



CABARRUS COUNTY CENTRAL AREA PLAN

Cabarrus County, NC

AUGUST 2008

Cabarrus County Central Area Plan
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1.0 Introduction

1.1 The Study Area and its Context

Located along the burgeoning I-85 corridor northeast of Charlotte, Cabarrus County has experienced rapid growth and is one of the faster growing counties in the Charlotte region. A significant amount of development, such as Lowes Motor Speedway and Concord Mills Mall, is readily visible near I-85. Unlike the I-85 corridor, the central area of the county, which is the focus of this study, is relatively less developed. The Central Area study area is a pre-defined area roughly between Concord and Mt. Pleasant that is bordered by Rocky River Road and Cold Springs Road. The Central Area lies on the east side of the city of Concord, directly in the path of growth. In addition to county land, it includes land that lies within the jurisdictions, extraterritorial jurisdictions (ETJs) and spheres of influence of the City of Concord and the City of Kannapolis. (See Figure 1, Context and Study Area Map.) As indicated on the Context and Study Area Map, much of the study area may one day be annexed by one or the other municipalities.

1.2 Purpose of the Plan

The Cabarrus County Central Area Plan was created in response to the county's need to better manage growth—and the impacts of it—in this unincorporated area. The attractiveness of this area for residential growth is due in part to good schools, lower property taxes and easy access via the recently improved NC-49. With an agreement in place that requires the City of Concord to allow developers to tap on to city water and sewer lines, neither the county nor the city have any control over the extension of utility lines in the area, and therefore, have little control over growth.

The plan establishes a vision to guide future growth and development in the study area, to set standards for achieving quality growth and to establish a framework for consistent land use planning and growth management across the three affected jurisdictions. More importantly, this plan is intended to be used by all three jurisdictions to guide decisions that ultimately prioritize public investment decisions, particularly in connection with the provision of public infrastructure. In doing so, such investments may be made so as to direct growth in a manner that is consistent with the community's long-range vision for the area.

To that end, this plan serves as a policy guide, and while it does not have the force of law, it does provide the information required to make informed decisions and to define growth management tools that will effectively achieve the vision expressed in this plan. This plan has a planning horizon of 20 years; however, it should be reviewed and updated every five years to take into consideration new and changing circumstances.

1.3 The Process to Develop the Plan

A collaborative, open planning process was the key to the success of the three-month planning process. The plan could not have been completed without the efforts and dedication of the county's Board of Commissioners, Planning and Zoning Commission, professional staff, and Advisory Committee and the participation of hundreds of community residents and business owners.

At the start of the planning effort, a project Advisory Committee representing a broad cross-section of Central Area residents, business representatives and concerned citizens was established. The role of the Advisory Committee was to assist in the collection and interpretation of area data, communicate plan activities to community members and encourage participation at scheduled events, and assist in the evaluation of draft plan elements. A list of committee members is provided in Appendix A.

With the committee established, the project team moved through a series of planning tasks, starting with the inventory, analysis and synthesis of information pertaining to existing conditions, opportunities and issues of importance for the Central Area. A number of reports, plans and maps that were reviewed provided vital information. These important reports, plans and maps included, but were not limited to, the following:

- Cabarrus County Eastern Area Plan
- Harrisburg Highway 49 Overlay District
- Harrisburg Highway 49 Corridor Overlay District Guidelines
- Midland Area Plan
- NC 73 Corridor Study
- Northwest Area Plan
- US 64 / NC 49 Corridor Study
- Trail Development Guidelines
- NC 73 / Poplar Tent Small Area Plan
- City of Concord Land Use Plan (2007)
- City of Kannapolis 2015 Land Use Plan
- The Livable Communities Blueprint (2002)
- Cabarrus County Parks and Bicycle / Pedestrian Master Plan

The information gathered through the review of these documents was supplemented with input obtained from a variety of key stakeholders and individuals who deal on a regular basis with one or more aspects of the issues addressed by this plan. Among those included in these meetings were staff members from Cabarrus County, the City of Concord and the City of Kannapolis, local and state agencies, and groups representing a variety of interests. The insights offered by these individuals aided in the process by providing an additional layer of information that cannot be gleaned solely from reports, observations in the field or data analysis.

Following the review of information and stakeholder interviews, the first two in a series of public meetings was held with the community. These meetings were designed to initially engage the community in the planning process and early data collection results, as well as learn from the community on area issues, aspirations and priorities. The feedback collected from these meetings served as the foundation for the plan's framework—the broad goals and objectives—upon which initial plan concepts were based. (See Section 3.0, Plan Framework.)



The process to create the Central Area Plan began with two community meetings, held back-to-back on consecutive evenings, to engage the public, detail early data collection results and gather additional information to determine the community's priorities for the plan.

At a mid-point in the planning process, a two-day charrette, or design workshop, was held. This collaborative workshop was organized to develop feasible land use alternatives and supporting development concepts in a series of focused sessions. Over the two-day period, the project team worked closely with county staff, the Advisory Committee and community members to generate a series of concepts and ideas for review and assessment. Each day, more than 50 people participated in the charrette.



Midway through the planning process, a two-day charrette was held to generate a series of concepts and ideas. More than 50 people participated each day.

With initial concepts established, the plan entered the final stages of the process with the detailed refinement of a single, preferred alternative. Additional Advisory Committee and community meetings were held to present draft plan results and solicit feedback on specific details of the plan.

Table 1.1: Schedule of Key Public Outreach Milestones

Advisory Committee Kick-Off	Apr. 1, 2008
Stakeholder Interviews	Mar. 30 – Apr. 1, 2008
Community Meeting #1 – North	Apr. 9, 2008
Community Meeting #1 – South	Apr. 10, 2008
Two-Day Planning Charrette	Apr. 22-23, 2008
Advisory Committee Meeting #2	Apr. 22, 2008
Community Meeting #2 – North	Apr. 23, 2008
Community Meeting #2 – South	Apr. 24, 2008
Advisory Committee Meeting #3	May 7, 2008
Advisory Committee Meeting #4	May 13, 2008
Advisory Committee Meeting #5	May 20, 2008
Community Meeting #3 – Open House	May 22, 2008
Community Meeting #4 – Final Open House	July 15, 2008

2.0 Existing Conditions: The Central Area Today

2.1 Overview of Existing Conditions

The existing conditions of the central area of the county were examined to gain an understanding of the features that are valued by the residents and property owners and the factors that are likely to influence future development. Through this examination, the existing conditions were also assessed to identify the issues and opportunities facing the central area. Among them are the following:

- The area is predominantly rural in character and the ability to maintain that character is threatened by the increasing growth pressures stemming from rapid urbanization of the Charlotte metropolitan area.
- Many portions of the study area lack water and sewer service which is a limiting condition.
- Regional growth is increasing traffic volumes and the demand for an improved road network, which is having an impact on circulation in the study area.

- Environmental issues are mostly associated with soils and water quality. Concerns are being raised about water quality degraded by sediment as a result of increasing stormwater runoff eroding soils, particularly on denuded sites cleared for development purposes, and carrying such pollutants into area streams and rivers.



The Central Area is predominantly rural in character, yet threatened due to increasing growth pressure.

The outcome of the analyses conducted was utilized later in the planning process to determine the most appropriate direction for future growth and development (see Section 3.0), to develop a plan that is a reflection of the community’s desires (see Section 4.0) and to pinpoint specific action steps to implement the plan (see Section 5.0). With the exception of demographics, the resulting plan addresses all of the elements discussed in this section.



2.2 Demographics

An estimated 21,332 residents were present in the study area in 2007, 23.7% more than the 17,239 in 2000. Household growth increased 25.5% during the same seven-year period, expanding from 6,525 households in 2000 to 8,190 households in 2007. Most residents and households are in the southern and western portions of the study area, near Concord and Harrisburg.

Table 2.1: Population Growth in the Central Area, 2000-2007

Area	2000	2007	2000-2007 Pct. Change
Study Area	17,239	21,332	23.7%
Cabarrus County	131,063	159,612	21.8%

Source: ESRI

2.3 Land Use and Market Conditions

General Development Pattern

Comprised of more than 39,000 acres (or 60.94 square miles), the Central Area of Cabarrus County is best described as mostly rural, dominated by agricultural uses—or remnants of agricultural uses—and vacant, undeveloped parcels. With portions under increasing growth pressure due to their access to roads, schools and the growing municipalities of Concord, Kannapolis and Harrisburg, the Central Area has been transitioning to



One can still see remnants of Cabarrus County’s agricultural uses throughout the study area despite the area’s transition to more low-density residential uses.

include more low-density residential uses. The leading urban and suburban development edge is proximate to these municipalities on the western side of the county, nearest the I-85 corridor. Land use diversity and density rapidly decrease in intensity from the west side to the east side of the study area, with the lowest areas of intensity in the northern half near the Rowan County line. A small amount

of non-residential uses are present, however, expanding the range of uses that are shaping and redefining the area. (See Figures 2 and 3, the Existing Land Use Map and Existing County Zoning Map, respectively.)

Residential

Single-family, detached residential units comprise 97.4% of the current housing stock in the study area. The highly homogeneous unit mix is primarily low-density in the northern portion of the study area, with a more diverse density mixture in the southern area where public utilities have been made available by the City of Concord.



Development pressure continues to encourage the building of new subdivisions in Cabarrus County's Central Area.

It is projected that there is currently 9,272 housing units in the study area, with an additional 4,369 lots fully entitled by Cabarrus County or the City of Concord.

(See Figure 4, Approved Subdivisions.) Population growth projections and previously entitled lots indicate that the study area will grow by 9,844 to 11,044 housing units by 2030, an average annual increase of 5.5%.

- Single-family, detached homes will increase from 9,034 units in 2008 to between 18,178 and 19,178 units in 2030.
- Single-family, attached homes (townhouses) will increase from only 10 units in 2008 to between 210 and 310 units in 2030. This assumes the addition of two townhouse communities (one per decade) ranging in size from 100 to 150 units each.
- There are currently 228 apartment units in the study area (contained in two communities). It is forecasted that an additional two communities could be added to the study area by 2030 (one per decade), each community is assumed to have approximately 250 to 300 units. A total of 728 to 828 apartment units could be supported by the study area by 2030.
- The projected mix of unit types in 2030 for single-family, attached, single-family, detached, and apartments is 94.5%, 1.6%, and 1.4%, respectively.

Closings on new construction single-family residences and townhomes showed mixed activity and expansion between 2003 and 2007 in the areas designated as Township 5 and Township 11 in Cabarrus County, those townships in the study area. According to information from the M.O.R.E. Report (Market Opportunity Research Enterprises), 1,205 new construction single-family closings were reported in the five-year period since 2003, the majority, or 957 units in Township 11. During the same period, 25 condominium and/or townhomes closings were reported in the study area, all in Township 11. Among the active residential subdivisions in the study area there are 5,395 total planned lots, of which 4,369 remain.

Table 2.2: Single-Family Closings in the Central Area and Cabarrus County, 2003-2007

Year	Twp. 5 Closings	Twp. 11 Closings	Total Closings Twps. 5 & 11	Cabarrus County Closings	Twp. 5 & 11 % of County
2003	59	117	176	1,181	14.9%
2004	47	146	193	1,566	12.3%
2005	32	224	256	2,042	12.5%
2006	53	241	294	2,425	12.1%
2007	57	229	286	1,844	15.5%
Total	248	957	1,205	9,058	13.3%
Annual Average	50	191	241	1,812	

Source: M.O.R.E. Report

Table 2.3: New Construction Townhouse Closings in the Central Area and Cabarrus County, 2003-2007

Year	Twp. 5 Closings	Twp. 11 Closings	Total Closings Twps. 5 & 11	Cabarrus County Closings	Twp. 5 & 11 % of County
2003	0	0	0	104	0.0%
2004	0	0	0	90	0.0%
2005	0	0	0	115	0.0%
2006	0	10	10	174	5.7%
2007	0	0	0	140	0.0%
Total	0	10	10	623	1.6%
Annual Average	0	2	2	125	

Source: M.O.R.E. Report

Retail

Approximately 75,000 square feet of neighborhood retail currently exists within the Central Area. With the growth in and near the area, more retail development can be expected.

Retail projections are based primarily on entitled developments, as retail demand by household growth is difficult to accurately measure because the study area is divergent from a natural retail trade area. Much of the demand and development within the study area will be driven by outside households.

There are two major entitled projects in the Study Area with known square footage. A third site has received approval on the sketch plan. First, the Aston Properties retail development south of NC 49 has been approved for 800,000 square feet of retail space, reportedly anchored by a Super Target. It is anticipated that the site will be fully developed between 2010 and 2020.

Second, the Mills at Rocky River was approved for 565,000 square feet of retail as part of a mixed-use, conditional rezoning in 2006. The Mills is located along Rocky River Road, approximately three miles south of NC-49, the nearest major highway. The lack of access will make this site less attractive to a major anchor, decreasing the probability of retail being developed on this site before 2030. Additionally, residential construction in

this community has currently stalled.

A third site along Flowes Store road controlled by Little Texas LLC has recently received zoning approval as a Planned Unit Development. The site plan shows approximately seven acres reserved for commercial uses, but the retail square footage is unknown. At a floor area ratio of 0.25, the site would support 76,000 square feet for a neighborhood shopping center.

In addition to the entitled retail, two additional neighborhood retail centers, ranging in size from 75,000 to 125,000 square feet each, could be supported by 2030.

Office

There is no multi-tenant office space located in the Study Area. Approximately 95% of the current corporate office market in the Charlotte region is located in Mecklenburg County. It is unlikely that this market will decentralize into the Study Area because of Mecklenburg County's existing development capacity, road network, proximity

to the Charlotte-Douglas International Airport, and recent transit development.

It is, however, forecasted that the NCRC will impact the study area with both direct and indirect needs for office, retail, and residential uses.

- Forecasts for multi-tenant office space used a 10% capture rate for new development in 2020 and a 20% capture rate in 2030. Capture rates were based on direct and indirect job forecasts completed for NCRC, and provides an average of 200 square feet of office space per employee.
- Between 400,000 and 500,000 square feet of multi-tenant corporate office space could be supported in the study area.
- An additional 80,000 to 120,000 square feet of professional, or retail, office space could be supported by 2030, based primarily on household growth. The demand for these service related uses such as small medical, insurance, attorney, and real estate offices is driven by area household growth.
- It is impossible to forecast for major relocations, or 'drop-ins', that could occur within the study area

Industrial

The Charlotte Regional Partnership (CRP) tracks a 16-county region, including Cabarrus County. As of 2006, the average industrial park size throughout the 16 counties contained 230 acres. More than 50% are located within three miles of a major Interstate highway.



According to the market assessment, the Central Area will be able to support an additional 400,000 to 500,000 square feet of office space.



Most of the approximately 1,800 acres of industrial property is within one-half mile north or south of NC 49.

There are approximately 1,800 acres of industrial property within the Study Area, concentrated within one-half mile north or south of NC-49. This portion of the Study Area emerged in the 1950s and 1960s due to rail and highway access. Approximately 92% of the industrial acreage is located along NC-49. The remaining 150 acres are located within one mile of I-85 in the northern portion of the Study Area.

In addition to flex industrial space, which could be incorporated into mixed use developments, the study area could likely support one industrial park between 250 and 350 acres in size by 2030. Land compiled within three-miles of the I-85 interchange would be most competitive for the development of an industrial park.

2.4 Economic Development

The demand for retail, office, and industrial space is directly tied to the population and future population of the study area. However, in the Central Area, the availability of water is the most limiting factor to growth and development. Supporting details, including employment trends in the study area, are as follows:

Retail:

- Demand is typically driven by the growth in number of households, income and expenditures.
- Retail demand will also be driven by household demand in areas surrounding the study area, such as Concord, Kannapolis, Mount Pleasant, and Harrisburg.
- Entitled retail exceeds the initial demand of projected population within the study area, but can be supported by outside household growth as part of regional and neighborhood commercial centers.
 - There is more than 1 million square feet of retail space entitled.
 - There is demand for at least two additional grocery store anchored neighborhood centers, including the existing Food Lion at NC-49 and US-601 and the entitled Super Target at the Aston Properties development.

Office:

- There is no multi-tenant corporate office space in the Study Area.
- Future demand of multi-tenant office space will primarily be based on direct and indirect impacts of the North Carolina Research Campus (NCRC).
- Household growth in the Study Area will support a moderate amount of professional office space.

Industrial:

- New employment centers should be focused on the northern (Lane Street/I-85 interchange) and western portion (proposed Westside Bypass and NC-49 intersection) of the study area, where roadway connections, utilities, and adjacent land uses are supportive.

Employment Issues & Opportunities:

- The North Carolina Research Campus will increase the Cabarrus County job base by 12,780 by 2015.
- There will be 2,500 local jobs lost at Philip Morris by 2010.
- Opportunities exist for the Stonewall Jackson site, agri-business/tourism and the Incubator Farm.

Table 2.4: Employment Trends by Industry, Study Area, 2000 - 2007

Industry	2000	2007	Net Gain /Net Loss	Pct. Change
Agriculture/Mining	35	32	-3	-8.4%
Construction	848	1,122	274	32.3%
Manufacturing	1,726	1,453	-273	-15.8%
Wholesale Trade	489	588	99	20.2%
Retail Trade	1,276	1,453	177	13.9%
Transportation / Utilities	684	727	43	6.2%
Information	230	235	5	2.2%
F.I.R.E.	766	930	164	21.3%
Services	3,037	3,825	788	25.9%
Public Administration	281	321	40	14.1%
Total	9,372	10,684	1,312	14%

Source: ESRI

2.5 Environment and Natural Resources

Hydrology and Drainage

Most of the Central Area is located in the Yadkin – Pee Dee River Basin with creeks and tributaries draining to the Rocky River. (See Figure 5, Environmental Features Map). The northern tip is located in a water supply watershed that drains to the Lake Fisher reservoir. Development in the water supply watershed is limited by density and impervious area maximums (2 dwelling units per acre or 24% built-upon area unless the high density option is utilized).

Soils

Soils in the study area present another set of development limitations. While some are considered prime farmland soils and soils of statewide importance, there are many that have characteristics that are not supportive of development. (See Figure 6, Soils.) According to the Cabarrus Soils and Water Conservation District (SWCD), many of the soils are rated as “very limited” for one, if not more, of the following uses: buildings with or without basements, local roads and streets and septic systems. Many also have hydric inclusions, or wet areas, associated with these types of soils. These soils tend to be “very limited” for most types of development as well. These soils are rated as such due to their propensities to flood and for the depths to their saturated zones. Depth to soft or hard rock presents limitations for foundations, roads and septic tanks in the study area. Often, extra reinforcement is required when building sidewalks and driveways to prevent cracks from developing in concrete, asphalt, bricks and blocks.

Other soils in the study area pose “severe” limitations, including but not limited to the following: Armenia loam, Altavista sandy loam, Chewacla sandy loam, Iredell loam, Sedgefield sandy loam and Wedhadkee. Such soils tend to limit most types of development as well, and wetlands associated with these soil types are usually regulated by both state and federal regulations regarding soil disturbance. These types of soils are highly erodible, drain poorly and may affect water quality when vegetation is disturbed.

Plants and Animals

Also, present in and near the study area are Natural Heritage Inventory (NHI) sites, which are mapped sites where threatened or endangered plant or animals—or their habitats—have been located. These five sites, two located on Miami Church Road, Frank Liske Park, Old Bell Mission Church and New Testament Baptist Church, are located on Figure 5, the Environmental Features Map.

Open Space and Natural Areas

Other environmental features that define the area are the open pastures and dense vegetation. Community members participating in the process expressed their support for preserving the vegetation, water resources and other natural features that contribute to the rural character of the Central Area. Related to the protection of critical environmental resources, the protection of vegetation in the form of larger buffers along rivers, creeks and streams was of primary interest. The desire for protection was mostly in response to the clear-cutting that is occurring in the county. The county has open space and preservation requirements, including a Waterbody buffer, as well as primary and secondary open space protection (steep slopes, tree, floodplain, etc.).



During the process to develop the Central Area Plan, the public stressed the importance of protecting vegetation in the form of buffers along streams, creeks, lakes and rivers.

2.6 Transportation

The study area is served by a network comprised of federal and state highways and local roads (see Figure 7, Transportation Facilities). Traffic congestion exists on some segments of roadways in the Central Area, and traffic volumes are increasing as the population and the number of households continue to rise.

Congested roadways:

- I-85 is approaching capacity
- NC 49 operates over capacity west of US 601 and in the vicinity of Rocky River Road; although NC 49 has been recently widened, other segments of NC 49 are approaching capacity. In the 2030 Metrolina Regional Model, NC 49 is shown to be highly congested between US 601 and Cold Springs Road and between Pharr Mill Road and Rocky River Road.
- US 601 between NC 49 and Flowe Store Road
- Branchview Drive / Union Street between Crestside Drive and NC 49
- NC 73 through the study area is approaching capacity.

Congested intersections reflected in the 2030 peak hour V/C ratios obtained from the Metrolina Regional Model:

- I-85 at US 29
- NC 73 at NC 49

Table 2.5: Traffic Volumes

Roadway	Approximate Location	2006 AADT
I-85	North of Exit 68	70,000
I-85	South of Exit 68	78,000
I-85	North of US 601 (Exit 58)	77,000
US 601	North of NC 49	23,000
US 601	South of NC 49	20,000
US 601	North of Fairbluff Road	12,000
NC 73	West of Gold Hill Road	14,000
NC 73	East of Gold Hill Road	13,000
NC 73	West of Irish Potato Road	8,500
NC 49	West of NC 73	9,600
Old Salisbury – Concord Road	East of Burrage Road	5,600
Old Salisbury – Concord Road	East of Penninger Road	4,600
Old Salisbury – Concord Road	Northeast of Neisler Road	4,500
Old Salisbury – Concord Road	North of Lane Street	10,000
Old Salisbury – Concord Road	South of Lane Street	4,000
Lane Street	West of I-85	10,000
Lane Street	East of I-85	17,000
Old Charlotte Road	North of NC 49	8,900
Rocky River Road	South of NC 49	6,600
Roberta Road	Northeast of Roberta Church Road / Stough Road	8,700

Source: NCDOT

Roadway improvements have been proposed or planned that are intended to improve mobility and reduce congestion in and near the Central Area. There are 12 roadway improvement projects on the Cabarrus County Long Range Transportation Plan that would affect the study area. The roads that have a direct impact on the Central Area are NC 49, US 601, NC 73 and Poplar Tent Road.



Among the major roadways that serve the Central Area are US 601, NC 73 and NC 49 (shown above).

Table 2.6: Long Range Transportation Plan Projects in the Vicinity of the Study Area

Horizon Year	Roadway	Extents	Length (mi)	Project Description	Estimated Cost
2010	NC 49	Harrisburg to east of Walker Road	11.6	Widen from 2 to 4 lanes	\$166.5 million
2020	I-85	Speedway Blvd. to US 29/601 connector	14.7	Widen from 4 to 8 lanes	\$178.6 million
2020	Poplar Tent Road	Derita Road to Westside Bypass	6.0	Widen from 2 to 4 lanes	\$4.8 million
2030	NC 3	Lake Concord Road to US 601	6.6	Widen from 2 to 4 lanes	\$19.3 million
2030	Westside Bypass	Weddington Road to NC 3	2.56	Widen / new location 4 lanes	\$25.6 million
2030	US 601	US 29 to NC 3 (S. Union Street)	3.7	Widen from 2 to 4 lanes	\$9.1 million
2030	US 601	NC 3 (S. Union Street) to Flowe Store Road	1.15	Widen from 2 to 4 lanes	\$2.5 million
2030	Cabarrus Avenue	US 29 to NC 3	2.56	Widen from 2 to 4 lanes	\$6.6 million
2030	NC 73	NC 3 to NC 49	7.02	Widen from 2 to 4 lanes	\$10.2 million
2030	Old Salisbury Road	NC 3 to eastern leg of Penninger Road	3.11	Widen from 2 to 3 lanes	\$3.7 million
2030	Pitts School Road	Poplar Tent Road to Roberta Road	2.84	Widen from 2 to 4 lanes	\$11.1 million
2030	Old Charlotte Road	Cabarrus Avenue to US 601	1.09	Widen 2 lanes	\$763,000

Source: Long Range Transportation Plan, updated May 2005

Five other projects are named by the Cabarrus–Rowan MPO as priorities. They are:

- Widen I-85 from NC 73 to Exit 68 in China Grove.
- Westside Bypass US 29 to NC 49. This project will include sidewalks, bike lanes and mast arms. While currently unfunded, NCDOT has started preserving right-of-way.
- Widen and improve NC 3 (Branchview Drive) from Lake Concord Road to US 601. This project will include sidewalks, bike lanes and metal pole mast arms.
- Upgrade the existing two lanes of NC 73 from NC 3 to NC 49, including a bypass at one new location. This project will include sidewalks, bike lanes and mast arms.
- Widen Rocky River Road from I-485 to NC 49. This project will include sidewalks, bike lanes and mast arms.

Public transit has the potential to alleviate some of the congestion by providing an alternative to single-occupant vehicular travel. However, the current population of the Central Area does not generate the ridership levels to warrant more service than what is currently offered. Presently, local transit options are limited in the study area to two services. Concord/Kannapolis Area Transit is a service provided jointly by the two cities, the Federal Transit Administration (FTA) and the North Carolina Department of Transportation (NCDOT). It operates six routes on weekdays and Saturdays. Cabarrus County Transportation Service operates a county-wide service providing transportation for special populations the county. The established policy currently allows riders to be taken to various destinations with a minimum 24-hour prior notification.

The Livable Communities Blueprint of 2002 and the Cabarrus County Parks and Bicycle/Pedestrian Master Plan, two of the documents reviewed during this process, recognize the need to provide bicycle and pedestrian facilities, even in the rural areas of the county including this Central Area. Recommendations include the following:

- Bicycle and pedestrian facilities as part of future roadway construction and/or land development projects.
- Require a public access component to all new and existing public utility rights-of-way.
- Develop bike trail corridors that link existing and proposed recreational facilities.

In addition, the City of Concord's 2007 Land Use Plan recognizes that development encroaching on the countryside is placing new levels of stress on roadways not designed to handle the congestion. It lists among the priorities connecting existing sidewalks for new and infill sidewalk projects, and it recognizes that compact and mixed-use development supports transit and multiple modes of mobility thereby reducing vehicle trips and distances. The plan urges that roadway, transit and pedestrian networks be integrated and be planned in concert.

2.7 Utility Infrastructure

Water and Sewer

Pressure for water and sewer service exists, especially in the southern portion of the study area, where residential development is concentrated and a number of new residential subdivisions have been approved. However, water and sewer service is limited in the Central Area. (See Figure 8, the Utility Systems Map.)

Water is supplied by both the City of Concord and City of Kannapolis, with wholesale water provided by the Water and Sewer Authority of Cabarrus County (WSACC). WSACC is an independent, incorporated public body funded by user fees with no taxing authority supporting the county, cities of Concord and Kannapolis and towns of Harrisburg and Mt. Pleasant. WSACC is the primary planning agency in the county for water and sewer facilities, and provides the wholesale transportation and treatment of water for its organizing jurisdictions and reservoir management. The organization is in the process of updating its master plan this year. WSACC manages and operates:

- Rocky River Regional Wastewater Treatment Plant
- Mt. Pleasant Water Treatment Plant
- Muddy Creek Wastewater Treatment Plant

- Lake Don T. Howell Reservoir
- Black Run Reservoir
- Lake Concord Reservoir

The City of Concord has two water treatment plants which draw water from three surface reservoirs. The Coddle Creek Water Treatment Plant draws water from Lake Don. T. Howell. The Hillgrove Water Treatment Plant draws water from lakes Concord, Fisher and Don T. Howell. Concord also purchases water from the City of Kannapolis. Kannapolis draws its water primarily from Kannapolis Lake, but also from Second Creek / Back Creek and Lake Don T. Howell. Meeting future water capacity needs in Cabarrus County are affected by the limitations of the interbasin transfer, which involves taking water from the Catawba River and returning treated water to the Yadkin-Pee Dee River.

The current lack of water service in the Central Area is the most limiting factor in terms of development. Much of the residential development within the study area is served by individual wells, which have to be deep to generate a sufficient supply. Even with service available and the possibility of future line extensions, the county cannot support new industries that are heavy users of water.

Sewer service is provided by both the cities of Concord and Kannapolis. Concord operates more than 496 miles of wastewater lines. Likewise, Kannapolis operates and maintains more than 210 miles of wastewater lines. Both Concord and Kannapolis systems tie into the WSACC wastewater system.

Stormwater

One of Cabarrus County and the study area's most pressing utility infrastructure issues is stormwater. Unlike the cities, the county does not have a stormwater program in place that exceeds the state's requirements for stormwater management. There is currently no county funding to better manage stormwater, other than simply reviewing site plans, so the county would have to implement a county-wide stormwater utility fee or some other funding mechanism.

2.8 Other Community Facilities and Services

Parks and Recreation

Population growth is driving the need for more parks and recreation facilities in Cabarrus County, including the study area. The county has identified a need for a regional park facility east of I-85 at Flowe Store Road on county-owned land. Phase one of this facility, which will be located on 50 acres, will have ball fields; phase two will contain passive recreational features. (See Figure 9, Community Facilities Map.)

Passive parks, including the Incubator Farm, will supplement other parks and recreational facilities in the area. The farm will be located at the center of a property that will have trails, educational stations, bird watching areas and larger riparian buffers along its creek to encourage more wildlife around the farm. The county hopes the demonstration farm can be a model in North Carolina, used as an educational tool with displays on catching and retaining water for use, irrigation and how particular crops draw bees for pollination, for example. The state's Department of Agriculture is currently considering a \$3.6 million grant request from the county to fund the Incubator Farm. The farm will raise only crops, not animals, and it will also have limited playground equipment and picnic

shelters. The Incubator Farm will provide farm-lots for those interested in agriculture education and research.

There are no plans for other parks or other recreational facilities in other parts of the study area, particularly the northeastern section of the study area. However, according to park and recreation staff interviewed among stakeholders, a survey of county residents indicates that citizens want parks of a more passive nature in the study area. In the eastern section of the study area, the county is anticipating a need for some type of



In the eastern section of the study area, the county anticipates the need for some type of park facility near the Cabarrus Arena and Events Center.

park facility near the Cabarrus Arena and Events Center once hotels and supporting commercial uses are constructed. According to park officials, there are no funds available for land acquisition for parks of any kind without a bond referendum; however, funds have been identified in the county's five-year plan for parks in nearby Midland and Mt. Pleasant, although those sites are outside the study area.

To address this situation of a growing demand and a lack of funding, the county and the school system adopted a joint plan 12 years ago that identifies opportunities to co-locate schools and parks. Based on this plan, the current policy regarding land acquisition for new schools is intended to facilitate this co-location concept. Sites acquired for new schools, particularly elementary schools, should encompass land area that exceeds what is required for the school itself so that a portion of a school site may be utilized for a park facility.

Civic and Institutional Facilities

Cabarrus County Schools has seven school sites in the study area: Concord Middle School, W.M. Irvin Elementary School, A.T. Allen Elementary School, J.N. Fries Middle School, Central Cabarrus High School, Rocky River Elementary School and C.C. Griffin Middle School. In addition, the state's Stonewall Jackson Training School is in the study area. (See Figure 8, the Community Facilities Map.)



One of the school facilities in the study area is Rocky River Elementary School.

Cabarrus County Schools is always seeking sites for new schools throughout the county, particularly in high-growth areas. However, no specific site has been identified as a future school site within the study area. According to the superintendent, Dr. Barry Shepherd, Cabarrus County Schools is trying to negotiate the purchase of property to construct a new elementary school that would replace the A.T. Allen Elementary School and add a new school near C.C. Griffin Middle School.

Public Safety

Law enforcement is less of an issue here relative to other areas of the county. The Cabarrus County Sheriff's Department and City of Concord Police Department serve their respective portions of the Central Area. As shown on the Community Facilities Map (Figure 8), the city's police department is located in downtown Concord and the sheriff's department operates sub-stations at the Cabarrus Arena, at the Mt. Pleasant Town Hall and at the Midland Town Hall. Both departments are responsible for multi-faceted aspects of law enforcement, but due to size and geography, the sheriff's department handles considerably more transportation-related duties. In the Central Area, the traffic congestion, particularly near schools during peak periods, is an issue. Ongoing communication and meetings held monthly to discuss common issues of concern enhance coordination between departments.

There are five fire departments in the study area (see Figure 9, Community Facilities Map). While the number of fire stations and the amount of equipment is sufficient to serve the Central Area today, like law enforcement, there will be needs for additional staff as growth continues.



The Allen Volunteer Fire Department is one of five fire stations that serve the Central Area.

Libraries

There are no public libraries within the Central Area. The closest libraries are located in Concord and Mt. Pleasant.

2.9 Historic and Cultural Resources

The Stonewall Jackson Training School site, owned by the state, has within it the only designated historic district in the study area (see Figure 2, Existing Land Use Map). According to some of the stakeholders participating in the planning process, there has been limited interest in the community in preserving a few of the unique cottages constructed on the site that



The Stonewall Jackson Training School is owned by the State of North Carolina but could become a site for redevelopment.

housed boys at the institution, which opened in the 1930s. While there are multiple structures on the North Carolina list of historic properties and the National Register, there are no local districts in the unincorporated portions of the county. Relatively little has been done to preserve historic and cultural resources in the study area, although stakeholders indicated that there are several types of structures and sites worthy of preservation. Examples include the following:

- Former mining sites (*Note: While some of these former mine sites have been identified, most locations are unknown because a survey of existing historical structures and properties has never been undertaken. These unknown, unmapped sites become problematic when rural land is converted into subdivisions, as they are potential safety hazards.*)
- McCurdy Log House

- Farms (*Note: Community members expressed hope that it may be possible to team with entities at the North Carolina Research Campus to work with and study niche farms in the study area, particularly the Incubator Farm site.*)
- According to stakeholders interviewed, there are several farmhouses which are over 50 years old and possibly eligible for preservation

3.0 Plan Framework

The broad planning ideas, goals and objectives provide the support, or “framework,” used as the basis for developing land use and growth management solutions. From the existing conditions assessment, and importantly, direct feedback from the Advisory Committee and measured community feedback, the following broad framework elements were established for the Central Area Plan. These framework elements were used to guide the creation and evaluation of plan alternatives.



Broad planning ideas, goals and objectives provided the “framework” used to develop land use and growth management solutions.

- ❖ Protect large portions of the northern and southern area as rural and/or agricultural in character
- ❖ Where infrastructure is supportive, establish a rational, non-sprawling pattern of low density development, and where appropriate, rural, suburban and neighborhood village clustering
- ❖ Focus activity centers at logical intersections and discourage commercial strip development
- ❖ Encourage light-industrial and other employment centers within the west-central portion of the study area where roadway connections and adjacent land uses are supportive
- ❖ Protect the integrity and character of NC 73 and US 601
- ❖ Ensure strong connectivity, where appropriate, and reduce congestion issues
- ❖ Protect and enhance environmental features and open spaces, and seek opportunities for parks, greenways and other related features
- ❖ Take into consideration schools, infrastructure, roads, other facilities and services
- ❖ Allow for zoning and other growth management tools for use by all affected jurisdictions to consistently guide development in accordance with the plan

4.0 The Central Area Plan

The Central Area Plan Map (Figure 10) is a conceptual representation that illustrates the development patterns leaders and citizens of Cabarrus County envision for the future of the study area. The map is descriptive, not prescriptive, conveying the community's desires for the future and the flexibility needed to accommodate unforeseen opportunities that may achieve the community's new vision in exciting new ways. The map's features include the following:

- Clearly defined and delineated development areas (land use categories) that reflect the community's desire to contain and/or encourage growth in specific geographic areas;
- Existing uses, including residential neighborhoods and publicly owned and maintained sites and facilities (i.e., parks, treatment plants, schools), that are likely to remain
- Transportation network improvements that support the future land use pattern envisioned by the community

Eight land use categories are depicted on the map. Each category is intended to indicate a predominant land use—or set of uses—as well as other features that define the character of the category. A brief description of each category is provided below. Each description is consistent with the ideas and vision the community has for the future of each category. These descriptions do not suggest a change to existing development within each category; instead, they suggest a direction moving forward and list qualities to be embodied by new development and redevelopment.

Rural Residential

- Rural: Comprised mostly of lands determined to remain agrarian in the future. Residential uses may be allowed but only to support agrarian purposes and are not the predominant use. Therefore, residential uses are provided only at the very lowest densities.
- Predominant Use(s): Agricultural and single-family residential (density up to 1 unit per 3 acres, or up to 1 unit per 2 acres provided additional development standards are met)
- Characteristics:
 - Open space consisting of large stands of trees, other naturally vegetated areas and fields and pastures preserved
 - Scenic views maintained
 - National Heritage Inventory (NHI) sites are protected
 - Agricultural uses are present
 - Natural features are avoided by development
 - Clustering is a common approach to development design
 - Architecture is not a dominant feature of the landscape, but large and sometimes unique structures are used for orientation
 - Historic structures and properties are identified and preserved
 - Typically, two-lane roads with shoulder and ditch (no curb and gutter)



The Rural Residential land use category is comprised of mostly agricultural lands and the very lowest residential densities, one unit per three acres, or one unit per two acres if additional development standards are met.

Very Low Density

- Very Low Density: Intended to remain predominantly rural in character while allowing residential uses to occur at very low to low densities.
- Predominant Use(s): Single-family residential (density up to 1 unit per 2 acres, or up to 2 units per acre provided additional development standards are met)
- Characteristics:
 - Trees and large, naturally vegetated areas are preserved
 - Natural features are avoided by development
 - Clustering is a common approach to development design
 - Architecture is sensitively integrated into the landscape
 - Typically, two-lane roads with shoulder and ditch (no curb and gutter)



The Very Low Density Residential land use category is intended to remain predominantly rural, allowing single-family residential densities of one unit per two acres, or up to two units per acre if additional development standards are met.

Low Density Residential

- Low Density: Intended to allow low to moderate density residential accommodating community development.
- Predominant Use(s): Single-family residential (density up to 2 units per acre, or up to 3 units per acre provided additional development standards are met)
- Characteristics:
 - Significant hardwood trees and some naturally vegetated areas are preserved
 - Neighborhoods organize around a focal point, such as an informal park around a stream and other natural features
 - Clustering is a common approach to development design
 - Architecture and landscape are balanced
 - Typically, two-lane roads (curb and gutter may be present) are primary form of access, but collector street network connects two-lane roads to area highways



The Low Density Residential land use category is intended to accommodate community development, allowing single-family residential densities of up to two units per acre, or up to three units per acre if additional development standards are met.

Medium Density Residential

- Medium Density: Intended to allow moderately high density residential accommodating community development.
- Predominant Use(s): Single-family residential (density up to 3 units per acre, or up to 4 units per acre provided additional development standards are met); some units may be attached in the form of townhouses and/or duplexes
- Characteristics:
 - Neighborhoods organize around a focal point, such as a central green
 - Clustering is a common approach to development design
 - Architecture is the dominant feature of the landscape, but is enhanced by landscaping (existing or planted) to soften the hard edges
 - Typically, two-lane roads, collector streets and four-lane divided roads are primary form of access, and curb and gutter is more widely used



The Medium Density Residential land use category is intended to allow moderately high residential densities to accommodate community development, allowing single-family residential densities of up to three units per acre, or four units per acre if additional development standards are met.

Commercial

- Commercial: Intended to maintain existing areas for small-scale commercial development while accommodating future large scale commercial uses.
- Predominant Use(s): Retail
- Characteristics:
 - Hardscape open spaces, such as plazas with outdoor seating
 - Some uncommon natural features may be integrated into development to become the focal point in the built environment
 - Accommodates future large-scale retail
 - Architecture is the dominant feature of the landscape, but is enhanced by landscaping (existing or planted) to soften the hard edges
 - Located in areas where infrastructure can support (more intense than other land use categories)
 - Typically, highways, four-lane divided roads and collector streets are primary form of access, and curb and gutter is more widely used



The Commercial land use category is intended to maintain existing areas for small-scale commercial development while accommodating future large-scale commercial uses.

Industrial

- Industrial: Intended to provide small-scale industrial and office uses.
- Predominant Use(s): Light industrial as well as existing industrial
- Characteristics:
 - Some uncommon natural features are integrated into development to become the focal point in the built environment

- Architecture is the dominant feature of the landscape, but is enhanced by landscaping (existing or planted) to soften the hard edges
- Located in areas where infrastructure can support (more intense than other land use categories)
- Typically, highways, four-lane divided roads and collector streets are primary form of access, and curb and gutter is more widely used



The Industrial land use category is intended to provide small-scale industrial and office uses, including multi-tenant flex space.

Institutional / Civic

- Institutional/Civic: Recognizes areas where a public use is appropriate to serve the needs of the overall community.
- Predominant Use(s): Schools, libraries, churches, public safety facilities
- Characteristics:
 - Some uses, such as schools and libraries, are centrally located within a neighborhood or commercial area to be a focal point and organizing element in such development
 - Architecture is enhanced by landscaping (existing or planted) to soften the hard edges
 - Typically, highways, four-lane divided roads and collector streets are primary form of access



The Institutional / Civic land use category recognizes areas where a public land use is appropriate to serve the needs of the community. Appropriate public uses include schools, libraries, churches and public safety facilities.

Mixed-Use

- Mixed-Use: Accommodates development that combines two or more compatible uses to create pedestrian-friendly, higher density development where it is supported by infrastructure.
- Predominant Use(s): Retail, office, multi-tenant (flex space), single-family detached and attached residential and multi-family residential
- Big box developments are not considered appropriate in scale for these areas.
- Characteristics:
 - Uses are seamlessly integrated and may include multi-story structures that have two or more uses located within them (on separate floors)



The Mixed-Use land use category accommodates development that combines two or more compatible uses to create a pedestrian-friendly, higher density development where it is supported by infrastructure. Uses will include retail, office, multi-tenant flex space, single-family attached and detached residential, as well as multi-family residential.

- Architecture is enhanced by landscaping (existing or planted) to soften the hard edges
- Uses are not separated by buffers
- Located in areas where infrastructure can support (more intense than other land use categories)
- Typically, highways, four-lane divided roads and collector streets are primary form of access, and curb and gutter is more widely used
- Vehicle trips are captured internally
- Supports transit and mobility is enhanced by multiple modes

The map depicts five areas designated for mixed-use. Because of their locations and access to infrastructure, among other factors, each mixed-use area will accommodate a different mixture of uses. Some areas already have an existing mix of uses, such as the Lane Street / I-85 interchange, which is also a gateway for the City of Kannapolis. The following is a description of each mixed-use area in terms of the potential mix of uses:

- Lane Street / I-85 interchange
 - Multi-family residential
 - Mixed-Use
 - Higher density single-family residential
 - 100,000 square feet of grocery-anchored neighborhood retail (No single retail tenant of greater than 100,000 square feet)
 - Industrial
 - Apartment communities
 - Multi-tenant office
- NC 49 / US 601 intersection
 - Multi-family residential
 - Medium to higher density, single-family residential
 - Neighborhood retail (No single retail tenant of greater than 100,000 square feet)
 - Multi-tenant office
- Stonewall Jackson Training School site
 - Industrial
 - Multi-family residential
 - Neighborhood retail (No single retail tenant of greater than 100,000 square feet)
 - Multi-tenant office
- The Mills at Rocky River
 - 565,000 square feet of retail space
 - Multi-family residential
 - Single-family residential
 - Neighborhood retail (No single retail tenant of greater than 100,000 square feet)
 - Multi-tenant office
- NC 49 at Cabarrus Arena and Events Center

- Neighborhood retail (No single retail tenant of greater than 100,000 square feet)

Parks

- Parks: Recognizes existing parks serving the area, including some outside of the study area. They are depicted on the map for reference only. They vary in size and range of activities supported. While parks are a type of land use that can be accommodated in all land use categories, depending on the type of park, there may be a need to locate another park in the Central Area at some point in the future to meet established level of service standards. New parks should be considered in any future update to the Cabarrus County Parks and Bicycle/Pedestrian Master Plan.



The Open Space / Recreation land use category is intended to show the existing parks serving the area, including some outside of the study area.

In addition to the land use areas, the map also depicts three types of areas that suggest an additional set of attributes further defining and distinguishing each from other areas in the Central Area.

Activity Center

Activity centers are central nodes typically located at intersections of US and state highways where existing or proposed commercial uses should be concentrated to discourage strip commercial along these same highways.

Special Corridor

The segment of the NC 73 corridor that the community has identified as a scenic section of roadway, valued for its narrow width (two-lane road), winding alignment and views of rural landscape is designated as Special Corridor. Development in the area and in the region could increase traffic volumes on this road, and such increases could warrant a road widening to maintain mobility. In the event of future widening, this road (cross-section) could be designed to maintain the rural, uncongested quality it has today. Ideas for achieving this are as follows:

- Wide setbacks (minimize impacts of architecture on the viewsapes)
- Right-of-way buffers (preserve trees along roadside)
- Access management features (control location and frequency of turning movements with a median and minimum driveway spacing standards)

Special Use

These areas represent places that accommodate relatively unique civic, institutional and/or research activities in the region. On the map, this symbol is used to highlight the locations of the arena and the incubator farm.

5.0 Recommendations and Implementation Strategies

5.1 Overview of Recommendations and Implementation Strategies

The following is a set of recommendations established through the Cabarrus County Central Area Plan process, beginning with ideas gathered during the charrette held on April 23, 2008 and refined with input by the Advisory Committee in meetings following the charrette and by citizens attending the open house held on May 22, 2008. The recommendations are supplemented by specific strategies, or action steps, that will aid in the realization of the vision reflected in the plan. The recommendations and strategies are in no particular order; they are presented in a menu-style format, designed to allow those involved in implementation to evaluate each to determine priorities and identify short-, mid- and long-term tasks.

5.2 Land Use, Housing and Economic Development

(LU-1) Recognize the value of existing agricultural land and protect it for future agricultural purposes.

- Protect existing agricultural operations from encroachment of development, particularly new residential subdivisions.
 - Increase awareness of voluntary agricultural districts and the benefits to increase the number of properties in agricultural use—and increase geographic area—in the program.
- Protect prime farmland soils and soils of statewide importance in support of efforts to maintain agriculture as a viable component of the county's economy.
 - To enhance the effectiveness of existing regulations that include prime farmland soils and soils of statewide importance in the definition of open space, provide incentives to protect these soils. As a model for this, the Soil and Water Conservation District (SWCD) recommends the LEED certification process provision that gives such credit for protecting such soils.

(LU-2) Support additional residential development in the Central Area at varying densities based on the pattern expressed in the Central Area Plan map and the availability of public utilities and transportation access.

- Allow single-family, detached residential units in most if not all portions of the Central Area.
 - Based on the availability of public utilities and transportation access, single-family detached homes should remain the primary use within the Study Area.
 - In order to protect existing agricultural land, the balance of the northern

portion of the Study Area (land north of NC-73) should be retained for low-density (rural), single-family detached homes.

- The area south of NC-73 and north of NC-49 could support low-density, single-family housing units.
- Accommodate higher density detached, attached, and multi-family units in the appropriate areas as indicated on the Central Area Plan map.
 - The Lane Street/I-85 interchange has the access, utilities, and visibility to host a variety of uses, including multi-family and higher-density single-family residential. The proximity of this portion of the Study Area to the North Carolina Research Campus (NCRC) will increase the marketability of this area for apartments.
 - Higher-density, single-family, detached homes should be used to create a buffer from a potential mixed-use node at the Lane Street/I-85 interchange to the rural areas in the northern portion of the study area.
 - Medium to higher-density, single-family developments should be focused in the southern portion of the study area where public utilities are available.
 - Multi-family development would also be well suited at the NC-49/US-601 intersection, at the proposed intersection of the Westside Bypass and NC-49.



Housing and demographics were among the elements discussed during the two-day charrette.

(LU-3) Prepare a common set of districts for adoption by Concord, Kannapolis and Cabarrus County.

- Modify existing ordinances to accommodate the four types of residential districts below and the standards associated with each.
 - Four residential districts are needed to implement the plan (also see descriptions in Section 4.0).

1) Rural Residential	No Cluster	40% Cluster
Density (max)	1 per 3 acres	1 per 2 acres
Open Space (min)	0%	40%
Lot Size (min)	3 acres	1 acre
Water/wastewater	Not permitted	Not permitted
2) Very Low Density Residential	No Cluster	40% Cluster
Density (max)	1 per 2 acres	2 per acre
Open Space (min)	0%	40%

Lot Size (min)	2 acres	10,000 sf
Water/wastewater	Allowed	Required
3) Low Density Residential	40% Cluster	50% Cluster
Density (max)	2 per acre	3 per acre
Open Space (min)	40%	50%
Lot Size (min)	10,000 sf	6,000 sf
Water/wastewater	Required	Required
4) Medium Density Residential	40% Cluster	50% Cluster
Density (max)	3 per acre	4 per acre
Open Space (min)	40%	50%
Lot Size (min)	7,500 sf	5,000 sf
Water/wastewater	Required	Required

- Develop enhanced standards for all cluster subdivisions including:
 - Open space
 - 75% in contiguous tract
 - 25% accessible to homeowners (trails, greenbelts)
 - No lot further than ¼-mile from open space
 - Range of housing types
 - Adequate protection of stream buffers
 - Undergrounding of utilities
 - Perimeter compatibility
 - Block Length restrictions (600 feet)
 - Street trees
 - Sidewalks (both side of the street)
 - Cul-de-sac length restrictions
 - Connectivity
 - Tree protection
 - Site design
 - Minimum first floor height
 - Required front porch
 - Roof overhang
 - Corner lot treatments
 - Front yard trees
 - Building materials
 - Garage doors

- Prepare new Urban Village District(s) (for Mixed-Use Areas) including standards as follows:
 - Build-to lines
 - Wider sidewalks
 - Ground floor transparency
 - Street Trees
 - Parking to the side and rear of buildings

- Ground floor retail, upper-story residential/office (vertical zoning)
 - Higher density housing options
 - Street-facing entrances
 - On-street parking
 - Smaller blocks
 - Pedestrian-friendly inter-sections
 - Multi-modal, pedestrian-friendly streets
- Revise City and County zoning maps consistent with Central Area Plan
 - Current zoning is inconsistent with the vision set forth in the plan. Using the proposed districts, Concord, Kannapolis and Cabarrus County should revise their current zoning maps to match the proposed land use categories shown on the plan. Refer to Figure 3 (County Zoning).

(LU-4) Ensure housing availability for all income ranges in the Central Area.

- Consider opportunities for affordable housing measures to supplement standard Federal programs such as HOPE VI or Section 8 rental vouchers, which are important means of providing housing for the lowest-income households. Other standard financing techniques include tax credit and grant programs.

Strategies may include any of the following:

- Adopt an inclusionary zoning ordinance for predictability and consistency in application. This strategy is supported by case study research, however, additional studies are needed for the study area to determine affordability ranges, percentage of units to be set aside, alternatives to on-site construction, incentives and other factors to ensure success. The developer, business and homebuilder community should be engaged in the process of evaluating this strategy.
- Establish partnerships with non-profit groups to allow the private sector to create affordable housing. This may include a requirement for land dedication to a community land trust where housing may be constructed by the community land trust or an outside developer. Another option is to work with groups such as Habitat for Humanity.
- To supplement the existing Manufactured Home Overlay Districts (MHODs), adopt new land use regulations or modify existing regulations to further promote a variety of housing types.
- Consider strategies to reduce non-housing costs such as transportation and utilities. This includes promoting mixed-use, considering transit options and densities in appropriate locations. Regarding utilities, energy-efficient homes can help residents save on energy costs.

(LU-5) Accommodate retail space in primarily four key areas that are easily accessed and can support such development.

- Allow one neighborhood center of approximately 100,000 square feet in the area surrounding the Lane Street/I-85 interchange.
- Allow approximately 50,000-75,000 square feet of additional retail that is likely to develop near the Aston Properties' regional retail site.
- Due to residential development, Central Heights Drive has become a heavily used connector street leading from Zion Church Road to NC-49. A small, non-anchored retail center of approximately 15,000-20,000 square feet could be supported at the intersection of Central Heights Drive and NC-49.
- Direct the remaining neighborhood retail to the NC-49/US-601 intersection mixed-use area, near the existing Southgate shopping center.

(LU-6) Accommodate office space in areas where access and visibility required by office tenants is adequate.

- Encourage office development in two of the activity centers identified on the plan.
 - Multi-tenant corporate office space is most likely to gravitate to the I-85/Lane Street interchange because of access, visibility, and proximity to NCRC. The Lane Street interchange will likely be used as a gateway to NCRC.
 - Some multi-tenant corporate office space could emerge at the proposed intersection of the Westside Bypass and NC-49, near the Aston Properties site.
 - Approximately half of the professional office space could be focused at the I-85/Lane Street interchange. The remainder of the professional office space will likely locate in the other activity nodes at NC-49 and US-601, and NC-49 and Stough Road.

(LU-7) Accommodate industrial space in areas where industrial development exists and/or where access is facilitated by proximity to highway and rail.

- Industrial uses will be most successful near the I-85/Lane Street interchange.
- The completion of the Westside Bypass would improve access to I-85 from the southern portion of the Study Area along NC-49, making it more competitive for industry.
- The relocation of one or more major employers into the Phillip Morris facility / property could increase the attractiveness of the Study Area for industrial uses.

- The plan for the Stonewall Jackson site, which is owned by the State of North Carolina, calls for a mixture of uses, including industrial. The Stonewall Jackson site may be less attractive for industrial development as it does not have direct access to an interstate highway. Access to NC 49, a four-lane highway, is within a quarter-mile of the site; furthermore, the site is scheduled to have access to the planned extension of George Liles Parkway. A utility tower and lines located centrally on the site may provide a barrier to development for larger industrial uses. Employment uses may be encouraged. This plan should be shared with the state to provide a new context for the Stonewall Jackson Training School as the plan for the site evolves and is refined.

5.3 Environment and Natural Resources

(ENR-1) Protect water quality.

- Minimize soil erosion that is accelerated by land disturbing activities, such as grading and the removal of vegetation and topsoil.
 - According to the SWCD, sediment and related turbidity is a leading form of non-point source water pollution, which is carried by stormwater runoff to area water bodies. The issue is exacerbated by the development of steep slopes where the velocity of runoff and its erosive effects are increased. Monitoring water quality and compliance with existing regulations may need to be evaluated for effectiveness.
- Consider the recommendations of the Upper Rocky River Watershed Management Plan, which aims to protect water quality in this basin and specifically addresses monitoring, the enforcement of ordinances (erosion and sedimentation control, and buffers), education, conservation easements as a tool for better protecting stream corridors, low impact development standards, stormwater management and floodplain management.
- Promote wetland conservation in new development to maximize the functionality of these natural water-filtering areas.

(ENR-2) Preserve the existing tree canopy to the extent practicable.

- Explore options for expanding regulations that are intended to maintain existing trees.
 - Prepare and adopt a tree protection ordinance that maintains existing tree canopy essential to retaining the natural character of the study area while also allowing new development to occur. Developers converting rural or undeveloped land to residential/other uses within the study area should comply with tree protection standards.
 - Notwithstanding other open space protection measures herein, include limitations on the amount of the site that may be cleared of vegetation or disturbed in order to accommodate new development.

(ENR-3) Protect important plant and animal habitats.

- Create an open space plan for the county that protects known habitats.
 - This plan should take into consideration the locations of NHI sites, state-designated “Significant Natural Heritage Areas” identified in the inventory published by the SWCD in 2002 and healthy native forests.
 - This plan could increase awareness of the presence and importance of such habitats and corridors that connect them, thereby increasing the sensitivity of development in protecting such assets.
 - This plan should also acknowledge regional conservation plans to ensure a connected network of open space that supports wildlife is established.
- Create incentives for implementing the plan by offering open space credits for protecting the areas identified in the plan. For example, a weighted system for achieving open space requirements would place more emphasis—and therefore more credit—on open space that coincides with the areas delineated on the open space plan.

(ENR-4) Support the SWCD’s conservation planning efforts to manage all natural resources – soil, water, plants, animals and air – and foster sustainable growth in the county.

- Revise local ordinances to protect soils officially designated as “prime farmland” soils and “farmland of statewide importance” soils.
- Restrict mass grading, particularly on steep slopes.
- Integrate water supply into planning efforts by coordinating road building and other construction projects with water resource management activities.
- Devote more money and time to research and analysis of the impact of development on water resources, and make this information accessible.
- Sign up all eligible degraded streams for enhancement and/or restoration with state Ecosystem Enhancement Program funds.

5.4 Transportation

(TR-1) Create collector street connections.

- The rapid rate of residential and commercial growth within the study area coupled with limited mobility alternatives and reliance on the existing arterial roadway system suggested that the study area would benefit from the development of a more robust collector street network. The primary purpose of the collector street system is to collect traffic from neighborhoods and distribute it to the system of major and minor thoroughfares. Generally, collector streets have two travel lanes

often with dedicated left turn lanes at major intersections. Collector streets are rarely constructed by local governments or NCDOT. Instead they are built by the private sector incrementally as development occurs. A properly implemented collector street system improved accessibility to higher intensity residential areas and activity centers while minimizing impacts to natural areas. They also serve as a transportation conduit allowing the free movement of not only automobiles but also bicyclists and pedestrians.

In order to be sure the recommended collector street network “makes sense” a simple methodology was applied using land use intensity (rather than use) and street spacing as a means to communicate the preferred block structure for each respective character area within the study area. Simply stated, as land use intensity increases, street spacing should decrease. The various categories of proposed future land use intensities expressed in the preferred land use plan resulted in a refined collector street block structure for the following residential land use categories: very low density, low density, and medium density. Collector street planning was not applied in the rural preservation districts given their extremely low densities. The following spacing standards were applied to the study area during the planning charrette:



Block structure for the following residential land use categories: very low density, low density, and medium density.

Land Use	Intensity	Street Spacing
Very Low Density	< 2 du/acre	3,000-6,000
Low Density	2 to 4 du/acre	1,500-3,000
Medium Density	>4 du/acre	750-1,500

The benefits of an interconnected street system include:

- Reduced travel on major arterials
- Reduced travel times without travel speed increases
- Increased access opportunities for emergency response vehicles
- Local trips on local streets
- More opportunities for non-vehicular connections

(See Figure 7, Transportation Facilities map)

(TR-2) Provide greenways and other facilities for enhanced mobility for bicycles and pedestrians.

- Creating great places and maintaining quality of life requires a diverse approach to transportation planning. The transformation of undeveloped portions of the study area into emerging neighborhoods will require a more robust transportation system that includes opportunities for functional and recreational non-motorized trips. Existing large scale transportation facilities currently act as barriers to this type of mobility, providing few accommodations for any other modes except automobiles. In portions of the study area specified for rural preservation or extremely low density residential development, it is also advisable to look beyond a singular approach to pedestrian accommodations (i.e. sidewalks). When considering all of these factors in addition to the study area's environmental features it is clear that opportunities exist to enhance transportation connectivity through means beyond typical streets.

The team worked with the Advisory Committee on the development of mobility strategies for bicycle and pedestrians. The first step in this process was to identify existing and likely future pedestrian generators (attractors). Uses such as schools and parks, as well as activity centers anchored by retail uses are places that could be considered attractors to non motorized trips. Next, the project team mapped the existing and planned bicycle routes already adopted by the City of Concord. Finally, the "green" infrastructure, represented by the study area's streams, riparian buffers and floodplains, was mapped. In essence, these features represent conduits for the area's natural systems that are often considered appropriate venues for future trails and greenways. In addition, existing and future utility corridors represent similar opportunities where mapped in conjunction with the green infrastructure features.

By overlapping the pedestrian attractors, existing routes, and green infrastructure an alternative system of greenways, trails, and on-street bicycle routes were identified. Taken as a group, these non-motorized recommendations represent a strategy to connect people with places in a safe and inviting environment. The simultaneous consideration of existing routes and attractors revealed locations with little to no alternative access which quickly became priorities to seek connections. Where feasible, off-street greenway connections were sought in order to be consistent with the rural character of the area. In location where this option wasn't feasible or didn't make sense, on-street routes were chosen.

(See Figures 7 and 9, the Transportation Facilities map and Community Facilities map, respectively, for bicycle, pedestrian, and greenway network as shown on maps presented during charrette)

(TR-3) Support transportation improvement projects of regional significance.

- “Eastern Bypass”

The Eastern Bypass, to be located in the northern section of the study area, was discussed as a part of the study. This proposed facility, generally follows a path extending from NC 49 along Crestmont Drive, north to Penninger Road, eventually extending to I-85. Although the Cabarrus-Rowan Metropolitan Planning Organization (CRMPO) is currently in the processing of completing the five-year update to its Long Range Transportation Plan (LRTP), this proposed roadway appears on the adopted 2030 Long Range Transportation Plan. The origin of the project is uncertain; however, the location of this roadway could play an important role in creating access opportunities for much of the northern portion of the study area while enhancing area-wide mobility.

This proposed roadway would pass through an area primarily designated for rural preservation. As a result, some members of the public expressed a desire to have the project relocated or removed from the plan. Some even suggested the potential to improve existing Branchview Road as an alternative to the constructing the bypass. However, Branchview Road is widely developed with a mix of uses with buildings located near the street, frequent driveways and is constrained for future widening by the existing creek parallel to the roadway. As a result, making the necessary improvements to Branchview Road is likely cost prohibitive and difficulties with permitting make this an unlikely candidate. Irish Potato Road was also offered by some as a potential alternative. Located east of the current bypass alignment and within proximity to an existing interchange with I-85, this corridor presents fewer constraints. However, this is also a roadway that was clearly communicated as “one worth preserving.” Irish Potato road is the quintessential rural two lane road with numerous viewsheds, reminiscent of many scenic highways in North Carolina. However, it was clear most question the need for any type of bypass facility.

Removing the bypass from the LRTP is not an easy task. Cabarrus County and the Charlotte region are currently in non-attainment status, violating the EPA’s 8-hour ozone standard for air quality. This standard was established by the EPA through the

National Ambient Air Quality Standards (NAAQS). Areas designated as non-attainment are required to perform air quality modeling analyses in order to gain approval of their long range transportation plans. Additionally, if a project is added to or removed from the long-range plan, a conformity analysis will have to be undertaken by the MPO. (Failure to comply with these requirements can result in the withholding of federal funds for transportation in the region). Likewise, member jurisdictions are expected to protect and promote the implementation of transportation facilities identified on the plan. This is often done through proactive planning and the reservation of right-of-way as development occurs. These facts make erasing this project more complicated than simply building local consensus.

If the community is interested in challenging the need for the proposed bypass, Cabarrus County as a member of the MPO may request that the corridor be

considered for removal during the regular updates to the LRTP and during the conformity determinations for the region. A formal request should generate an analysis of the transportation network with and without the proposed bypass. If the MPO can reasonably demonstrate conformity with the removal of said project and there is no other compelling reason to maintain the project on the LRTP, then the MPO and its member jurisdictions may come to agreement on the removal of the roadway from the Plan. (Note: the Cabarrus-Rowan MPO is currently in the process of conducting an update to its LRTP).

Should the bypass remain a part of the plan, participants in the planning process widely agreed that the street design for the new bypass should be responsive to the rural context through which it passes. This process, referred to as Context Sensitive Design, allows for the establishment of

“green streets” in environmentally sensitive areas or location where the rural heritage and character are to be preserved. Bicycle and pedestrian amenities would be considered as a part of the street concept, with a sidepath/greenway (rather than sidewalks) to work in concert with a larger greenway strategy for the area and to enhance compatibility with the rural character of the area. Access management strategies would likewise be a part of the design in an effort to enhance safety and maintain traffic operations. Other features that may help the roadway blend in with the terrain include: exclusion of curb and gutter, instead using a natural filtration strategy that includes the use of natural swales; implementation of heavily planted medians; and reduction of the amount of disturbance to the area outside the right-of-way during construction in order to allow for a preservation buffer.



Bicycle and pedestrian amenities will be considered as part of the “green street” concept, with a sidepath or greenway rather than sidewalks to be environmentally sensitive.

▪ NC 49

NC 49 is the major east-west corridor within the Cabarrus County Central Area Plan study area, functioning as a workhorse street for the community and connecting ultimately to I-485 in the west. With few alternatives for east-west travel, investments in capacity and operational improvements to the NC 49 corridor will be critical for its continued operability. At this time, NC 49 is primarily a four-lane divided roadway through the study area.

In order for this road to continue to perform at acceptable levels, it is recommended that a series of access management strategies be employed. NCDOT’s access management guidelines should be utilized when developing this set of recommendations. In addition, it is recommended that this corridor be protected through policies and strategies that can be implemented at the county, city or MPO level. One of the most effective policies that could be implemented would be to require all TIA’s requesting driveway access to NC 49 to demonstrate their need for access, first exploring the possibilities for connections to side streets.

- Roberta Church Road Extension (Westside Bypass/Kannapolis Parkway)

The Roberta Church Road Extension is currently being proposed to provide a connection between I-85 and NC 49. When completed, this project will provide another mobility option for those located in the western section of the study area. In addition, this road will allow users to avoid Concord, thereby reducing delay and also alleviating some congestion within Concord itself. This project is currently a part of the Cabarrus-Rowan MPO 2030 LRTP.

The existing portion of George Liles Parkway runs between I-85 and Weddington Road near Concord, continuing to the north as Kannapolis Parkway. A section of this road is missing between Weddington Road and US 29. This portion of the project is being pursued as a part of a public-private partnership as a means to advance implementation. Once that portion of the road is completed, the only section that will be needed to create a continuous facility will be a linkage between the existing Roberta Church Road and Stough Road. It is recommended that funding be pursued to implement this portion of the road extension. This project will enhance regional mobility and will serve the village center proposed at its southern terminus and provide a valuable alternative to traveling through the middle of Concord in order to reach I-85.

5.5 Utility Infrastructure

(U-1) Utilize existing infrastructure.

- Provide utility service to development in areas where there are existing lines and areas other than those identified on the plan as suitable for rural or low density residential development (where densities are likely to be less than one unit per acre).

(U-2) Develop a utility system extension policy that supports the proposed land use pattern reflected in this Central Area Plan.

- Establish priorities for publicly-financed future extensions: higher density areas, and areas where septic and/or private package treatment plants are not an option
- Allow utility system improvements, particularly extensions provided by private developers, that support the desired land use pattern expressed in the Central Area Plan.
- In all instances, size systems to support the land use intensity indicated in the Central Area Plan.

5.6 Community Facilities

(CF-1) Consider this Central Area Plan in the creation and updating of all plans for community and facilities and services.

- Meet with school board representatives to discuss the Central Area Plan, once adopted, so that this plan may serve as input into the next school facilities plan update(s).
- Update the Cabarrus County Parks and Bicycle/Pedestrian Master Plan and similar local plans to ensure level of service needs are met.

(CF-2) Support regional greenway initiatives that provide connectivity in long-term.

- Seek land dedication through the private development process to establish connected greenway system over the long-term.

(CF-3) Encourage the integration of community facilities into existing and proposed development.

- Churches, schools and libraries complement other compatible uses and, with thoughtful integration, may serve as a focal point in a neighborhood.

5.7 Historic and Cultural Resources

(HR-1) Raise awareness of existing historic and cultural resources and encourage the preservation of such resources that contribute to the character of the area.

- Consider conducting a formal survey of existing structures and properties that, locally, have historic value to create an inventory of such assets.

5.8 Implementation

(IM-1) Concord, Kannapolis and Cabarrus County each adopt Central Area Plan as the guiding document when reviewing development proposals within the study area.

- Concord and Kannapolis should amend their future land use maps to be consistent with the Central Area Plan.

(IM-2) Establish an implementation program to ensure the objectives of this plan are achieved within a reasonable time period through the participation of all three affected jurisdictions.

- Evaluate and prioritize implementation strategies outlined in this Central Area Plan.
 - Develop an implementation guide that reflects the prioritization by identifying short-, mid- and long-term activities

- Establish measurable goals to be used in the monitoring of progress.
- Form a committee to oversee and measure progress on implementation activities, particularly those identified as short-term or first-year tasks.

(IM-3) Update this Central Area Plan not more than five years after its adoption.

(IM-4) Consider a city/county agreement to provide for joint decision-making.

- In order to insure future agreement on development proposals within the study area, Concord, Kannapolis and the county should enter into a joint agreement.
 - Requires future rezonings to be consistent with the plan. Sets up a shared process for rezonings and adequate notification of rezoning proposals between the three jurisdictions.
 - If a rezoning is inconsistent with the plan, the plan must first be amended. Sets up a shared process for future plan amendments.

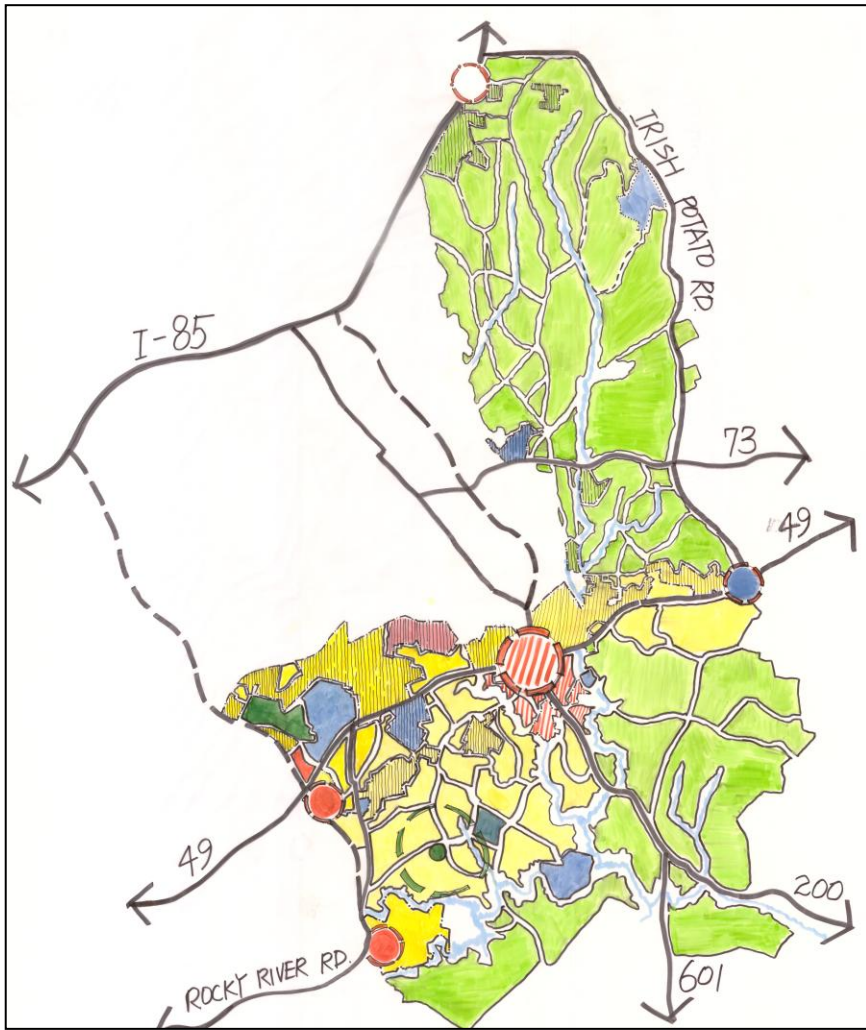
Appendix A – Central Area Plan Advisory Committee

The Cabarrus County Central Area Plan was developed through a process initiated by the Cabarrus County and facilitated by the consultant team led by LandDesign. This effort was aided by the Central Area Plan Advisory Committee. These individuals, selected by the county, were instrumental in assisting the consultant team in evaluating relevant information, synthesizing input from the public and formulating a plan that is reflective of the community's expressed desires for the future of the Central Area as it grows and develops. The members of the committee are as follows:

Aaron Cook
Iris Barnhart
Bill Cannon
Albert (Pete) Partridge
Robbie Faggart
Chaonn Hoyle
Dakeita Vonderberg Horton
Ed Phillips
Tim Sherman
Kenneth Propst
Emmitt Black
Dale Cline
Kathy Faggart

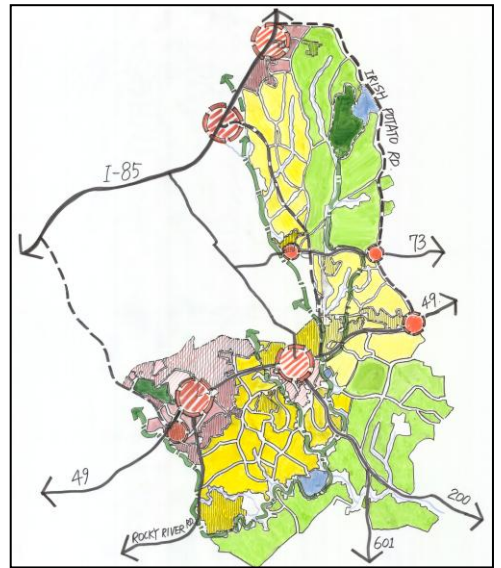
Appendix B – Products of the Charrette

The Cabarrus County Central Area Plan process included a multi-day charrette during which the project team, staff representing Cabarrus County and the cities of Concord and Kannapolis, the Advisory Committee, citizens and other stakeholders worked together to develop three plan alternatives that were all reflective of the goals and objectives stated in plan framework. The alternatives tested ideas for achieving the goals and objectives, and ultimately provided a foundation for the final plan. Included here are some of the products of the charrette.

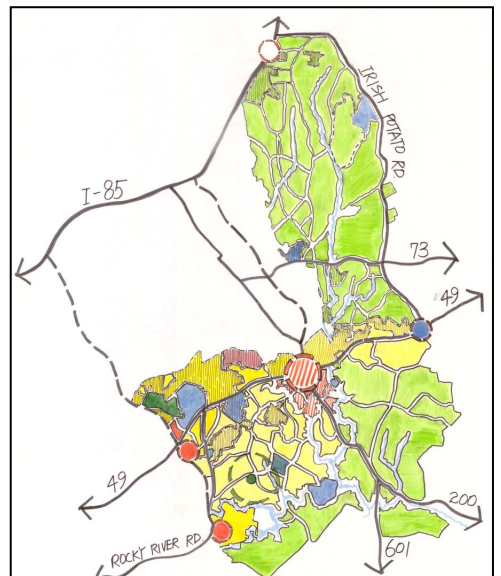


Option C

Of the three design options crafted during the two-day charrette, Option C was clearly the preferred choice of the community. The public voiced its choice for Option C during two back-to-back evening meetings on Wednesday, April 23, and Thursday, April 24, 2008.



Option A



Option B