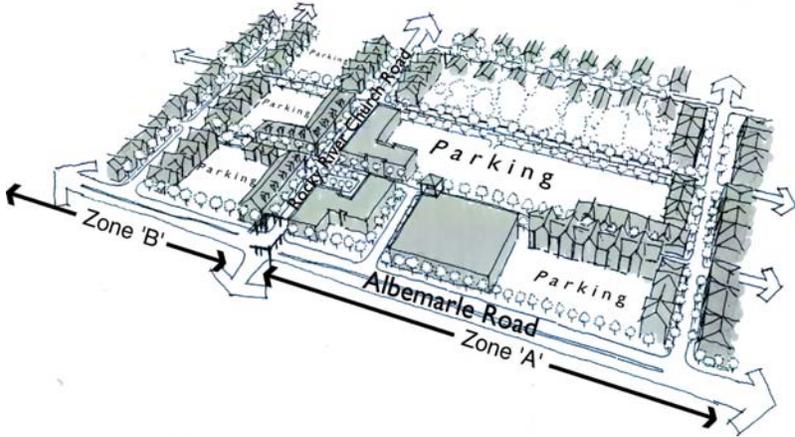


Design streets to accommodate pedestrians.

Design Recommendations: Parks and Open Space

Zone B

Spaces such as parks and plazas can encourage social interaction and create an environment designed for people. In addition, these places often serve as community landmarks and focal points, making them ideal locations for transit stops.



- Development in Zone B should incorporate active parks and public spaces (aside from streets and retention areas). Typically, these areas would encompass approximately 10% of the site area, which for Zone B would be approximately 4 acres.
- Where appropriate, areas of steep slopes or other natural features should be maintained as parkland or open space that is accessible to residents of Zone B.



Public spaces become important gathering spots for residents and users of adjacent buildings. Their buffering nature can also aid in the transition between different land uses.

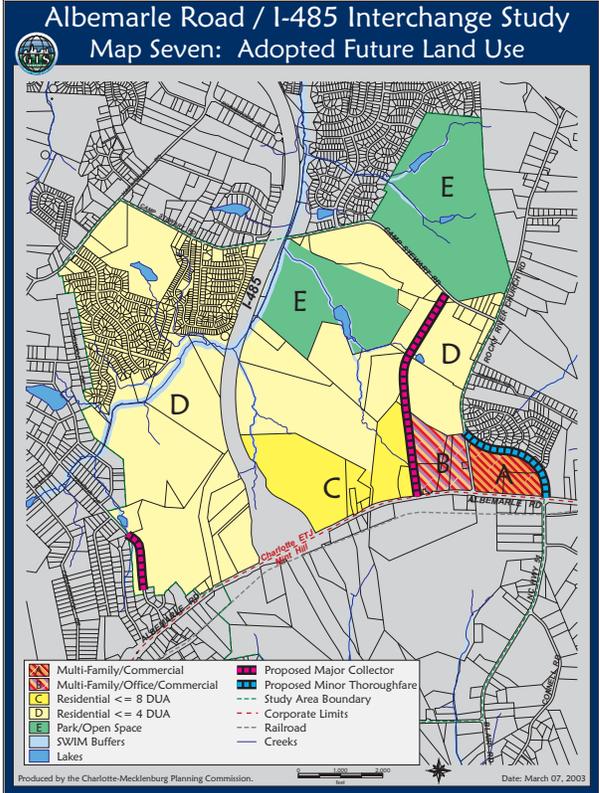


A publicly accessible street should front Parks and open space that are provided within Zone B. This frontage allows greater general access to the park resource, creates a safer environment with more “eyes on the park,” and keeps the park from feeling like a private reserve for those who live nearby.

Land Use Recommendations Zones C and D

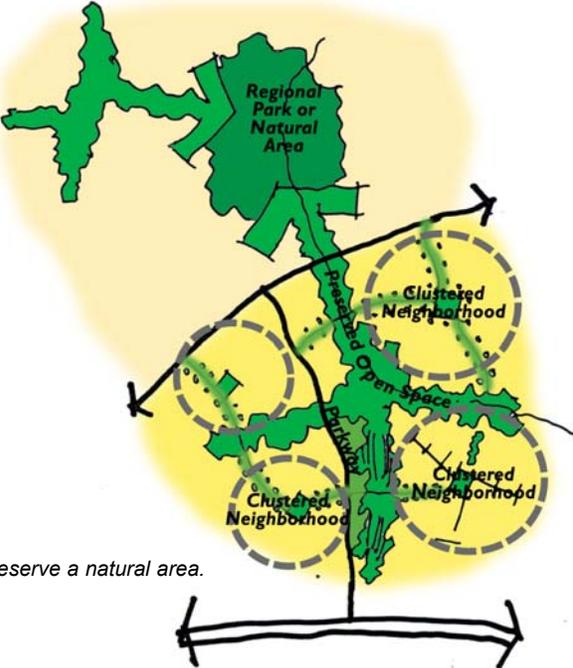
Zone C allows mixed residential types at a density of up to 8 dwelling units per acre. The intent of the zone is to allow for a mixture of housing types, e.g., attached town homes, duplexes, triplexes, and detached single-family homes.

- Higher density residential uses should be located along Albemarle Road to take advantage of transit opportunities that are easier to access on the thoroughfare.
- Cluster development, which will allow for the conservation of environmentally sensitive areas, is encouraged.

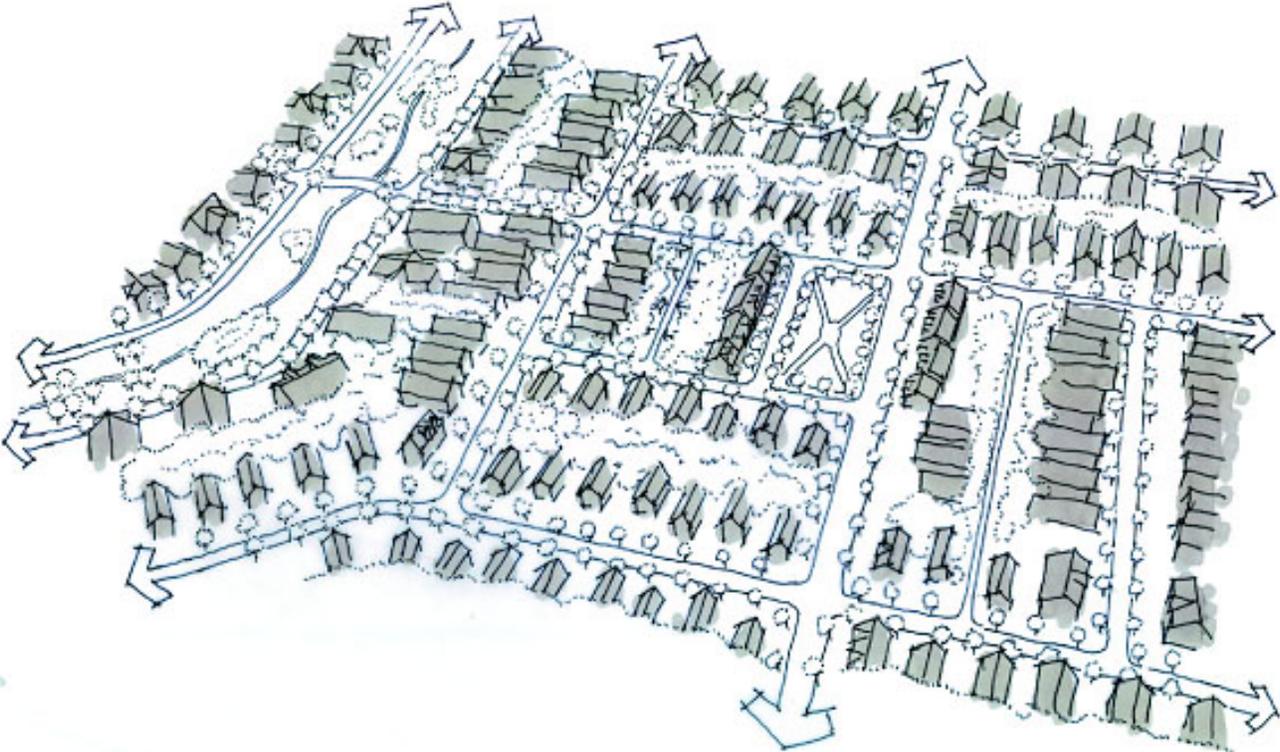


Zone D allows mixed residential types at a density of up to 4 dwelling units per acre. Similar to Zone C, this area will allow a mixture of housing types and encourages clustering but has a lower allowable overall density.

- Cluster development preserves natural areas such as stream corridors, steep slopes, or view sheds, while developing at a slightly higher net density on the remainder of the site, leaving the overall density the same.



Design Recommendations: Building Placement & Massing Zones C and D



- Neighborhoods should be designed around a 1/4-mile radius to allow residents to be within a 5 to 10 minute walk from any destination in the neighborhood.
- The perimeter of blocks should average 1,500 to 2,000 feet in order to create walkable blocks.
- Differing lot sizes are encouraged to allow a community to appeal to a larger portion of the public.
- Buildings should be oriented to the street or public/common open space and provide pedestrian access to the street.
- For development fronting a thoroughfare, the provision of a secondary access point (i.e., alley) is encouraged.
- Facades should be located at the minimum required front setback and present a pedestrian-scaled street frontage.
- Garages should be recessed or oriented toward the side yard.
- Parking pads and protruding garages are discouraged. In this manner, the impact of the garage on the streetscape is minimized.

Design Recommendations: Parks and Open Space Zones C and D

Residential uses within Zones C and D are intended to be integrated with the environment. As such, the adequate provision of parks and open space is highly recommended.



- Each neighborhood should include a park and/or common open space component equal to at least 15 percent of the site acreage.
- Parks should be connected to each other and to the open space network by a system of streets, sidewalks, and trails.



Preserved natural areas, when fronted by homes can be wonderful community amenities.



All parks and open space areas should be connected with sidewalks on streets or off-street trails.

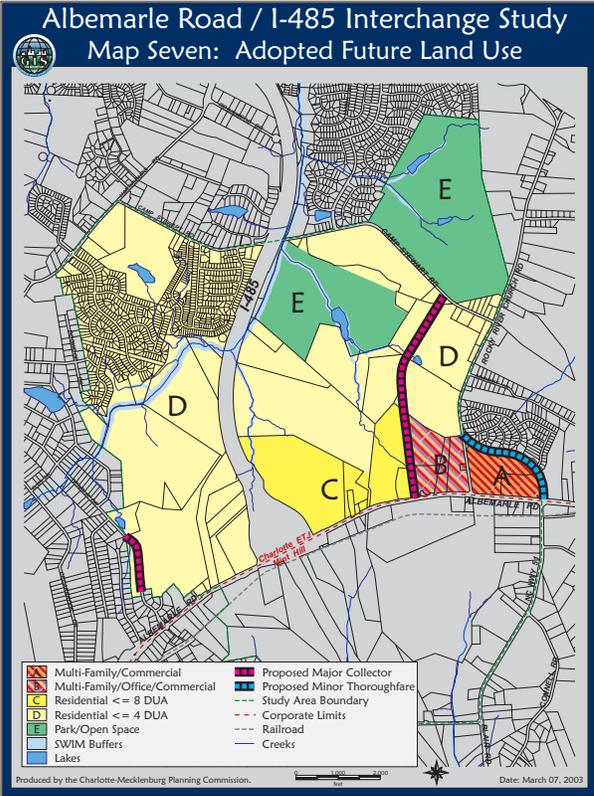
Recommendations

Zone E

The recommendation for Zone E recognizes the existing golf course use south of Camp Stewart Road and supports continued use of this area as a golf course, or similar park, recreation or open space use.

Mecklenburg County Parks and Recreation currently owns the land indicated as open space north of Camp Stewart Road. This area is appropriate for development as a district park with strong linkages to the future development within the study area.

Zone E reinforces the recommendations throughout the study to provide connections between the various types of parks/open space (i.e., district park, golf course, greenways, common areas in neighborhoods) and the other proposed land uses.



EXISTING TRANSPORTATION CONDITIONS

Roads

Map 8 illustrates the existing and currently planned road network within the study area.

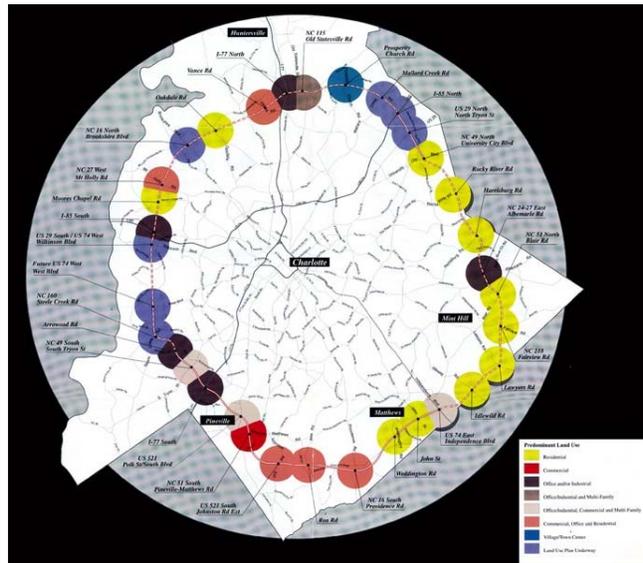
Interstate 485 is planned to be a 67-mile loop with 34 interchanges. Approximately 47 miles and 15 interchanges are currently open for traffic.

The Albemarle Road interchange is scheduled to open in July 2003. It is designed as a half cloverleaf because the proximity of the rail line on the south side of Albemarle Road makes it very difficult to fit ramps on that side of the road. The half-clover design allows all of the ramps to be located on the north side of Albemarle Road. The disadvantage to the half-clover interchange is that once built, very little can be done to improve its capacity. Current projections indicate that this interchange is likely to exceed its capacity around 2015 or 2020. Any significant land development within a half-mile of the interchange will likely exacerbate the level of congestion at the interchange.

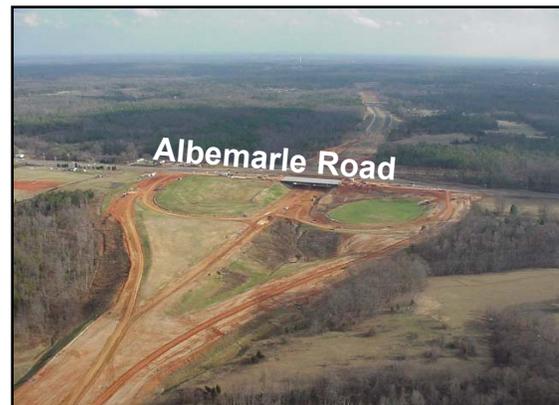
Two major thoroughfares traverse the study area – Albemarle Road and Blair Road.

Albemarle Road is a four lane undivided roadway that forms the spine of the study area. It provides the primary transportation connection to neighboring Cabarrus County and is the major traffic carrier in this area. The most recent traffic counts (2000) indicate that on average, over 19,000 vehicles a day travel on Albemarle Road east of Harrisburg Road (see Table 3). Traffic volumes increase significantly west of Harrisburg Road. Blair Road (NC 51) is a two-lane road within the Town of Mint Hill carrying approximately 8,200 to 16,000 vehicles per day. Harrisburg Road is also a major thoroughfare that lies at the far northwest edge of the study area.

Minor thoroughfares within the study area include Rocky River Church Road, which forms the northeast boundary of the study area, and Camp Stewart Road, which forms the northern boundary.



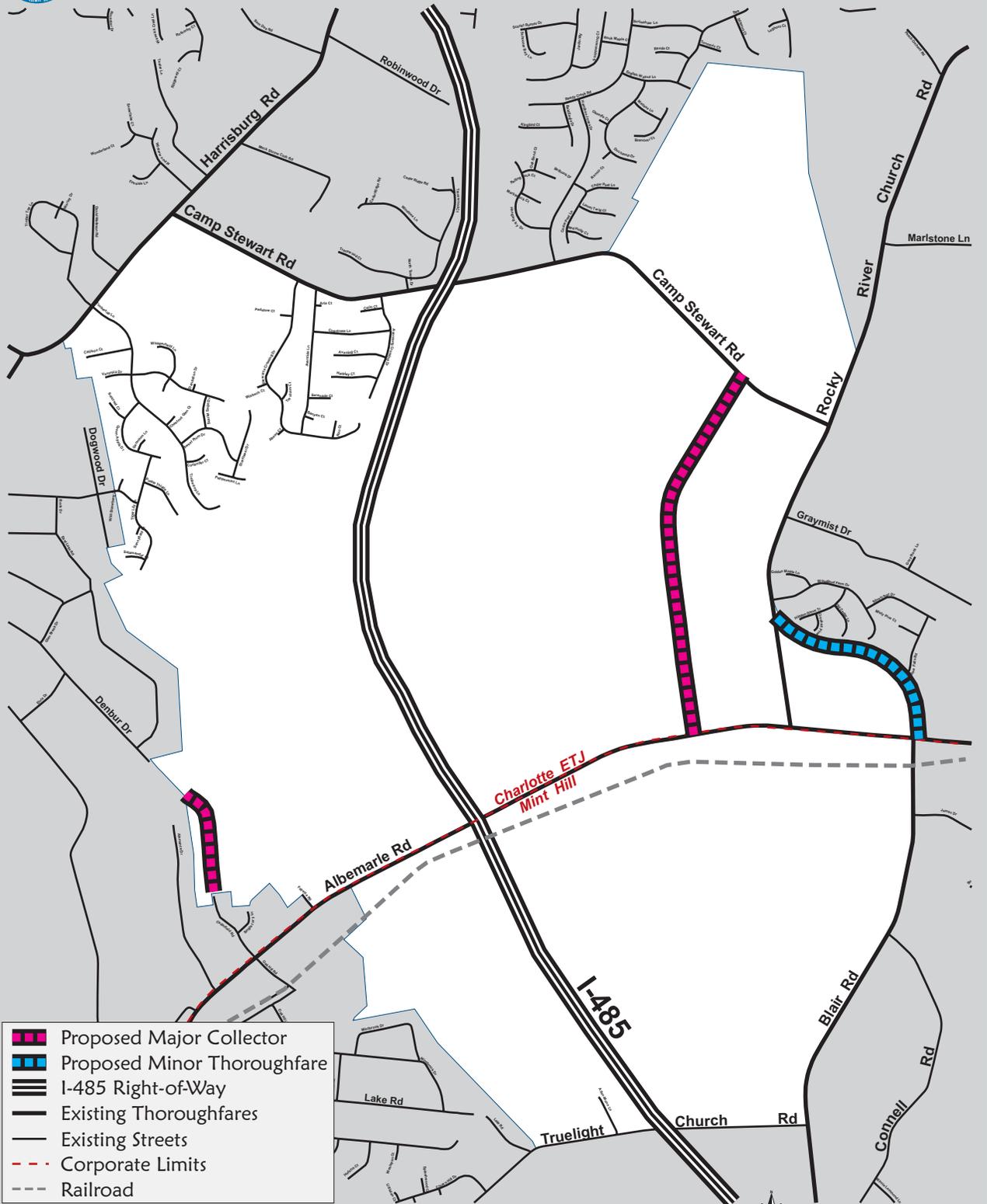
34 Interchanges are planned along I-485.



The interchange is designed as a half cloverleaf.

Albemarle Road / I-485 Interchange Study

Map Eight: Transportation Network



Produced by the Charlotte-Mecklenburg Planning Commission.



Date: March 24, 2003

**Table 3: Albemarle Road/I-485 Interchange Study
Average Weekday 24-Hour Traffic Volumes**
Source: Charlotte Department of Transportation

Location	2000 Volume
Albemarle Road	
East of Harris Boulevard	48,500
East of Olde Savannah Road	36,300
East of Harrisburg Road	19,300
East of NC 51	16,000
Blair Road	
South of Albemarle Road	8,200
South of Woodland Avenue	9,200
South of NC 218	16,000
Rocky River Church Road	
North of Albemarle Road	6,400
North of Camp Stewart Road	4,100
Camp Stewart Road	N/A

Roadway improvements planned within the study area include:

- Realignment of Rocky River Church Road with Blair Road, at Albemarle Road (to be built after 2020).
- Widening of Blair Road to 4 lanes between Wilgrove-Mint Hill Road and Albemarle Road (unfunded).
- Construction of a new major collector road in the northeast quadrant of the interchange that would run parallel to I-485 and Rocky River Church Road and connect from Albemarle Road and Camp Stewart Road (to be built through the development process).
- Construction of a new major collector road in the northwest quadrant of the interchange that would connect Cedarfield Road to Denbur Drive (to be built through the development process).
- Extension of Camp Stewart Road to Albemarle Road (unfunded).

Sidewalks and Bikeways

Sidewalks do not currently exist along the thoroughfares within the study area. The provision of sidewalks is not currently planned and would likely occur as the area is annexed, as development occurs, or as road improvements take place. The City of Charlotte's Sidewalk Program will ultimately add sidewalks on one side of all thoroughfares throughout the City. In addition, both the Mecklenburg County and City of Charlotte Subdivision Ordinances require sidewalks on both sides of all streets for all new development.

There are currently no accommodations (i.e., bike lanes, wide outside lanes, paths) for bicyclists within the study area. The Charlotte-Mecklenburg Bicycle Transportation

Plan (1999) identifies Blair Road on the list of specific improvements as a candidate for future wide outside lanes to accommodate bicycle travel. In addition, the Bicycle Transportation Plan recommends improvements for bicyclists as part of all new road construction and improvements to existing roadways.

Transit

Express bus service is currently provided on Albemarle Road from Charlotte's Center City, eastward to Harrisburg Road. Bus service is currently not provided within the study area. According to the Charlotte Area Transit System (CATS), service could be extended within the next three years if there was shown to be adequate demand.

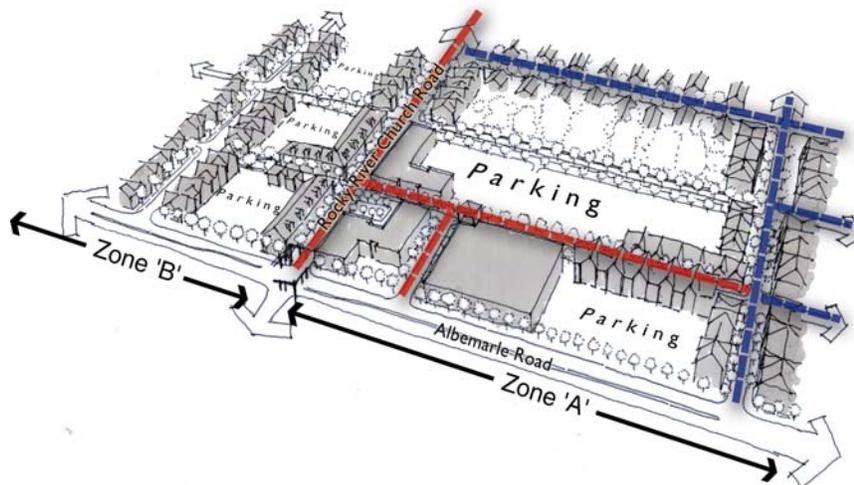
In addition to the existing bus service and possible extension, CATS is planning a community transit center in the Eastland Mall area. The transit center would provide a much higher level of transit service to the Eastside, including the Albemarle Road area. The transit service would improve access to major employment centers, expand service for areas at the City's edge, and link bus routes to the planned rapid transit system.

TRANSPORTATION RECOMMENDATIONS

Street Design

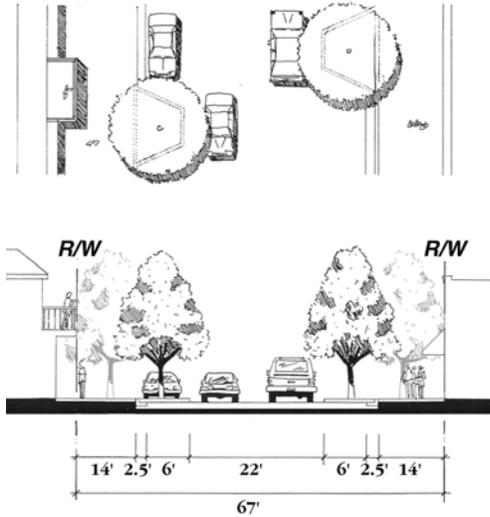
Streets should be designed to accommodate pedestrians, bicyclists and automotive traffic. The specific design should be established based on the location and primary function of the streets. Within the study area, four general types of streets have been identified and the following design guidelines are provided for each specific type. (Note that the City of Charlotte is currently developing new Street Design Guidelines that, once completed, may require that the following guidelines be revised.)

Street Types 1 and 2



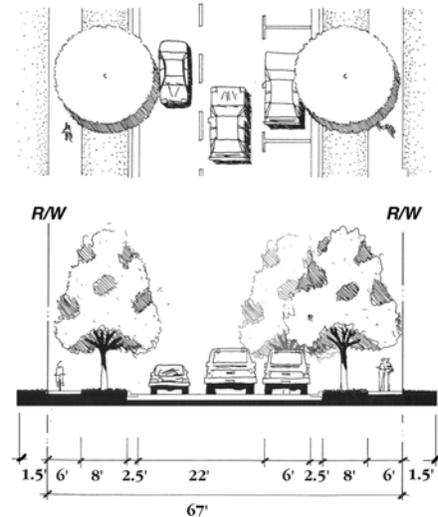
Street 1: This is the area's "Main Street" and is found in Zones A and B as shown in red on the accompanying diagram. It is designed to serve pedestrian-oriented retail uses. Functionally, the street type accommodates two travel lanes and dedicated curbside parking with bulb outs, trees in tree grates and larger sidewalk on both sides of the street within a 67 foot right-of-way.

A 12 foot to 14 foot sidewalk is appropriate to handle the larger number of pedestrians who will use the street. Trees are placed in bulb-out islands and in sidewalk grates. A formal landscaping pattern is recommended with trees placed at 40 feet on center.



Street type 1 is the main street through the town center.

Street 2: This type of street (shown in blue) is appropriate for the higher density residential land uses found in the zone. These uses, such as town homes, condominiums or apartments, typically have shorter front setbacks where off-street parking is restricted. A 67 foot right-of-way accommodates two travel lanes and parallel parking on both sides of the street. A 6 foot sidewalk is separated from the street by a continuous grass planting strip of 8 feet. This street also incorporates a formal tree pattern with street trees planted at intervals of 50 feet on center.



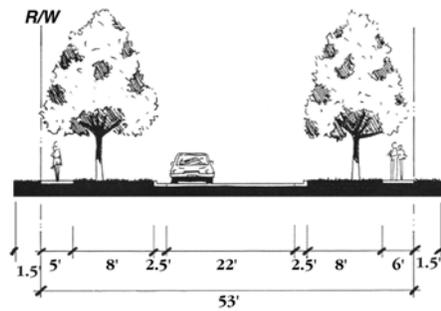
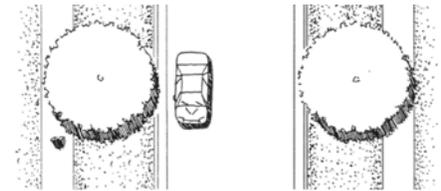
Street type 2 is appropriate for higher density residential neighborhoods.

Street 3: (Shown in yellow.) This is the most common type of residential street and is located in Zones C and D. Within a 53-foot right-of-way, a pavement width of 22 feet allows for two travel lanes and non-dedicated curbside parking on one side of the street. An 8-foot wide continuous grass planting strip on both sides of the street separates the vehicles from a 5 foot sidewalk.

This street would typically have a formal planting pattern with street trees located at 50 foot intervals. Development types most appropriate for this street type are detached single-family homes or town homes.



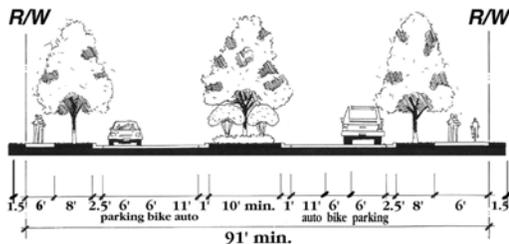
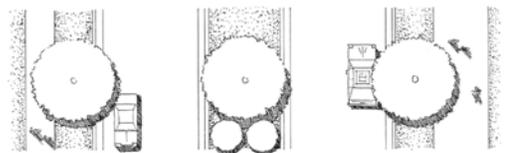
Street type 3 is a typical residential street appropriate for residential streets in Zone C and D.



Street 4: (Shown in green.) This is a parkway type street consisting of one travel lane in each direction separated by a planted median or natural feature within the median. The right-of-way width of the parkway should be flexible to allow for the preservation of natural features such as slopes, trees or creeks, but generally should be at least 91 feet accommodating 11 foot travel lanes, 6 foot bike lanes, 6 foot marked for on-street parking, 8 foot planting strip and 6 foot sidewalks. Trees should be planted in the planting strip between the sidewalk and curb in an informal pattern, underscoring the park-like nature of the street.



Street type 4 is to be a parkway that takes advantage of natural features and linking residential neighborhoods with green space.



Streets and Intersections

1. As the interchange area develops, a grid of streets should be constructed in both the northeast and northwest quadrants to provide multiple options for dispersing traffic throughout the area. The grid should connect to adjacent development, as well as to roads outside of the study area.

2. All signalized intersections should facilitate safe pedestrian crossings. This can be achieved in numerous ways but should include the provision of pedestrian activated crossing signals and well-marked crosswalks. Pedestrian refuge islands, prohibiting right turns on red, traffic calming and special lighting and paving should also be provided as appropriate.



The road should complement the proposed land use.

3. Rocky River Church Road should be realigned with Blair Road as indicated on the Thoroughfare Plan map. The new section of Rocky River Church Road should be a two-lane road designed to complement the proposed land use plan. In particular, the road should provide for pedestrians and bicyclists. As such, sidewalks, improved pedestrian crossings, bicycle lanes and traffic calming should be included in the road design. The old section of Rocky River Road should be re-configured to be a very pedestrian-oriented main street through the mixed-use section of the study area (see design guidelines for Street 1).
4. Any right-in/right-out driveways on Albemarle Road should be located at least one-quarter mile away from the nearest freeway ramp; and any full-access driveways should be located at least one half mile away from the ramps.

At many freeway interchanges there is an inherent conflict between congestion associated with the adjacent development (particularly if it is a major traffic generating land use such as a shopping center) and the congestion that always occurs at a freeway interchange. Because both the development and freeway interchange require a lot of turning movements to and from the surface road (i.e., Albemarle Road), congestion often results in the vicinity of each. When the development and the interchange are located close to each other, the congestion at each one degrades the operation of the other, and the situation becomes regressive with much greater congestion than would occur if the two were located a reasonable distance apart (i.e. a half mile).

5. A new major collector road should be developed in the northeast quadrant of the interchange area as illustrated on the Collector map. The road should be designed to complement the proposed land uses and provide a key connection between the development within the study area, Camp Stewart Road and the planned district park. The road should provide for pedestrians and bicyclists, including sidewalks,

improved pedestrian crossings, bicycle lanes and traffic calming (see design guidelines for Street 4).

6. A new major collector road should be developed in the northwest quadrant of the interchange area as illustrated on the Transportation map (Map 8). The road should be designed to complement the proposed land uses, and provide connections between the developments within the study area and Albemarle Road (see design guidelines for Street 3).

Sidewalks and Bikeways

1. Sidewalks within the residential areas should be a minimum of five feet wide and located on both sides of the street. Current ordinances require four-foot wide sidewalks. The increased width provides a more comfortable and safe walking environment.

2. Sidewalks in non-residential or mixed-use areas should be a minimum of six feet wide and located on both sides of the street. Non-residential and mixed-use areas are expected to produce more intense levels of pedestrian activity. Wider sidewalks will provide a more comfortable walking environment and can also provide space for outdoor eating and other pedestrian-oriented activities.



All roads should accommodate bicycles.

3. All new roads and improvements to existing roads should adequately accommodate bicycle transportation. This may be accomplished in numerous ways including providing bike lanes, wide outside lanes or a separate bicycle path. The specific bicycle accommodations should be discussed during the roadway design process with input from the Bicycle Coordinator and the community.

Transit

1. Consider extending transit service to the study area as development occurs, to link the area to the Eastland transit center as well as to the nearby rapid transit corridors.
2. Locate a transit shelter within the mixed-use core of the study area (near Albemarle and Rocky River Roads) and identify opportunities to develop a park and ride facility in the same vicinity.



Provide transit service.

CONCLUSION

The area surrounding the Albemarle Road/I-485 interchange is a desirable location for both residential and commercial development. With the completion of the interchange in July 2003, new development will begin to transform the character of this area.

This study seeks to provide a framework for future growth and development that protects the future livability of the study area and ensures the viability and vitality of the greater Charlotte-Mecklenburg community.

ALBEMARLE ROAD/I-485 INTERCHANGE STUDY



VOLUME II: IMPLEMENTATION PLAN
FEBRUARY 2003



CHARLOTTE

CHARLOTTE-MECKLENBURG
PLANNING COMMISSION

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IMPLEMENTATION

INTRODUCTION

This document outlines the steps needed to implement the recommendations from the draft *Albemarle Road/I-485 Interchange Study*. Elected officials do not adopt this implementation document. However, some of the actions identified may require future City Council and/or County Commission approval. These items will be brought before the appropriate body on a case-by-case basis.

PLAN STRATEGIES

The Concept Plan portion of the *Albemarle/I-485 Interchange Study* focuses on the following key issue areas:

- Land Use
- Design
- Transportation

The Concept Plan identifies specific goals and recommendations for each of these issues. The following are strategies identified to implement the recommendations:

Land Use

- *Use the rezoning process to ensure that proposed development is consistent with both the land use and design recommendations in the plan.*
- *Work with the owner of the conditionally-zoned property in Zone A to develop a revised site plan that is consistent with the design guidelines provided in the plan for that zone. This property is currently zoned under a conditional site plan for 80,000 square feet of retail uses and 300 multi-family residential units. If the property owner were unwilling or unable to work within the parameters of the design guidelines, an alternate strategy would be to consider reviewing this property as part of the 3 year Conditional District Rezoning Review Process.*

Design

- *Use the rezoning and subdivision processes to ensure that proposed development is consistent with the design guidelines proposed in the plan. Uses should be mixed either vertically or horizontally; a vertical mix of uses is strongly encouraged.*

Transportation

- *Work with CDOT and NCDOT to ensure that traffic signals are placed on Albemarle Road at least ½-mile from the interchange. Access to intensive land uses should be located away from the immediate interchange area to reduce congestion and enhance safety at the interchange itself.*
- *Work with CDOT and NCDOT to design new major collector roads in both the*

northeast and northwest quadrant of the interchange area. These new collectors should be aligned to provide key connections between development within the study area, Camp Stewart Road, and the planned district park.

- *Work with CDOT and NCDOT to ensure that all right-in/right-out driveways on Albemarle Road are located at least ¼ -mile and all full-access driveways are located at least ½ -mile from the nearest freeway ramp.*
- *Work with CDOT and NCDOT to implement appropriate streetscape design as defined by the plan. Streets should be designed to accommodate pedestrians, bicyclists and automotive traffic. The specific design should be established based on the location and primary function of the street.*
- *Build a comprehensive pedestrian and bicycle system. Work with CDOT and NCDOT to ensure that the Bikeway improvements within this study area are implemented as part of all new roadway construction or roadway widening projects.*
- *Work with CDOT and NCDOT to ensure that all new and existing signalized intersections facilitate safe pedestrian crossing.*
- *Ensure connectivity. Work through the rezoning, site plan review, community planning, and joint use processes to ensure that development is well connected with through-streets and pedestrian pathways. In particular, a dense grid of streets should be constructed in both the northeast and northwest quadrants of the study area to better disperse traffic.*
- *Work with CATS to expand transit service to the study area and establish links to the proposed rapid transit corridors. Primary consideration should be given to linking the study area to the Eastland transit center. A transit shelter and potentially a park-and-ride lot should be located within the mixed-use core of the study area (near Albemarle and Rocky River Roads).*
- *Work with CATS to determine a design for transit hardware that is appropriate to the site context for new development within the study area.*



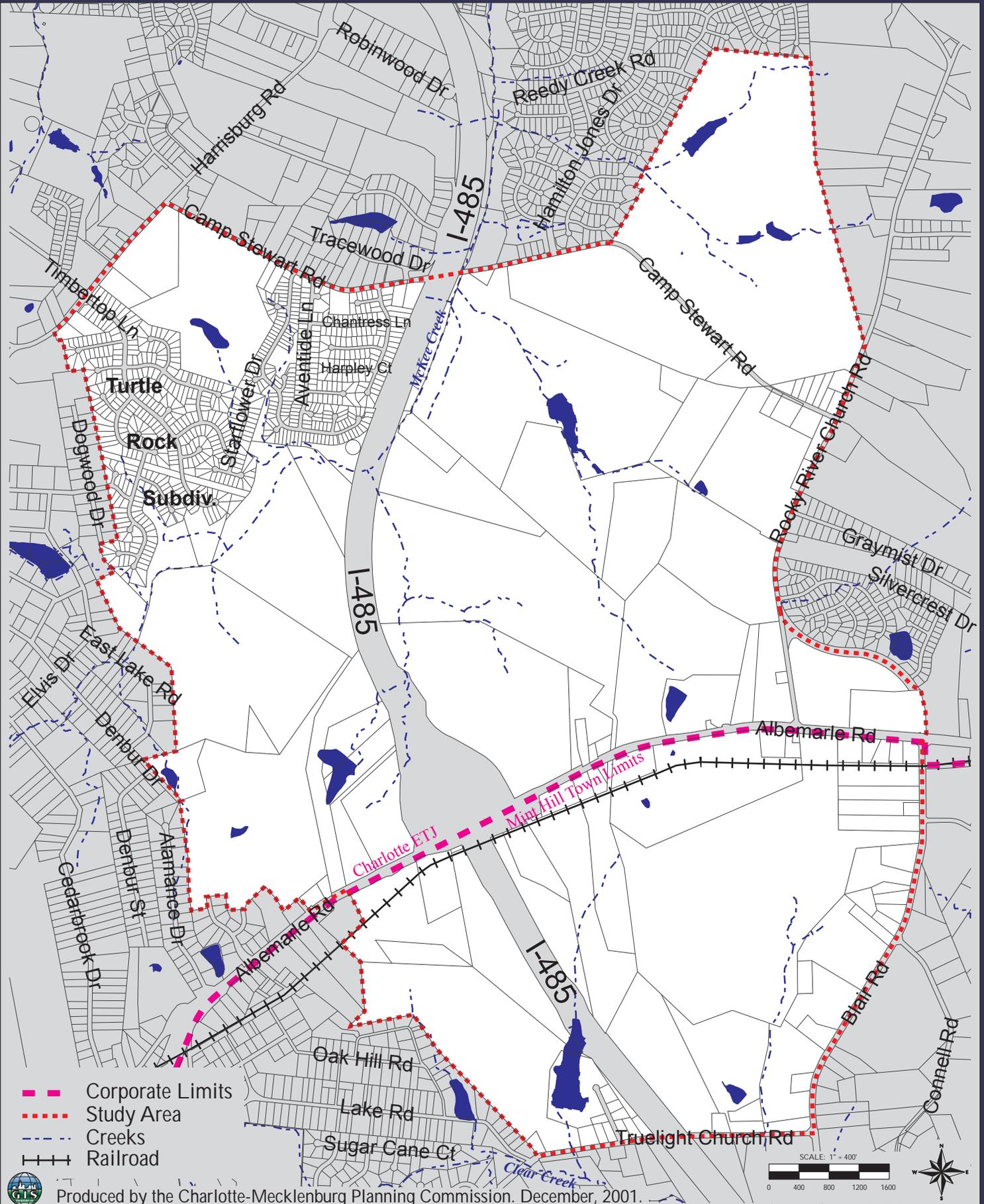
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CHARLOTTE, NORTH CAROLINA 28202

ALBEMARLE ROAD / I-485 STUDY MAP 1: STUDY AREA



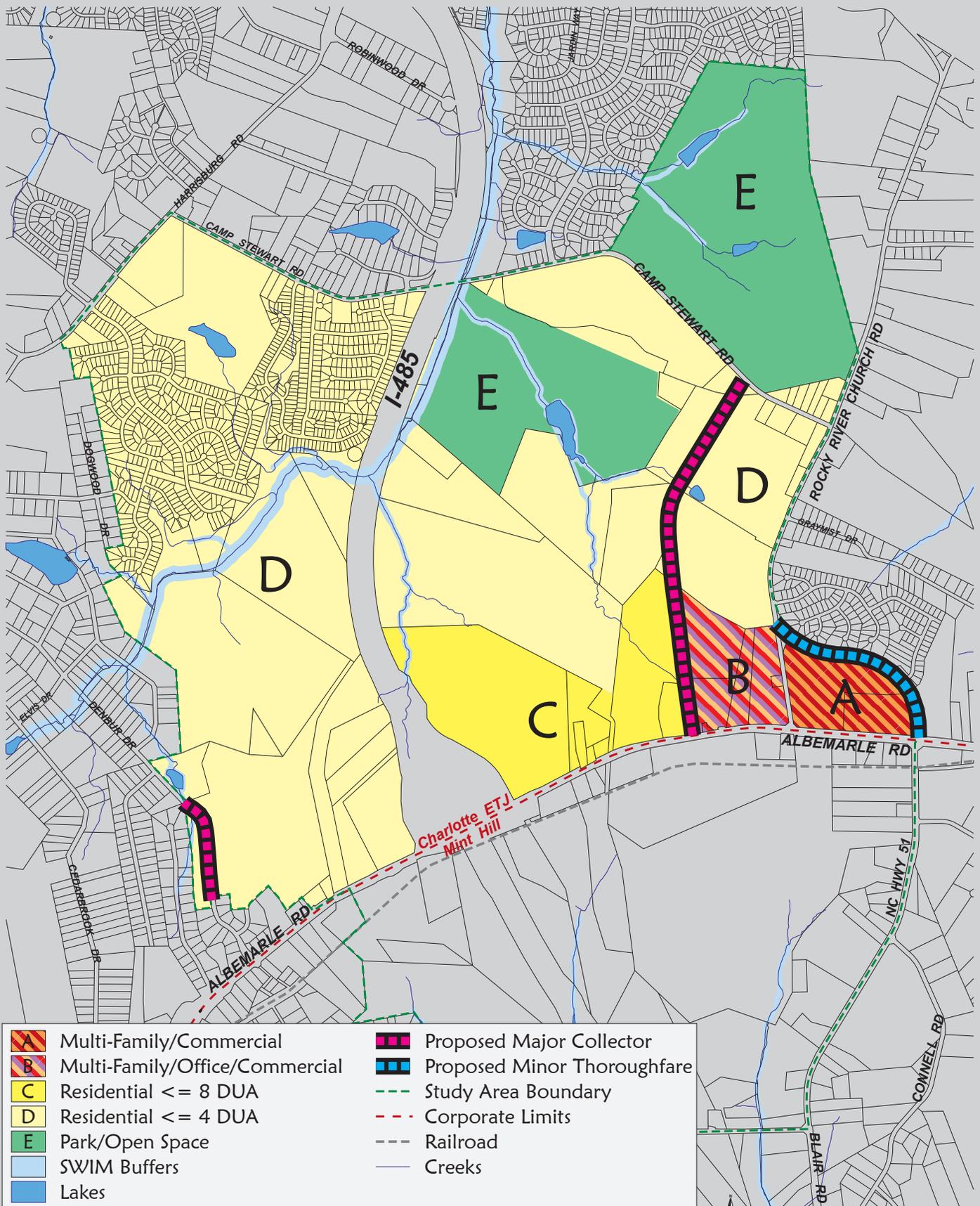
- Corporate Limits
- Study Area
- Creeks
- Railroad

SCALE: 1" = 400'
0 400 800 1200 1600



Albemarle Road / I-485 Interchange Study

Map Seven: Adopted Future Land Use

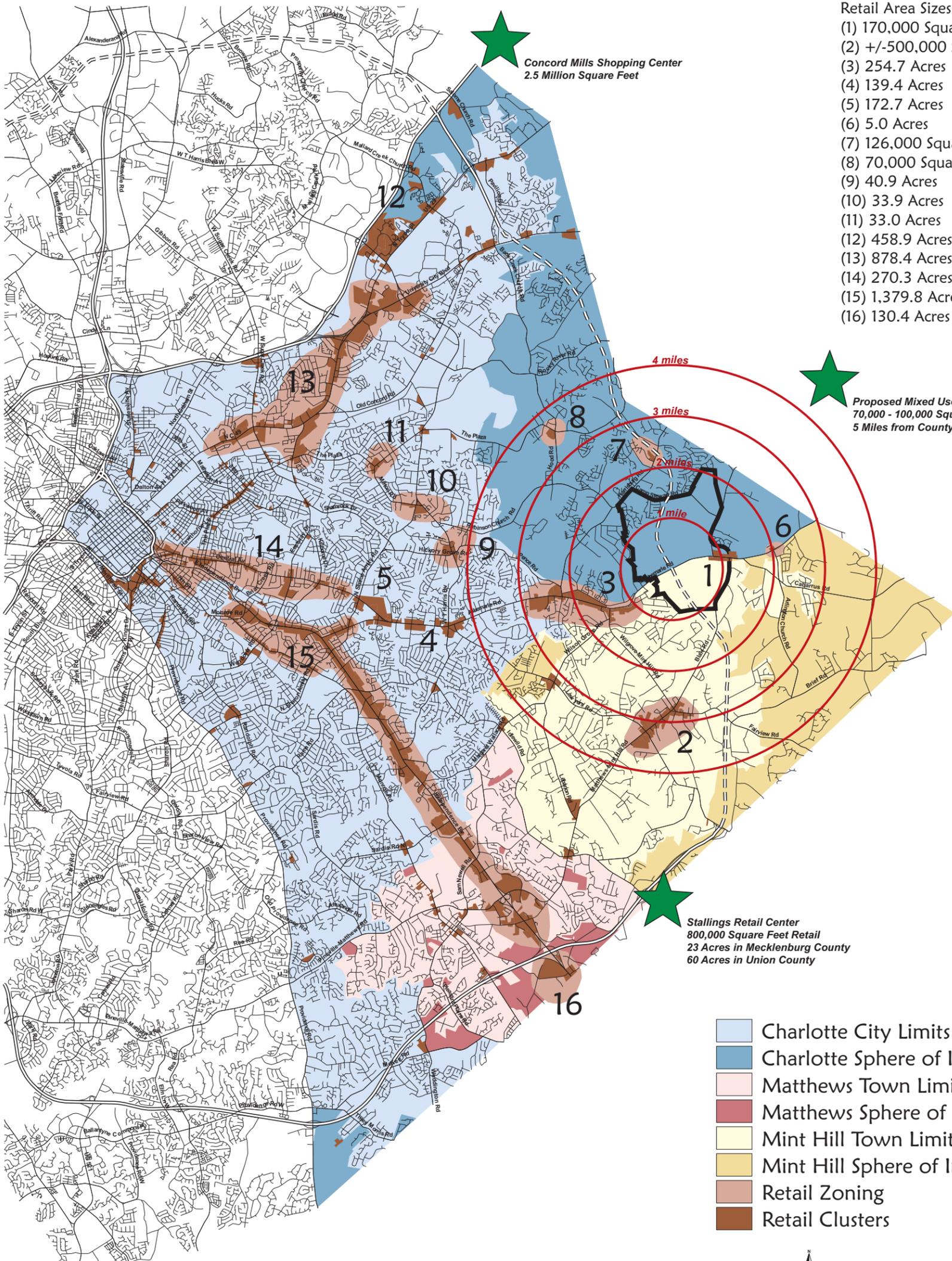


	Multi-Family/Commercial		Proposed Major Collector
	Multi-Family/Office/Commercial		Proposed Minor Thoroughfare
	Residential <= 8 DUA		Study Area Boundary
	Residential <= 4 DUA		Corporate Limits
	Park/Open Space		Railroad
	SWIM Buffers		Creeks
	Lakes		



Albemarle Road / I-485 Interchange Study

Map Five: Retail Development Context



- Retail Area Sizes:
- (1) 170,000 Square Feet
 - (2) +/-500,000 Square Feet
 - (3) 254.7 Acres
 - (4) 139.4 Acres
 - (5) 172.7 Acres
 - (6) 5.0 Acres
 - (7) 126,000 Square Feet
 - (8) 70,000 Square Feet
 - (9) 40.9 Acres
 - (10) 33.9 Acres
 - (11) 33.0 Acres
 - (12) 458.9 Acres
 - (13) 878.4 Acres
 - (14) 270.3 Acres
 - (15) 1,379.8 Acres
 - (16) 130.4 Acres

Concord Mills Shopping Center
2.5 Million Square Feet

Proposed Mixed Use Center
70,000 - 100,000 Square Feet
5 Miles from County Line

Stalling's Retail Center
800,000 Square Feet Retail
23 Acres in Mecklenburg County
60 Acres in Union County

- Charlotte City Limits
- Charlotte Sphere of Influence
- Matthews Town Limits
- Matthews Sphere of Influence
- Mint Hill Town Limits
- Mint Hill Sphere of Influence
- Retail Zoning
- Retail Clusters

