2009

COMPREHENSIVE PLAN

FOR

RIDGELAND, MISSISSIPPI

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INTRODUCTION

Purpose of the Plan

The city of Ridgeland, Mississippi recognizes that in order to make both effective and economically sound decisions for the future, some type of policy must govern the decision-making process. The purpose of this Comprehensive Plan is to serve as a policy guide for the physical and economic development of Ridgeland. The plan will serve decision-makers as a means of orderly development for the city at a minimal cost to the city.

A comprehensive plan has five characteristics. First, a comprehensive plan serves as a guide to the physical development and future growth of a city. Second, comprehensive plans are long-range, often extending 20 to 25 years into the future. Current policies that impact future development are an integral part of the comprehensive plan's scope. Comprehensive plans include the entire city geographically and address all functions that make a city operational. Fourth, comprehensive plans include statements of the community's future ideas and strategies for implementing those ideas. Finally, a comprehensive plan is used as a guide for decision-making by local government officials.

The Ridgeland Comprehensive Plan, required by state law, is in compliance with Sections 17-1-1 through 17-1-39 of the Mississippi Code Annotated. The plan was developed to "bring about coordinated physical development in accordance with present and future needs..." (Section 17-1-11 Mississippi Code). Ridgeland's plan is both geographically and functionally comprehensive in nature. Geographically, all the area within the existing city boundaries has been included in the plan. Functionally, the plan includes Ridgeland's proposals for future economic and physical development. Additionally, the plan serves as a means of citizen participation in local government.

Elements of the Plan

Section 17-1-1 of the Mississippi Code defines a comprehensive plan as follows: "...a statement of public policy for the physical development of the entire municipality or county adopted by resolution of the governing body..." A comprehensive plan must include a minimum of four components in order to comply with the statute. These components are long-range goals and objectives, a land use plan, a transportation plan, and a community facilities plan.

The goals and objectives of a comprehensive plan are made with respect to the future. Long range community development plans help a community identify what it desires to achieve in the following decades. Section 17-1-1 of the Mississippi Code requires that the goals and objectives section of the plan address residential, commercial, and industrial development as well as parks, open space, and recreation. Additionally, street or road improvements, public schools and community facilities must be considered.

The second part of a comprehensive plan is the Land Use Plan. This plan designates, in map form, the proposed distribution and extent of land use for residential, commercial, industrial and, recreational lands, as well as public and quasi-public facilities and open space. The land use

section of the plan contains projections of population, economic growth, and land use for the community.

The third part of a comprehensive plan is the Transportation Plan. This plan, in map form, classifies all existing and proposed streets, roads and highways and shows them on the Land Use Plan. The Transportation Plan covers the same time period as the Land Use Plan. The plan identifies arterial, collector and local streets, and roads and highways, as defined by minimum rights-of-way and surface width requirements. The Transportation Plan covers the same time period as the Land Use Plan. The plan identifies arterial, collector and local streets, and roads and highways, as defined by minimum rights-of-way and surface width requirements. The Transportation Plan also addresses other transportation needs, such as the needs for mass transportation or general aviation airports.

The final portion of the comprehensive plan is the community facilities plan. Used as a basis for making capital improvement decisions, the community facilities plan includes: an inventory of and an identification of needs for parks and recreation, public buildings and facilities, utilities and drainage, schools, and housing. The community facilities plan forms the bases for a capital improvements program, which is not included in the Comprehensive Plan.

The city of Ridgeland recognizes that the quality of life in developing areas is affected by the quality of development. People and businesses are attracted to higher quality developments. In facts, other areas around the country have discovered that quality development breeds more quality development. All development should be examined as to its effect on the city's image, because it is the city's image that is at stake. It is a well-known fact that one of the factors a business/industry considers in determining a location is the quality of life in a community. Quality of life includes such amenities as shopping, cultural and recreational opportunities, good schools, and attractive business and residential areas.

A community desperate for development with regard to the quality of that development will not be able to successfully compete with communities that are more concerned with the quality of development and other quality of life issues. Therefore, the city intends to foster those policies that will make this a more competitive community.

Included in the plan is a section concerning plan implementation. This section includes tools and strategies for carrying out the Comprehensive Plan.

HOW TO USE THIS PLAN

Overview

As noted in the Introduction, a comprehensive plan serves as a policy guide for the physical and economic development of the community. It is to be used in making decisions regarding rezonings, variances, special exceptions, and site plan review. It may also be used to aid in locating businesses, industries, and public facilities. Finally, it forms the bases of zoning ordinances and capital improvement programs.

Community planning does not attempt to replace market forces of supply, demand, and price but to shape and channel those forces by establishing certain rules for development and conservation. A community plan should contain policies that foster growth that enhances the community, rather than "no growth" policies. For example, haphazard growth is unsightly and wasteful of space and public facilities, which results in higher public costs and property tax increases.

According to state law, zoning and other land use regulations must be based upon a comprehensive plan. This means that zoning and subdivision regulations, at a minimum, must conform to the local comprehensive plan. The implication is that comprehensive plans must precede land use regulations in preparation and adoption. Regulations that are consistent with, or conform to, a comprehensive plan must be consistent with a plan's policies, goals and objectives as well as the land use plan map and the other plan elements. Even though there is generally not an exact identity between the land use plan map and the zoning map, the two should mirror each other as closely as possible.

The reason for such consistency or compatibility is that the courts are likely to uphold land use decisions when these decisions are based upon plans. For example, land use decisions requiring an up-zoning (zoning to a more intensive use) or a down-zoning (zoning to a less intensive use), when challenged on taking grounds, are likely to be upheld by the courts.

The goals and objectives' element of the plan is used by the governing authority to have written, consistent policies about how the community should develop. The plan enables the legislative body to make decisions on development matters that arise, using a unified set of general, long-range policies. The plan is supposed to serve as a practical working guide to the governing body in making decisions.

The governing body uses the comprehensive plan to take action on two types of physical development matters: (1) measures that are specifically designed to implement the comprehensive plan (zoning ordinance, subdivision regulations, capital improvements program and budget, the official map, and development plans), and (2) other measures which routinely require legislative approval (rezoning cases, special use permits/special exceptions/conditional use permits, variance applications, subdivision plats, street closings, site acquisitions, and public works projects. For both types, the plan should be consulted at least to see if the plan speaks specifically to the matter or provides any guidance as to how the matter should be handled. It should be remembered that the plan may not indicate what action to take, nor will it answer all the questions that come before the governing body. It is not supposed to; its purpose is to serve as a generalized guide, which has the force of law in many communities.

Use of the Plan

The proponent or applicant for a zoning change must show that the proposed change is in conformance with the comprehensive plan. The applicant must also show that there is a public need for the kind of change in question, and that the need will be best served by changing the zoning classification of the property in question. Public need is often shown by changes in neighborhood statistics or by a lack of property zoned for such purposes. Usually, a rezoning's conformance or nonconformance can be quickly established by looking at the land use plan map.

The colored designations of land use categories on the map should follow specific boundaries to be useful as a decision-making guide. Arbitrarily drawn land use boundaries can make it difficult to determine into which map section a particular piece of property falls. If an applicant's property falls on or near the boundary between a conforming and a nonconforming land use category on the land use plan map, the applicant should make a case that his particular proposal is consistent with the plan to the nearest natural topographical boundary, or to the nearest street or property line. The applicant should also establish conformance with both the map and the text, if possible, and it is important that both the plan and the facts showing conformance be placed into the record of the hearing.

Nonconformance to the Plan and Plan Amendments

If the proposed change does not conform to the plan, the plan must be amended before the requested change in zoning classification can be approved. For all practical purposes, if an applicant submits a plan amendment application to change the designation of a parcel of land, he should also submit a rezoning application. The application should explain exactly why a plan amendment and a zoning map amendment are needed. The reason is that the Zoning Board should be informed as to the intent or the end result of the plan amendment so that they can make an informed decision. Most proposed plan amendments are in pursuit of rezonings.

All development proposals as well as proposed rezonings would not only be reviewed in light of the standards set forth in the zoning ordinance, but also according to each element of the plan. The goals, objectives, and policies would be checked against the proposal to determine if there was any conflict. The Land Use Plan must be checked to see if the proposed rezoning is in line with the designated land use category. For example, if a proposed rezoning to a multi-family district is indicated, then the Land Use Plan must show a high-density classification for that site. The proposed rezoning must not be in conflict with the Transportation Plan's recommendations, nor with those of the Community Facilities Plan, both of which relate to capital improvements.

Implementation Devices

Once the plan has been prepared, it needs to be implemented. There are three primary means or devices commonly used to implement comprehensive plans: zoning ordinances, subdivision regulations, and capital improvement programs. Other devices include official maps and specific development plans. Comprehensive plans should be reviewed each year to see if they need revision. Plans should be completely revised/rewritten every five years to take advantage of changes that have occurred and to use current information.

Comprehensive plans can and should be used for concurrence plans. This is a concept that adequate infrastructure should be in place before development is allowed to occur or as a condition of rezonings. Otherwise, what often happens is that when infrastructure is inadequate to support development, the existing facilities are overwhelmed and the cost of bringing the infrastructure up to standard can be quite expensive and difficult. It is better to have adequate infrastructure in place before development takes place. This becomes a matter of timing.

CHAPTER ONE: GOALS, OBJECTIVES, AND POLICIES

The goals and objectives of the Ridgeland Comprehensive Plan and the continuous, comprehensive planning process are to provide guidance for rational response to change.
They reflect ideally, consideration of a combination of community issues and facts blended with community values. Goals institute the conscious statements of a community concerning what it wants to become, and how it will direct its energy toward that achievement. The Ridgeland Comprehensive Plan begins with a set of general goals. These are followed by more specific goals in the following areas: cultural and aesthetic, community facilities and services, environment, land use, residential, commercial, industrial, socio-economic, transportation and implementation.

Policy statements have been developed for each of the above categories. A policy statement usually consists of three or four policy levels. Policy statements in this plan are divided into four policy levels: goals, objectives, policies, and implementation programs. Definitions for these levels are as follows:

GOAL: The ultimate purpose of an effort stated in a way that is general in nature and not easily measured.

OBJECTIVE: A more specific, measurable goal.

POLICY: A specific statement guiding actions and implying clear commitment.

IMPLEMENTATION
PROGRAM: A more specific statement of how the policy will be carried out.

Policy Statements may, in some cases, be followed by statements explaining the planning principle behind the policy statement. A second definition of policy (2) is a collective term describing those parts of the comprehensive plan that guide action, including goals, objectives, plan proposals and standards in both the text and illustrations (maps, diagrams, etc.) For the purposes of this plan, whenever the term policy is used, it should be understood to mean the collective term.

This plan will be implemented by a zoning ordinance, subdivision regulations, and a capital improvements program, in addition to other growth management techniques. According to state law the plan must be consistent with the implementing regulations. Therefore, the policies in the plan must be reflected in the above three implementation devices (zoning ordinance, subdivision regulations and capital improvements program). In order to be effective as guidelines for day-to-day decision-making, the policies in this plan will supersede the zoning and subdivision regulations in cases where there are conflicts between regulations and policies or where the regulations are not clear.

General Goals

GOAL: To provide for an orderly arrangement of land uses in the incorporated areas of the City of Ridgeland.

OBJECTIVE: To recognize the desirability for separation of land uses into compatible types.

OBJECTIVE: To grade land uses by type, character, intensity and orientation with particular emphasis on the relationship between adjacent residential and commercial uses.

OBJECTIVE: To separate incompatible land uses and provision of open space buffering to reduce possible conflicts where different land use classifications adjoin.

POLICY 1: Through the use of the land use plan as a development guide, the character of this community will be more easily defined and developed.

IMPLEMENTATION PROGRAM:
Determine what type of community Ridgeland is and develop remainder of available land in a manner consistent with the land use plan.

GOAL: Through new developments to make the community a healthy, safe and convenient place, and to provide a pleasant and attractive atmosphere for living, shopping, recreation, civic and cultural, and service functions.

OBJECTIVE: To ensure that future development will be in the best interest of the community and its citizens, measures will be taken which will generally improve the quality of life of the citizens of this community.

POLICY 2: To use the comprehensive plan as a tool in guiding the future development of this community.

IMPLEMENTATION PROGRAM: To develop an updated comprehensive plan.

GOAL: To guide and direct the development of the foreseeable future into desirable forms and patterns rather than inefficient sprawl.

OBJECTIVE: To prevent the inefficient use of land. By using the comprehensive plan as a guide to development, the desired land use pattern will be produced.

POLICY 3: Existing strip commercial development and residential sprawl will be controlled. Future development, in accordance with the comprehensive plan, will be of a more desirable nature.

IMPLEMENTATION
PROGRAM: Develop Land Use Regulations to be consistent with this policy.

GOAL: To coordinate living areas, working areas, and leisure time areas into an integrated relationship and create a unique combination of function, circulation, and image through which a balanced community development can be reached.

OBJECTIVE: Development of residential, commercial, recreational, and other areas will be in such a manner as to compliment the overall land use pattern.

POLICY 4: Development of programs which result in a balanced community will be implemented.

IMPLEMENTATION
PROGRAM: The land use plan will be developed for existing development and for determining future land use.

GOAL: To provide and maintain a consolidated planning program, one which thoroughly and continuously plans for the physical, social, cultural and aesthetic development and redevelopment of the city of Ridgeland.

OBJECTIVE: Coordinate and consolidate the various planning efforts within the City of Ridgeland.

POLICY 4A: The City of Ridgeland has developed a master plan for the city and the planning area, entitled *Ridgeland Area Master Plan 2008, First Edition* (RAMP). The content of the master plan is incorporated into this comprehensive plan.

POLICY 4B: In the event conflicting interpretations are derived from the content of this comprehensive plan and the RAMP plan, the language and interpretation of the RAMP plan shall serve as the guiding plan.

Cultural and Aesthetic Goals

GOAL: To preserve and enhance the value of places and objects of historic landmark and cultural importance to the community.

GOAL: To encourage good urban design to improve the appearance of the central business district, the highways, streets, bridges, intersections and the street facilities that will enhance the aesthetic qualities and reflect the beauty and attractiveness of the community.

OBJECTIVE: To improve the overall visual image of Ridgeland.

POLICY 5: The Public Works Department shall be consulted prior to any major improvements in the City that would significantly change the appearance of the highways, streets, bridges, intersections, and street facilities.

POLICY 6: The landscaping of public and private property and preserving existing trees where feasible will be encouraged.

POLICY 7: The size, number and location of signs shall be regulated to improve the safety and visual quality along streets.

POLICY 8: The Comprehensive Plan and Land Use Regulations shall be used as a basis for determining the approval and implementation of a project. Landscaping will be encouraged by standards that allow reductions in required parking spaces in exchange for landscaping.

Community Facilities and Services Goals

GOAL: To provide public facilities in a cost efficient manner and in a manner that makes public facilities accessible and convenient to citizens.

OBJECTIVE: To provide public facilities in a cost efficient manner.

POLICY 9: The construction/purchase of new public facilities or improvements/additions to older facilities shall be done according to the schedule in the Capital Improvements Program with the exception of emergencies. The maximum use shall be made of existing infrastructure/public facilities.

9.1 The City will encourage orderly growth patterns which minimize "leap frog" type development patterns that leave large vacant spaces between subdivisions and commercial developments that must be traversed by streets, public utilities and other facilities that necessitate public expenditures.

9.2 Capital Improvements Program and an annual capital budget may be developed and adopted by the Mayor and Board of Aldermen.

9.3 Encourage the infill development of vacant land with underused public facilities.

POLICY 10: Public facilities and services must be available and adequate to support the development at adopted levels of service as a condition of development approval.

10.1 Level of Service standards are used to compare the demand for public facilities created by new growth to the capacity of public facilities affected by that growth. The city must also determine what facilities, and at what stage of development, will be included in the adequacy determination.

10.2 The city should prepare administrative guidelines in accordance with Policy 10. These guidelines may be reconsidered annually to ensure that the growth in private development allowed under the guidelines corresponds with the availability of adequate facilities.

PLANNING PRINCIPLE: Public facilities such as water, sewer, and streets should be provided to areas of the city in a cost-efficient manner. Vacant properties with underutilized facilities are wasteful of public funds and redevelopment of such properties shall be encouraged.

GOAL: To develop public facilities in a manner that is accessible, convenient, and that most effectively serves the community.

OBJECTIVE: To develop plans for needed public facilities; to acquire open land appropriate in character at the proper time; and to encourage their continued development, maintenance, and optimum use by the public to meet the needs of today and of the future.

POLICY 11: Current facilities will be examined to determine areas where facilities are lacking. These areas will be targeted for future development.

Vacant land in these areas will be purchased if necessary and appropriate restrictions placed upon the land to preserve its use as a public facility.

POLICY 12: Public and quasi-public structures and facilities shall be located in areas most accessible to the public and in areas where other similar structures are located for the general convenience of the public.

POLICY 12A: The City of Ridgeland shall fully implement the September 7, 1999 Services and Facilities Plan associated with its annexation ratified in October, 2005 and further maintain an excellent record of past performance in regard to providing municipal services and improvements.

OBJECTIVE: To take advantage of infrastructure technology not only to better serve the citizens of Ridgeland but also to enhance Ridgeland's reputation as being on the leading edge of technology.

Environmental Goals

GOAL: To recognize and consider environmental constraints in the establishment of land use patterns.

OBJECTIVE: To manage flood plain development.

POLICY 13: Development in floodways is prohibited, and development in areas of high flood hazard is discouraged..

IMPLEMENTATION PROGRAM: Areas subject to flooding will be monitored and managed by a Floodplain Management Plan and the Floodplain Management Ordinance. Development will be limited and guided with the Floodplain Management Plan and the Comprehensive Plan. Identification of drainage issues are the responsibility of Ridgeland's building, zoning, and engineering officials.

OBJECTIVE: To control land management practices and land development in a manner that is environmentally sound.

POLICY 14: Land use maps and environmental studies will serve as guides for the establishment of land use patterns.

OBJECTIVE: To decrease the rate of soil erosion.

POLICY 15: Soil erosion shall be reduced. Areas of significant soil erosion shall be determined and appropriate steps to slow the erosion shall be outlined in the Subdivision Regulations and through any other appropriate means.

PLANNING
PRINCIPLE: Urban development creates conditions that increase the potential for soil erosion. Soil erosion is not only unsightly, but it also silts up drainage ditches and storm sewers, thereby increasing the chances of flooding.

OBJECTIVE: To identify areas which have extreme soil characteristics and to manage development of those areas accordingly.

POLICY 16: Development should be discouraged in areas where extreme soil characteristics preclude site development. Land use maps and soil studies will be used to determine what areas are less suitable for development.

OBJECTIVE: To encourage proper use of land that has a hazard potential due to slope or some combination of factors that include slope.

POLICY 17: Development of lands with hazard potential will be discouraged except for purposes suited to such lands. Determine affected areas and develop a strategy for land use.

OBJECTIVE: To reduce storm water runoff from new development, where appropriate, to lessen its adverse impact.

POLICY 18: Develop means to control the amount and rate of storm water runoff in new developments.

18.1 Adopt a soil erosion ordinance to allow the use of performance standards for controlling runoff, such as impervious surface ratios, retention basins and ponds, landscaping, grass lined swales and open ditches.

18.2 Provide for density increase incentives for reducing the amount and/or rate of runoff.

18.3 Continue to implement city-wide stormwater master plan.

PLANNING
PRINCIPLE: The reason for this policy is that urban development creates impervious surfaces, which increase the amount and rate of storm water runoff and flood hazard potential. Therefore, this policy is directed to reduce the problems.

General Land Use Goals

GOAL: To promote compatibility in land uses and to promote orderly expansion of urban growth to provide efficient use of resources.

OBJECTIVE: To coordinate land uses so as to create a functional and appealing image for the community.

POLICY 19: The City shall promote an urban pattern that provides for the safe and efficient movement of people and goods, reduces conflict among land uses, and protects the natural environment.

POLICY 20: Strengthen the entire community by working with developers to carefully plan the location and design of business establishments, residential areas, industrial development and recreational facilities.

OBJECTIVE: To redevelop areas of Ridgeland that are blighted in order to make these areas more useable.

POLICY 20.1 The city should prepare a redevelopment plan for Ridgeland that identifies those areas in need of redevelopment.

POLICY 20.2 The city should appoint a redevelopment authority to carry out the redevelopment plan.

OBJECTIVE: To guide and direct future urban development in an efficient manner. Land use patterns such as strip commercial and residential sprawl have characteristics which create an urban environment which is costly and inefficient in terms of construction and maintenance of public facilities.

OBJECTIVE: To lessen congestion in the streets, to secure safety from fire, panic and other dangers; to promote health and the general welfare; to provide adequate light and air; to prevent the overcrowding of land; to avoid undue concentrations of population; to facilitate the adequate provision of transportation, water, sewerage, schools, park and other public requirements.

POLICY 21: Urban growth will proceed in an orderly fashion in conjunction with the land use plan. The land use plan shall be implemented through zoning policies, subdivision regulations, and other land development regulations.

Residential Goals

GOAL: To establish a residential density pattern that will produce desirable concentrations of residences and will not overburden the local community facilities or cause traffic congestion.

OBJECTIVE: To allow modified residential development, which remains compatible with existing neighborhood residences and to encourage developers to share some of the costs of additional public facilities that might be required.

OBJECTIVE: To allow manufactured housing (sometimes called mobile homes) only in manufactured home parks or manufactured home subdivisions.

POLICY 22: Residential development shall be located on streets designed to accommodate it. High density (6 or more dwelling units per acre) development will locate on major streets, as identified in the Transportation Plan Update For City of Ridgeland, Mississippi. The allowable density of a project shall be determined by the physical and service constraints of the property, the area in which the property is located, the planning goals, objectives, and policies of this Comprehensive Plan and other local ordinances.

POLICY 23: High density (6 dwelling units per acre and above) residential uses shall be located on arterial streets or have direct access to collector streets in order to accommodate the higher traffic generation rates of multi-family dwellings. An exception to this would be to allow increased development densities on infill lots to encourage infill development.

OBJECTIVE: To prohibit non-conforming nuisance uses in residential neighborhoods that inhibits investment in low- and moderate-income housing.

POLICY 24: Establishments selling alcoholic beverages to be consumed on the premises, which are located in residential neighborhoods, are prohibited.

IMPLEMENTATION
PROGRAM: Develop regulations which will eliminate these blighting influences from residential neighborhoods.

GOAL: To sustain high quality of neighborhoods and to protect individual property values by encouraging proper standards of design, construction and maintenance.

OBJECTIVE: Improve residential areas to increase the residents' overall quality of life and property values. Improvements that increase pedestrian safety, such as sidewalks, are strongly

encouraged and may be required in areas where pedestrian traffic is present.

POLICY 25: Plan, develop and redevelop neighborhood improvements which will encourage long term livability of residents.

25.1 Upgrade or eliminate deteriorated housing to promote sound living conditions for all residents through code enforcement. Make public assistance available through the Community Development Block Grant Program to encourage rehabilitation of older residential structures.

25.2 Encourage construction of sidewalks, open space and other amenities that make a neighborhood safer and more livable.

POLICY 26: Residential neighborhoods will be protected from the encroachment of commercial, office and industrial rezoning.

26.1 Use the land use plan to identify vacant land into which commercial and industrial uses can expand without encroachment into residential areas. "Commercial creep" will be strongly discouraged.

26.2 Approve rezoning applications which locate business and industrial uses adjacent to compatible uses if they meet standards set by the Comprehensive Plan and Zoning Ordinance.

26.3 Allow the extension of existing commercial districts only if they meet buffering and other requirements which reduce blighting influences.

26.4 Rezoning of individual lots within established residential neighborhoods for any commercial purpose will be strictly limited.

PLANNING PRINCIPLE: The rezoning of a residential area usually for commercial or office uses on a continuous basis is called "commercial creep." This process starts with the rezoning of a single lot from residential to commercial. The next door neighbor finds that either he doesn't like living next to a commercial property or that his property loses value as residential property.

Consequently, he obtains a rezoning for his property. This process repeats itself and commercial uses creep down the street one by one and rezoning becomes easier each time because it can be proven the neighborhood is changing. This process not only disrupts residential neighborhoods but also introduces blighting influences and may overload existing public facilities. Industrial uses are generally incompatible with residential uses due to noise, traffic and other blighting influences.

In addition, the single most important investment many people make is in a home. Consequently, people do not favor development that adversely affects the value of their homes. Therefore, policy 27 seeks to conserve property values and neighborhoods from negative influences.

POLICY 27: Transitional neighborhoods are those which are slowly changing from one use to another, usually from residential to commercial. The concept of adaptive reuse is often used to convert older homes in neighborhoods to office uses. However, neighborhoods which are still viable and stable residential neighborhoods are not considered as transitional and must not be disrupted.

POLICY 28: Older residential neighborhoods which have a substantial number of vacant or deteriorated housing units may be considered for redevelopment as residential or office uses.

Commercial Goals

GOAL: To strengthen the entire community by carefully planning the location of shopping centers and the design of business establishments.

OBJECTIVE: The desired land use pattern will be produced by limiting the number and design of shopping centers and business establishments.

POLICY 29: New shopping centers and business establishments will be located in areas in close proximity to their service population and will be designed so as to coincide with the existing architectural features of the area.

29.1 The City of Ridgeland will encourage the location of neighborhood shopping centers within two miles of residential areas at the intersection of major arterial streets. Neighborhood shopping centers should provide convenience services and merchandise for the surrounding residential areas.

29.2 The City of Ridgeland will encourage the location of regional shopping centers along its highways. Regional

shopping centers should supply service and merchandise which appeals to a wider market area than Ridgeland.

29.3 The City of Ridgeland will encourage the location of general shopping centers or commercial areas along major arterial streets and the highways leading into the city. The merchandise and services provided should be of a wider range than that provided by neighborhood shopping centers.

29.4 Office uses are allowed in any of the commercial districts, transitional districts or residential districts as home occupations. Office parks or office districts are encouraged to locate along arterial streets or highways.

29.5 Mixed use districts (large-scale developments containing a mixture of office, retail, and residential uses) are encouraged to locate along major arterial streets and the Interstate highways.

29.6 Evaluate existing shopping centers and existing commercial locations for areas of potential expansion. Make use of the land use plan in developing new areas of commercial activity. Develop appropriate commercial districts in the zoning ordinance.

29.7 To segregate commercial uses on the Land Use Plan and the Official Zoning Map by intensity of use. That is locating commercial uses based upon potential impacts (noise, traffic, general appearances characteristics, etc.)

29.8 To require wide (at least 50 feet) side and rear yard buffer zones or greenspaces of General Commercial and High Intensity Commercial uses bordering single-family residential uses or zoning districts (except R-5A districts; encroachment by structures, parking lots, or other paved areas into the setbacks should not be allowed in these buffer zones.

29.9 To require landscaping in all areas of a commercial lot that are not used for buildings, parking, driveways, patios, and sidewalks. This landscaping should be installed in accordance with standards adopted by the City with regard to type of planting material and spacing.

29.10 To require developers of all NEW commercial uses on arterial streets to plant street trees and other landscaping in accordance with adopted standards.

29.11 To promote the safe access to public streets and highways by regulating access control and design, especially on streets and highways designated as "principal arterial" or "minor arterial" on the adopted Thoroughfares Plan in commercial zones. This can be handled through the Zoning Ordinance and Subdivision Regulations. One method would be to encourage shared driveways between commercial establishments.

POLICY 30: Redevelopment of existing strip commercial areas will be encouraged.

POLICY 31: Urban activity centers or mixed use districts will be encouraged to locate at the crossroads of major arterials.

POLICY 32: Strip commercial development will not be allowed to spread beyond parcels where it already exists in its present form unless it meets specific buffer and screening requirements.

PLANNING PRINCIPLE: As described by zoning authority Fred Bair in Planning Cities, "strip commercial describes only (commercial) development along the frontages of a single street, and does not include areas of concentrated business development such as shopping centers and central business." As business developments spread out from the business district to areas located along arterial streets in strips that require frequent curb-cuts, and continuous left-turn movements on the street, traffic congestion problems and other hazards will occur.

In an effort to lessen the problems stemming from strip commercial development, strip zoning was developed, but has largely failed as a device to contain the hazardous and blighting influences of commercial development along a single arterial street. In fact strip zoning has worsened the conditions. In addition to uncontrolled curb-cuts, strip zones are also characterized by an uncontrolled mixture of signage, unlandscaped parking areas, and vacant buildings. This is a blighting influence on nearby residential properties. Strip zoning is often wasteful of land and public facilities.

As traffic congestion on the arterial increases, the speed limit is lowered, and it eventually becomes necessary to either widen the street or to build a

by-pass. If the same development pattern is allowed on the by-pass, then it too will become congested and need widening or another by-pass.

Policies to avoid the ill-effects of strip commercial development can be directed along two lines: new development and remedial action for existing commercial strips. New construction should be limited to shopping centers or planned clusters. Existing strips cannot be removed overnight, but they should not be allowed to become worse. Therefore, some sort of transitional regulation at the common boundaries between strip commercial and residential zones is necessary.

POLICY 33: To allow a mixture of high quality retail, office development, and high-tech commercial and industrial uses on the Highland Colony Parkway in addition to public/quasi-public uses such as churches and schools.

Industrial Goals

GOAL: To designate adequate and suitable land for the expansion of existing industries and for the location of new industries.

OBJECTIVE: Expansion of industrial areas will be determined based upon future predictions of industrial activity and the land use plan.

POLICY 34: Industries will be encouraged first to locate and expand within existing industrial areas to take advantage of more cost effective existing infrastructure.

POLICY 35: The City of Ridgeland will encourage industrial development in areas appropriate for industries.

POLICY 36: Existing zoning will be reviewed and evaluated to determine the extent to which it relates to projected industrial land use needs.

GOAL: To provide well located sites adequately served by highways, railroads, utilities and services for new industrial development.

OBJECTIVE: To promote new industrial development through accessibility to transportation, utilities and service functions.

POLICY 37: Industrial districts will be located in areas that can be cost effectively served by adequate transportation and utilities.

GOAL: To encourage the installation of business and industrial establishments that would be most desirable for the community from a socio-economic standpoint.

OBJECTIVE: To attract and expand business and industry in order to diversify the economic base, produce needed jobs, and raise wages.

POLICY 38: To strengthen the existing socio-economic base of the community through commercial and industrial growth in a manner compatible with current practices and the land use plan.

POLICY 39: The existing infrastructure system shall be maintained and enhanced in order to prevent the limiting effects on economic growth due to infrastructure decay.

POLICY 40: To Develop a Capital Improvements Program for the City, to have a continuous program of regular maintenance and new construction of the City's infrastructure.

Transportation Goals

GOAL: To provide a network of roadways which allows for the safe and efficient movement of traffic between locations.

OBJECTIVE: To design a comprehensive circulation system to serve the community and its entire region and to integrate facilities and land use.

OBJECTIVE: To provide better traffic flow by improving or constructing new north-south and east-west transportation routes.

OBJECTIVE: To reduce traffic congestion on existing major and minor streets between homes and places of shopping and employment and to discourage through traffic in residential areas.

OBJECTIVE: To improve vehicular accessibility and circulation.

OBJECTIVE: To address the recreational needs of pedestrians and bicycle riders. A Trails and Greenspace Master Plan is being prepared.

OBJECTIVE: To maintain a presence in the Metropolitan Planning Organization in order to be involved in an areawide transportation planning process.

OBJECTIVE: To reduce the impact of railroad, highway, and arterial road noise on residential properties by recommending spatial separation of residential uses from these elements of the areas’s thoroughfares system.

OBJECTIVE: To determine the right-of-way of new roads before any development begins, and to begin a continuous program to buy the right -of-way for proposed new streets and for streets that need to be widened.

OBJECTIVE: To provide a roadway system capable of accommodating the accessibility needs of development that occurs in the planning area.

POLICY 41: To build on and improve existing roadway resources and to add significant new roads to accommodate expected future development.

POLICY 42: New commercial and industrial development shall be clustered off arterial streets to lessen traffic congestion.

POLICY 43: Schools and multi-family complexes will be located with direct access to arterial streets to lessen traffic congestion.

POLICY 44: Single- and two-family housing will not have access onto arterial streets, and access onto collector streets is discouraged because:

1) as the number of curb cuts increases along a collector or arterial, the potential of accidents and traffic congestion also increases; and
2) increased traffic volumes and speeds encountered on arterials and collectors make these sites undesirable as residential sites.

POLICY 45: To require minimum lot size for a new commercial development where subdivision of land is proposed, so that lot sizes do not encourage numerous curb cuts; or to require services drives for access.

POLICY 46: If it becomes necessary to locate houses along arterial and collector streets, then the front yard setback will also be increased. An increase in lot frontage may be required to provide space for a turnaround so that vehicles will not have to back out onto arterial or collector streets.

POLICY 47: Parking that allows vehicles to back out onto major streets in commercial and industrial districts is prohibited, unless approved at site plan review by the Mayor and Board of Aldermen.

POLICY 48: To open new streets, to improve existing streets and to redesign intersections in order to improve traffic circulation and street conditions.

Implementation Goals

GOAL: To adopt and use a capital improvements program as a major tool for the accomplishment of the comprehensive plan.

OBJECTIVE: A capital improvements program will be based on a community facilities plan in accordance with Section 17-1-1 of the Mississippi Code.

POLICY 49: The capital improvements program will be the means of financing those capital improvements developed as a part of the plan.

The capital improvements program will be a basis for planning for housing, schools, parks and recreation, public buildings and facilities, and utilities and drainage.

GOAL: To implement the land use plan through zoning policies, subdivision regulations, and urban renewal activities which are in agreement with the plan.

OBJECTIVE: To use the land use plan as a guide for development of the area.

POLICY 50: The land use plan shall be consulted before any development or policy making occurs.

Development will be approved after a comparison with the land use plan's policies and found to be compatible. Changes in local building policies must be in accordance with the plan.

Zoning Policies

POLICY 51: The cumulative or pyramidal form of zoning district structure is considered by zoning authorities to be antiquated. However, a limited pyramidal form should be permitted under the following conditions:

51.1 Single-family homes are allowed in the less restrictive residential zones.

51.2 Commercial uses permitted in the transition districts are allowed in all the less restrictive commercial districts.

However, all uses permitted in the general and regional commercial districts are not appropriate in the central business district.

51.3 Apartments or townhouses, if carefully integrated and controlled, can be located in planned commercial districts or in the upper floors of buildings in the central business district. This is because any residential use tends to interrupt the commercial continuity such that commercial and residential decay results.

51.4 Mixed use districts composed of office, retail, and residential uses or of office retail and light industrial uses, but no residential uses, are permitted in the same district with industrial uses.

51.5 Detached and semi-detached single- and two-family dwellings are not permitted in commercial or industrial districts because they have a tendency to be blighted in commercial or industrial districts.

POLICY 52: An agricultural district will be established to preserve agricultural lands from the encroachment of incompatible uses and to provide for orderly and compact development.

POLICY 53: Buffer yards and screens will be required in order to improve the appearance and compatibility of land uses and other development within the city.

POLICY 54: The City of Ridgeland will employ flexible zoning administrative techniques (Variances, special use permits, rezonings, site plan review, overlay zones, floating zones, and administrative permits) and decision-making standards for these techniques.

PLANNING
PRINCIPLE: The standards are necessary to permit fair and impartial review and evaluation of development and to prevent arbitrary and capricious decisions when these discretionary methods are used. The term "highest and best use," as appraisers and realtors use the term, is that which will yield the maximum economic return. This term is not helpful in development review because highest and best uses often cause problems if they are located in the wrong places. The use of standards also attempts to minimize external factors, side effects, and spillover costs to other properties and the public at large.

POLICY 55: Use variances are prohibited. Variances are only granted to relieve hardships involving dimensional requirements.

POLICY 56: Guidelines for reviewing rezoning applications must include standards for dealing with spot zonings. No proposed zoning amendment (rezoning) will receive favorable recommendation unless:

56.1 The proposal will place all property similarly situated in the area in the same category, or in appropriate complementary categories;

56.2 There is clear and convincing evidence that all uses permitted under the proposed district classification would be in the general public interest and not merely in the interest of an individual or small group;

56.3 There is clear and convincing evidence that all uses permitted under the proposed district classification would be appropriate in the area included in the proposed change. (When a new district designation is assigned, any use permitted in the district is allowable, so long as it meets district requirements, and not merely uses which applicants state they intend to make of the property involved.);

56.4 The proposed change must not create an isolated district unrelated and incompatible to adjacent districts;

56.5 There is clear and convincing evidence that the character of the neighborhood will not be materially and adversely affected by any use permitted in the proposed;

56.6 The proposed change is in accord with the comprehensive plan and sound planning principles;

POLICY 57: The Land Use Plan will be used as a general guide to evaluate rezoning applications. Proposed rezonings may be approved if they conform to the land use conditions.

57.1 If the applicant's property falls on or adjacent to a district having the same zoning classification. The effect would be an extension of the land use classification.

57.2 If the density of the property conforms to that of the proposed zoning district.

POLICY 58: All necessary public facilities are available and adequate at the time of development.

POLICY 59: The city of Ridgeland uses zoning overlay districts for specific purposes.
Overlay district zones are defined as follows: a zone to which an overlay district ordinance has been adopted. Development within an overlay district zone is in accordance with the overlay district ordinance specified for that zone, and is compatible with the City of Ridgeland's Comprehensive Plan. However, nothing contained herein shall be construed as constituting a change of the underlying zoning applicable in any overlay district.

Information Technology Goal

GOAL: To establish a "World Class" information and communication system that positions the City of Ridgeland at the forefront of technology.

OBJECTIVE: SAFETY – Develop technology that will enhance public safety, be compatible with private security and surveillance, and position Ridgeland to be the safest City in the World.

OBJECTIVE: EDUCATION – Develop technology that will enhance Ridgeland's education system through the offering of virtual on-line classrooms.

OBJECTIVE: CONNECTIVITY – Develop technology that will allow the citizen's of Ridgeland the opportunity to forever remain in Ridgeland by connecting them to the World through any computer or handheld communications device.

OBJECTIVE: COMMUNICATION – Develop technology that will enhance communication through real-time video conferencing, voice-over IP technology, and better telecommunication systems.

OBJECTIVE: ECONOMIC DEVELOPMENT – Develop technology that will enhance Ridgeland's ability to offer a better business climate for national and international corporations by establishing a more advanced technology infrastructure network, both wired and wireless.

OBJECTIVE: MUNICIPAL SERVICES – Develop technology that will enhance the municipal services offered by Ridgeland's government including real-time Automatic Meter Reading, Network Monitoring, Traffic Monitoring, and Public Safety.

OBJECTIVE: ENTERTAINMENT – Develop technology that will enhance the entertainment value for the citizens of Ridgeland through interactive video, high resolution video, high resolution video-on-demand, and online gaming.

POLICY: Partner with a technologically advanced Broadband-over-Power-Line (BPL) research and development company to investigate Ridgeland's technology needs.

POLICY: Apply for state or federal grants to develop a BPL Network that is both wired and wireless throughout the entire City of Ridgeland.

POLICY: Develop a technology system that establishes an international model for the whole World to see.

CHAPTER TWO: LAND USE PLAN

Introduction and Methodology

Section 17-1-1 of the Mississippi Code specifies that the Land Use Plan element of the Comprehensive Plan shall designate "---in map or policy form the proposed general distribution and extent of the uses of land for residences, commerce, industry, recreation and open space, public/quasi-public facilities and lands." The Code also requires that "background information shall be provided concerning the specific meaning of land use categories depicted in the plan in terms of the following: residential densities; intensity of commercial uses; industrial and public/ quasi-public uses; and any other information needed to adequately define the meaning of land use codes (reflected on the Land Use Plan map). Projections of population and economic growth for the area encompassed by the plan may be a basis of quantitative recommendations for each land use category."

The purposes of the land use section of the comprehensive plan are to inventory the community's existing land use patterns and to recommend policies for future development that are consistent with the community's character. These policies also involve decisions on how the land use patterns should change for future needs. The Land Use Plan is a vital part of the Comprehensive Plan since zoning decisions are required by state law to be based upon the adopted Land Use Plan. It should be remembered, however, that the Land Use Plan is subject to change as the city grows and may be amended at any time following the necessary public hearings and justification for such amendments. Therefore, the Land Use Plan should not be regarded as being "cast in concrete."

In addition to an existing land use inventory, population, housing, and employment projections are also used to determine future development patterns. Population, housing, and employment projections establish patterns of expected future development. The land use section, in particular, serves as a guide for reviewing private development proposals and for making decisions on the location of public facilities.

Land Use Inventory and Projected Land Use Needs

Study Area:

Since state law requires that the plan address a 20 to 25 year period. With this long range time period in mind, a city such as Ridgeland would naturally look beyond its current borders at those areas that lie within its path of growth. This then requires that the city consider an area of at least one mile beyond its present corporate limits as part of its study area. Ridgeland's study area for the year 2020 is shown on Map 1. Ridgeland's study area extends only west and northwest of the current corporate limits because the City of Ridgeland is bordered by the cities of Madison and Jackson to the north and south and the Ross Barnett Reservoir to the east. This study area is intended to encompass the land within Ridgeland's "path of growth" for the next 25 years. A land use inventory was conducted for the study area, the results of which will be given later after the population projections are presented.

DEMOGRAPHIC PROFILE AND FORECASTS

Demographic Characteristics and Trends

The following data is compiled to establish the current profile of the city of Ridgeland with respect to a variety of issues including population, age, housing, education and employment. As a point of clarification, the data included in these tables reported for Ridgeland does not include the annexed territory or the portion of the planning area lying outside the corporate limits.

Population

Population data is recorded every ten years by the United Stated Bureau of the Census, as it has done since 1790. The latest census, Census 2000, provides the most recent and readily available resource for demographic information. The success or quality of a community is sometimes gauged by changes in population. The assumption is that increasing population indicates a favorable community because people are choosing to move into the community (or choosing to stay as opposed to moving away). These statistics are often compared by community leaders to "gauge" the community's standing.

The population of Ridgeland has increased dramatically over the past 30 years. The data reported by the Census Bureau indicates the following population figures:

Year	Population
1970	1,650
1980	5,461
1990	11,714
2000	20,173

In considering population changes, it is important to consider the factors which impact population. Population can be affected by three different components:

1. In migration or out migration (persons moving in or moving away)
2. Net affect of births or deaths, and
3. Change in geography (annexation or deannexation)

The City of Ridgeland has experienced population increase due to each of these three factors.

Table 1 (following page) depicts the population and population changes from 1980 to 2000 for the City of Ridgeland and other geographic areas within Madison County. The purpose of this comparison is not to indicate which community is "better" or "worse", but to get an idea of where growth is occurring and the pace of that growth.

Geographic Area	Total Population			Numerical Change			Percent Change		
	1980	1990	2000	80-90	90-00	80-00	80-90	90-00	80-00
Ridgeland	5,461	11,714	20,173	6,253	8,459	14,712	114.5%	72.2%	269.4%
Canton	11,116	10,062	12,911	-1,054	2,849	1,795	-9.5%	28.3%	16.1%
Flora	1,507	1,482	1,546	-25	64	39	-1.7%	4.3%	2.6%
Madison	2,241	7,471	14,692	5,230	7,221	12,451	233.4%	96.7%	555.6%
Jackson (part)	N/A	727	533	N/A	-194	N/A	N/A	-26.7%	N/A
County Remainder	21,288	22,338	24,819	1,050	2,481	3,531	4.9%	11.1%	16.6%
County Total	41,613	53,794	74,674	12,181	20,880	33,061	29.3%	38.8%	79.4%
State of Mississippi	2,520,638	2,573,216	2,844,658	52,578	271,442	324,020	2.1%	10.5%	12.9%

Source: US Census Bureau for years noted.

Table 1: Change in population over time for select geographic areas. Ridgeland, the largest municipality in the county, has gained population over time, as has the county as a whole.

As can be seen in Table 1, Madison County experienced an increase in population of 33,061 persons over the twenty-year period from 1980 to 2000. For the same time period, the unincorporated portions of the county only increased by 3,531 persons. This fact indicates that most of the countywide population growth is occurring within municipal limits, or has been annexed into a city. Ridgeland accounts for a significant proportion of the population growth that has occurred within the county.

Since the release of the Census 2000 data, population growth is continuing, as evidenced by census estimates. For the period spanning from 2000 to 2007, the Census Bureau estimates Ridgeland and Madison County's population as follows:

	2000	2001	2002	2003	2004	2005	2006	2007
Madison Co.	74,674	76,544	78,015	79,809	82,030	84,488	87,223	89,387
Ridgeland	20,173	20,345	20,874	21,583	21,692	21,373	21,487	21,495

According to these census estimates, population growth within the City of Ridgeland is not keeping pace with historical growth rates. The most likely cause for the trend change is the lack of vacant land within the city limits. Additionally, contributing to this population, is the fact that redevelopment is occurring within the city. Apartment units have been removed to make way for other forms of development.

At the time of this writing, Ridgeland has recently received approval of an annexation that will provide for some additional vacant land for development; however, this supply of land should not be considered sufficient for an extended period of time. Because of the timeframe within which annexations occur (years to complete), Ridgeland should consider adding additional territory to its city limits.

Age Structure

Changes within the population by age can reveal certain information about the future for Ridgeland. Table 2 provides the opportunity to see how age groups have changed over the

decade between census periods. By comparing age strata over two census periods, the changes in specific age groups can be identified.

Age	City of Ridgeland 1990	2000	Change in Age Group
9 & under	1,604	2,790	n/a
10 to 19	1,086	2,304	700
20 to 29	3,563	4,131	3,045
30 to 39	2,673	4,001	438
40 to 49	1,210	3,056	383
50 to 59	614	1,774	564
60 to 69	447	837	223
70 to 79	273	613	166
80 and over	244	667	n/a
Total	11,714	20,173	

Sources:
1990 and 2000 Summary Tape File 1, U. S. Census Bureau

Table 2: Change in population over time by age cohort. Ridgeland has gaining population in every age category.

For example, in Table 2 the age group "9 & under" in 1990 would be the age group "10 to 19" in 2000. Calculating the difference in these groups provides insight as to the age makeup of Ridgeland.

The youngest measurable age group (10-19 for 2000) increased by 700 persons. Each age group thereafter gained population. The largest gain is in the "20 to 29" age group, with a gain of 3,045 persons. The high proportion of gain for this age group could be attributed to certain areas that were annexed by the city in 1995. Higher density residential developments in the vicinity of the reservoir were annexed, and likely contained many persons of this age cohort. Growth in all age cohorts is important to a community, as it represents a balanced community. Services must differ for various age groups (particularly with regard to recreational opportunities), and having balanced distribution and growth within all age groups results in a wider variety of community services and opportunities.

Housing Characteristics

The housing characteristics for the city of Ridgeland and Madison County are presented in Table 3 (following page). As can be seen, the number of housing units in the city of Ridgeland increased each census year from 1980 to 2000. This trend is logical given the correlation between population and housing units. As with population, the increase in housing units can, to some degree, be attributed to annexation. Nonetheless, Ridgeland is experiencing substantial growth from new construction. The market forces that are driving the demand for housing are expected to continue, which will in turn increase the demand for increased levels of service, particularly where this housing growth spills over the Ridgeland city limits into the comprehensive planning area.

Changes in household size create a disconnection between the growth of housing units and population. The bottom of Table 3 reports the persons per household, and over the twenty year period shown, Ridgeland has lost 0.44 persons for each household. Because of this, the growth rate for housing units out paces that of population. This is not unique to Ridgeland whereas Madison County experienced a similar reduction in persons per household. This trend is consistent with national demographic trends.

	1980				1990				2000			
Housing	Ridgeland		Madison Co.		Ridgeland		Madison Co.		Ridgeland		Madison Co.	
Units	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Occupied	2,091	91.9%	12,711	90.8%	5,625	91.6%	19,276	92.8%	9,267	93.3%	27,219	94.6%
Vacant	184	8.1%	1,282	9.2%	516	8.4%	1,485	7.2%	663	6.7%	1,562	5.4%
Total	2,275		13,993		6,141		20,761		9,930		28,781	
Occupied												
Owner	1,392	66.6%	8,957	70.5%	1,962	34.9%	12,371	64.2%	4,471	48.2%	19,288	70.9%
Renter	699	33.4%	3,754	29.5%	3,663	65.1%	6,905	35.8%	4,796	51.8%	7,931	29.1%
Total	2,091		12,711		5,625		19,276		9,267		27,219	
Persons per Household	2.59		3.20		2.07		2.74		2.15		2.67	

Source: U.S. Census Bureau for years noted.

Table 3: Housing tenure and vacancy rates. Over the twenty-year period, Ridgeland shows growth in housing units with a decrease in vacancy rates.

The data in Table 3 also indicates trends in housing tenure and occupancy. The vacancy rate in Ridgeland has decreased from 8.1% in 1980 to 6.7% in 2000. At the same time, Madison County has also experienced a decrease in vacancy. As a benchmark, the vacancy rate statewide for 2000 was 9.9%. In 2000, both Ridgeland and Madison County had vacancy rates that were well below this statewide average. Lower vacancy rates indicate a stronger demand for housing (i.e., if the housing stock is occupied, then fewer houses are available on the market for rent or purchase).

The housing ownership mix in Ridgeland changed considerably from 1980 to 2000. In 1980, owner occupied homes made up 66.6% of all housing in the city. By 2000, that percentage had dropped to 48.2%. Countywide, however, the ownership mix has remained unchanged over the 20 year period. Statewide, the housing ownership mix is 72.3% owner occupied, and 27.7% renter occupied. The high proportion of renter occupied housing is likely due to the high density housing annexed in 1995.

Housing quality is a factor that has an impact on the community in terms of community appearance, property values and overall quality of life. Presently, the housing stock in Ridgeland is in excellent condition overall. An indicator as to the future quality of housing is the age of housing.

Older housing usually requires a higher level of maintenance to keep it in good condition. The Census Bureau reports the “year structure built” in its decennial reports. The importance of this data is that it will demonstrate not only the age of housing but also the distribution by time period.

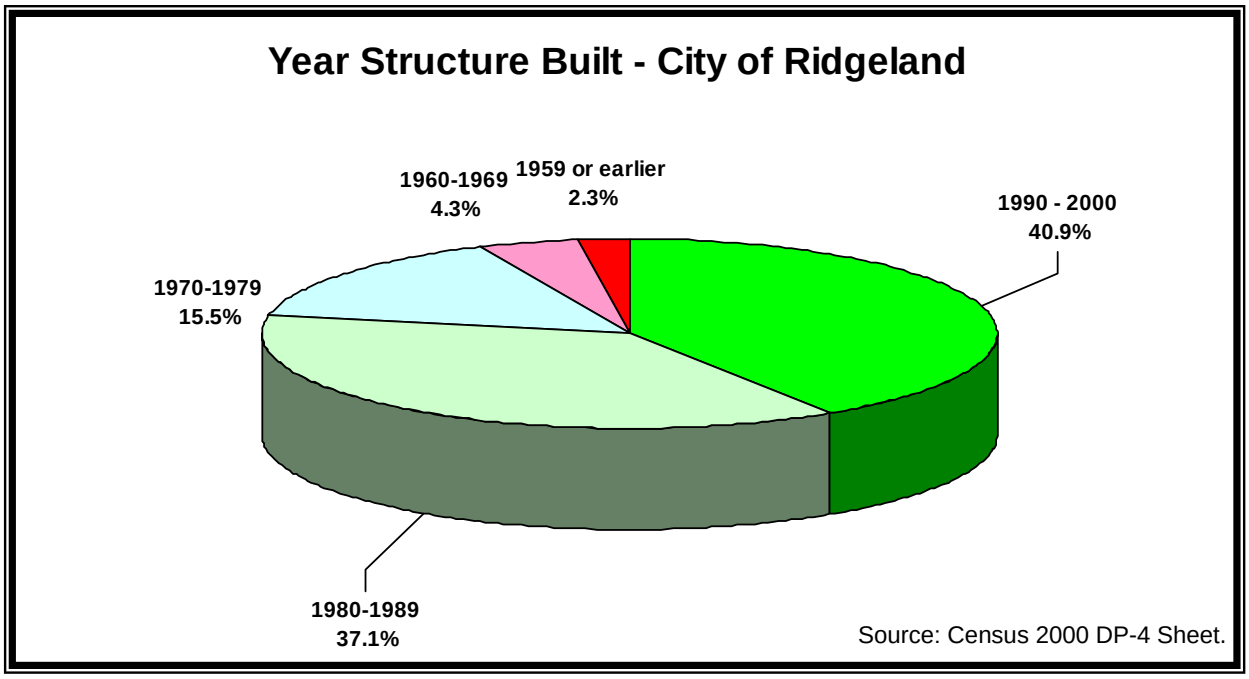


Figure 1: Distribution of housing units in Ridgeland based upon year structure built. Percentages represent total of all housing units.

Figure 1 is a pie chart indicating the data reported by the Census Bureau. It indicates an uneven distribution of housing units among the time periods. An overwhelming majority, approximately 78%, of the housing units in Ridgeland were constructed in the 1980s or later.

Educational Attainment

Information on educational attainment is presented in Table 4(following page) for the city of Ridgeland, Madison County and the State of Mississippi. In reading Table 4 it is important to understand the data rows. The row labeled "High School Graduate only" includes the population that has achieved only a high school education (college educated persons also have a high school education).

As can be seen in Table 4, Ridgeland has a higher percentage of persons with higher levels of education than does Madison County or Mississippi. This fact is not unusual, considering that much of Madison County and the state are rural in nature and agriculture is a primary occupation in these rural areas. The education level of the area's population will have an impact on the types of employers that seek to draw upon the local labor pool. Likewise, income levels will be commensurate with education levels.

1990	Ridgeland		Madison Co.		Mississippi	
	No.	%	No.	%	No.	%
Less than 9th grade	222	2.8%	4,285	13.3%	240,267	15.6%
9th to 12th, no diploma	424	5.4%	4,871	15.1%	309,418	20.1%
High school graduate only (includes equivalency)	1,150	14.7%	6,096	19.0%	423,624	27.5%
Some college, no degree	1,752	22.4%	5,673	17.6%	259,477	16.9%
Associate degree	631	8.1%	1,800	5.6%	79,264	5.2%
Bachelor's degree	2,719	34.8%	6,789	21.1%	149,109	9.7%
Graduate or professional degree	915	11.7%	2,650	8.2%	77,838	5.1%
Total persons 25 yrs and older	7,813		32,164		1,538,997	

2000	Ridgeland		Madison Co.		Mississippi	
	No.	%	No.	%	No.	%
Less than 9th grade	231	3.0%	2,995	9.3%	169,178	11.0%
9th to 12th, no diploma	670	8.6%	4,951	15.4%	307,852	20.0%
High school graduate only (includes equivalency)	2,126	27.2%	8,558	26.6%	516,091	33.5%
Some college, no degree	2,999	38.4%	9,702	30.2%	366,744	23.8%
Associate degree	838	10.7%	2,823	8.8%	100,561	6.5%
Bachelor's degree	4,375	56.0%	12,110	37.7%	194,325	12.6%
Graduate or professional degree	2,290	29.3%	5,634	17.5%	102,766	6.7%
Total persons 25 yrs and older	13,529		46,773		1,757,517	

Source: US Census Bureau 1990 and 2000 Summary Tape File 3.

Table 4: Educational attainment for Ridgeland, Madison County, and Mississippi. Totals represent the population 25 years old and older.

Employment Base

Economic analysis is more difficult for smaller levels of geography such as cities and towns. Data is compiled by various agencies at larger levels of geography such as counties, metropolitan areas and states.

Madison County is experiencing an increase in employment. According to data published by the Mississippi Employment Security Commission, there were 17,340 more persons in the civilian labor force in May 2006 than were there in 1990. The unemployment rate has fluctuated over that time period, but is now lower than the 1990 rate. Table 5 (following page) provides a summary of these data.

Madison County, Mississippi Employment Statistics

	1990	2000	May 2006
Civilian Labor Force	26,710	38,310	44,050
Unemployment Rate	5.4%	4.4%	4.7%
Employed	25,280	36,610	42,000

Sources:
Data taken from Mississippi Employment Security Commission Annual Averages report and May 2006 Labor Force Estimates.

Table 5: Madison County has seen an increase over the years with respect to employment. The May 2006 unemployment rate had fallen to 4.7%.

The economic profile of Madison County is favorable for continued growth. With significant increases in population, employment opportunities have been available to maintain a low unemployment rate. For comparison purposes, the unemployment rate for Mississippi for May 2006 was 7.4%, significantly higher than the 4.7% for Madison County. As employment increases, similar trends are taking place with respect to employment establishments. Table 6 provides a summary of change over time by establishment.

Madison County, Mississippi
Employment by Establishment

	1990	2000	Change '90-'00	% Change
Establishment Based Employment	16,700	28,830	12,130	72.6%
Manufacturing (Total)	2,780	3,250	470	16.9%
Non-manufacturing (Total)	13,920	25,580	11,660	83.8%
Mining & Construction	650	1,890	1,240	190.8%
Transportation & Public Utilities	860	2,030	1,170	136.0%
Wholesale & Retail Trade	6,140	8,970	2,830	46.1%
Finance, Insurance, & Real Estate	1,040	2,370	1,330	127.9%
Service & Miscellaneous	2,780	6,560	3,780	136.0%
Government	2,450	3,760	1,310	53.5%
Public Education	1,210	1,550	340	28.1%

Note: Totals may not add due to rounding.

Source:
Data taken from Mississippi Employment Security Commission Annual Averages for 1990 - 2000.

Table 6: Change in establishment based employment over time. An increase in the number of jobs has taken place overall (72.6% increase). Unlike many other counties, Madison County is experiencing an increase in all sectors of employment.

The most significant increase in employment occurred in the non-manufacturing sector, gaining some 11,660 positions over the decade. Manufacturing jobs, which usually show a decrease, increased by 470 over the decade. Although a detailed analysis is not within the scope of this report, the Nissan facility and its associated suppliers have likely had a significant influence on these trends.

A matter of interest in planning for the future is to consider, to the extent possible, where people work. For example, consider the fact that the Mississippi Employment Security Commission data indicates that in 2000, there were 38,310 persons within Madison County employed. Then also consider that the same data source indicates that for 2000 there were only 28,830 jobs within Madison County. The difference is that of 9,480 persons employed outside the county. Clearly there is room within the county for additional jobs.

In an effort to understand where people work, the Census Bureau provides data to that effect. For the city of Ridgeland's population, the data is summarized in Table 7.

Place of Work - City of Ridgeland
Based on Working Population 16 Years and Older

	Number	% total
Working Population 16 years+	11,455	100.0%
Work within Ridgeland	2,509	21.9%
Work outside of Ridgeland:		
Elsewhere in Madison County	1,372	12.0%
Outside Madison County	7,574	66.1%

Source: U. S. Census Bureau; Summary File 4 for Census 2000.

Table 7: More than 78% of the city's working population finds employment beyond the city's limits.

On a countywide basis, the Census Bureau provides data to identify commuter patterns, or where people travel to work. This data summarizes the flow of workers from a resident county to work county and vice versa. Table 8 (following page) indicates the commuter patterns into and out of Madison County.

Part I of the table indicates that 19,438 workers that reside in Madison County travel to work outside the county, with Hinds County receiving more than 81% of those workers. Part II of the table indicates that 13,775 workers from outside Madison County seek employment within the county. If more employment opportunities were available within the county, then the amount of commuting would likely be lessened.

Commuter Patterns for Madison County, Mississippi
Based on Census 2000

Part I.
People living in Madison County, but working in some other place.

Residence County	Workplace County	Count*	% Total Working	% Working Out of County
	Madison County	14,922	43.4%	
	Hinds County	15,906	46.3%	81.8%
Madison County,	Rankin County	2,521	7.3%	13.0%
Mississippi	Yazoo County	271	0.8%	1.4%
	Holmes County	123	0.4%	0.6%
	Scott County	122	0.4%	0.6%
	Warren County	118	0.3%	0.6%
	Other Area (22 counties)	377	1.1%	1.9%
Total Madison County Residents Working:		34,360		
Commuting to Outside Madison County:		19,438		

Part II.
People working in Madison County, but living in some other place.

Workplace County	Residence County	Count*	% Total Working	% Working Out of County
	Madison County	14,922	52.0%	
	Hinds County	7,279	25.4%	52.8%
Madison County,	Rankin County	3,739	13.0%	27.1%
Mississippi	Yazoo County	732	2.6%	5.3%
	Holmes County	354	1.2%	2.6%
	Leake County	245	0.9%	1.8%
	Other Area (52 counties)	1,426	5.0%	10.4%
Total Working in Madison County:		28,697		
Commuting from Outside Madison County:		13,775		

* Number of workers age 16 years and over in the commuter flow

Source: U.S. Census Bureau
Internet Release date: July 25, 2003

Table 8: Commuter patterns into and out of Madison County. Hinds County is a strong attraction for Madison County workers.

Summary

Ridgeland is experiencing internal growth with regards to both residential and non-residential development. Population in Ridgeland is on the rise, and along with the increasing number of rooftops come additional development in all forms, including retail and service industries. The Highland Colony Parkway area is rapidly developing, and the development trend is expected to push further west and north, as more land is available for urban development.

As evidenced in Table 5, unemployment has decreased in Madison County. A low unemployment rate is important not only at a personal level, but also at the community level. An employed population equates into a cycle of money flowing through the community, benefiting business owners, service providers and governmental entities. The ability of local government to function and provide services is enhanced as the cycle of spending increases. This economic cycle in Ridgeland and Madison County should be continually fostered and strengthened.

Population Estimates

Overall, the population in the Ridgeland study area is expected to increase substantially in the next 20- 25 years. The 2020 projected population for the study area is expected to more than double from 14,563 to 37,221. This means that there will be a great deal more development for which to plan.

According to the 1990 U.S. Census, Ridgeland and its study area had a population of 14,563, with 11,714 being inside the corporate limits. The largest age group for both Ridgeland and the study area is 20-29, and the second largest group is 30-39.

TABLE II-1
CITY OF RIDGELAND
1990 POPULATION AND 2020 PROJECTIONS BY TRAFFIC ANALYSIS ZONE AND BY PLANNING AREA

TRAFFIC ANALYSIS ZONE	1990 POPULATION	2020 PROJECTED POPULATION
RIDGELAND AND PLANNING AREA		
266	486	743
267	277	2006
268	932	947
269	466	486
270	527	1000
271	979	1057
272	0	0
273	499	532
274	1139	1341
275	81	333
276	1060	1184
277	1173	1352
278	208	257
279	66	71
281	0	0
282	267	557
283	1167	1235
284	17	3515
285	223	2985
286	66	217
287	373	2617
291	722	2928
292	30	64
293	898	1896
297	666	1023
298	746	1483
311	109	236
312	405	493
314	261	2090
315	720	4733
TOTALS	14,563	37,381

Numerous techniques of projecting future population exist. The CMPDD used a linear regression technique to project County-wide population through the year 2020, with a base year of 1970. This technique projects future population by establishing a growth curve from past trends. An

average of population and dwelling units counts from 1970 through 1990 was used to arrive at the projections rather than "pure" Census population figures. Table II-1 shows the Population Projections for Ridgeland and its planning area, which were a part of the county-wide projections.

Because municipal boundaries do not remain constant due to annexation, CMPDD population projections for the Ridgeland Study Area are based upon Traffic Analysis Zone projections that were developed for the 2020 Jackson Urbanized Area Transportation Plan. CMPDD compiled 1990 population counts by Traffic Analysis Zone from the 1990 Census of Population. Next, projections of residential acreage were produced based upon the current Ridgeland Land Use Plan. Assumptions were made about the amount of acreage that would actually be developed for residential uses within 20-25 years. Population density figures (according to the type of residential development— existing or proposed) derived from the Land Use Plan were used to produce population projections to the horizon date of 2020. The population of the Ridgeland Study area is projected to be 37,221 by the year 2020.

Existing Land Use Methodology

The land use survey is traditionally the most important survey of the planning process. This survey is a field "windshield" survey conducted in Ridgeland and the surrounding study area. The field work was recorded on a base map and aerial photographs, and each parcel was coded according to its present land use and then transferred to a large base map. The current zoning classification of each parcel was not considered at this time, because it does not come into play until the Land Use Map is developed. The existing land use is divided into the following categories:

1. Residential Estate (large lots of at least one acre)
2. Low-density residential (1-3 dwelling units per acre)
3. Medium-density residential (4-6 dwelling units per acre)
4. High-density (multi-family) residential (7-10 dwelling units per acre)
5. Residential Manufactured Homes
6. Public/Quasi-public (schools, churches, libraries, public buildings, etc.)
7. Parks/Open Space
8. Limited Commercial (offices, medical clinics, etc.)
9. General Commercial (indoor commercial uses)
10. Highway Commercial (primarily commercial uses with outdoor storage)
11. Technical Industrial Park
12. Light Industrial Uses
13. Heavy Industrial Uses
14. Agricultural/Open Space

The existing land use map shows present land use patterns and provides a basis for the development of the land use plan and future zoning map.

Table II-8 shows the relative sizes of existing land use categories within the current Ridgeland corporate limits and the entire study area. Land use categories have been depicted in acres, and

each category is expressed as a percentage of the total city area and the total study area. This survey is useful for pointing out existing estimated land use acreage and potential available land for future development. For example, this survey estimates that Ridgeland is approximately 79 percent developed, and the study area is 60 percent developed. Clearly, the city of Ridgeland is rapidly being built out and will need more land for development. In this regard, this is an indicator of future land use needs, especially if the percentages of each land use category are assumed to be approximately the same in 2020 as those of today, with the exception of agricultural land uses.

TABLE II-8
SUMMARY OF EXISTING LAND USES
CITY OF RIDGELAND AND STUDY AREA - 2000

Land Use Category	Ridgeland: Area in acres	Percent of city	Study Area: Area in acres	Percent of Study Area
Total Area	**10,750**	**100.**	**28,800**	**100.0**
RESIDENTIAL IN USE				
Residential Estate	1,045.9	9.7	2,829.6	9.8
Low-Density Residential	975.8	8.9	1,122.9	3.9
Medium-Density Residential	541.0	5.0	549.2	1.9
Multi-Family Residential	341.1	3.2	341.1	1.2
Manufactured Homes	98.6	.9	180.5	0.6
Subtotal for Residential Uses	**3,001.9**	**27.9**	**5,023.4**	**17.4**
COMMERCIAL IN USE				
Light/Office Commercial	236.4	2.2	236.4	0.8
General Commercial	294.2	2.7	299.3	1.0
High-Intensity Commercial	213.6	2.0	213.6	0.7
Subtotal for Commercial Uses	**744.2**	**6.9**	**749.3**	**2.6**
INDUSTRIAL IN USE				
Light Industrial	112.8	1.1	112.8	0.4
Heavy Industrial	36.7	0.3	243.0	0.8
Subtotal for Industrial Uses	149.5	1.4	355.8	1.2
Public/Quasi-Public	481.8	4.5	531.3	1.9
Parks	279.3	2.6	279.3	4.0
Natchez Trace Parkway	735.0	6.8	882.5	
Street Rights-of-way	1,201.0	11.2	5,870.0	20.4
Utility Rights-of-way	95.9	.09	255.0	0.9
Subtotal for Supportive Uses	**2793.0**	**26.0**	**7,818.1**	**27.2**
Total of Development Land	**7,505.7**	**69.8**	**18,304.2**	**63.6**
Floodways	678	6.3	1,246	4.3
Floodplains	1,125	10.5	2,219	7.7
Reservoir	892.6	8.3	892.6	3.1
Available Land for Development	**548.7**	**5.1**	**10,495.8**	**36.4**

SOURCE: CMPDD 1997 ESTIMATES
Note: The City of Ridgeland annexed territory subsequent to the preparation of this table. Additionally, the limits of the planning area have been modified and such modifications are not reflected in this table.

The Land Use Plan

Overview:

The land use plan represents a composite of all the elements of the planning program. Within this context, the plan depicts in narrative, statistical and map forms the general relationships between land use patterns, major transportation arteries, schools, parks and other community facilities, and the overall environment of the community. Preparation of the land use plan was closely coordinated with the development of all other elements of the planning program, particularly the population and economic study, the transportation plan, and the community facilities plan.

In addition to coordinating the land use proposals with other elements of the planning program, preparation of this study largely consisted of two major work elements. The first work element was determining quantities of various land use categories needed to sustain anticipated future city growth through the planning period. The second major work element was selecting areas of the community that were best suited for a particular type of urban activity.

The Land Use Plan should be used primarily as a general and long range policy guide to decisions concerning future land development. The adoption of these policies by the Mayor and Board of Aldermen establishes their dominance as a guide for land use decisions, and that they may change only by amending the plan. This plan shall also be used as a forecast of the future land needs of the city.

Although the land use forecasts are for 20 to 25 years in the future, the life expectancy of the land use plan, for accuracy and applicability is five to six years. This points to the need to revise the plan every five years.

The plan is not a legal tool; however, because it forms the basis for the zoning ordinance, the subdivision regulations and other implementation documents, it does carry some legal weight. The plan should serve as a guide for consideration of amendments to the Zoning Ordinance, the Official Zoning Map, the Subdivision Ordinance, the public improvements program and capital improvements budget. The Land Use Plan map is intended to indicate broad categories of development for general areas of the city. In order to be useful to zoning, the land use map attempts to delineate exact boundaries wherever possible.

Methodology:

This section of the Comprehensive Plan was developed using three processes involving plan formulation and evaluation. First, the spatial distribution of Ridgeland's future land uses was made after applying specific location criteria. Second, the amount of land allocated for future land uses was correlated with the demand for land in the year 2020. Last, a physical plan for future growth was developed to use city resources and meet city needs in an effective and efficient manner.

The quantities of land needed to accompany various activities in an urban area depend on a multitude of interrelated factors. The most important factors are the composition and the characteristics of the population, the economy of the area and the trends in the density of

development. Since all three of these factors are closely related, a change in one will cause a corresponding change in the other two.
For example, the density of development is dependent, to a large degree, on raw land and development cost (economic factors). Therefore, if these costs increase, the density of the development usually increases to offset these costs, unless the costs are offset by a corresponding increase in income, sales or other economic factors. Although there are numerous methods and techniques used to forecast demands for the future land uses in urban areas, all of these techniques rely, directly or indirectly, on estimates of these factors.

The Land Use Plan, in order to be useful as a policy tool for guiding land use decisions, must be carefully composed. In drafting the Land Use Plan Map, the following factors were considered:

1. Existing land use patterns and growth trends
2. Projected future land use needs based on projected future population and employment converted to the number of acres needed to accommodate projected growth levels
3. Flood plains, excessive slopes (over 12 percent), and soil types
4. Location of major streets and open space

Location Criteria:
Location criteria and guiding principles and standards are used in the placement of activities in the Land Use Plan. These principles and standards have evolved over time within the planning profession and are recognized for their universal application. These criteria involve numerous considerations including danger from floods and other health and safety standards, the vulnerability of important environmental processes to urban activities, the proximity of one land use from another in time, distance and cost, the social, economic and environmental compatibility of adjacent land uses, physical characteristics of individual locations and their suitability for development and the pattern of land values. General principles relating to the location of land uses customarily identify five major functional areas: the work areas, the living areas, the shopping and leisure time areas, the community facility systems and environmentally critical areas of land and water. These principles can be expressed as follows:

1. **Work areas** should be located in convenient proximity to living areas where energy efficient interconnecting transit and thoroughfare routes can be designed to insure easy access back and forth; they should be in convenient proximity to other work areas and where uses incidental to one another have access to interconnecting truck routes. The spatial distribution of work areas should harmonize with intra-urban patterns of firm interaction. Heavy concentrating of work areas should be avoided so as to disperse point source of pollution. Some work areas should be in locations accessible to heavy transportation facilities and large capacity utility lines. Work area locations provide sites adequate in size, economic to develop and attractively situated for the particular uses intended.

2. **Living areas** should be located in convenient proximity to the work and leisure time areas and where there are nearby transit and thoroughfare routes to insure easy access. The spatial configuration of residential communities should take the

activity and residential preference patterns of various categories of households into account. Living areas should be in convenient proximity to large open spaces and should include smaller open spaces, with residential areas within easy walking distance of community facilities. They should be located in areas protected from traffic and incompatible uses, in areas that are economic, energy efficient, and attractive to develop, and where desirable residential densities with a range of choice can be insured.

3. **Shopping areas** and entertainment centers such as shopping malls, restaurant areas, cultural centers and educational complexes should be in convenient proximity to living areas. They should be in centrally located areas and on sites adequate for their purposes.

4. **Community facility** systems should be designed around the underlying service-delivery concepts of each such system and its program, with service levels appropriate to the user groups of each facility. Recreational facilities, schools, libraries, medical care facilities, police and fire stations, and other community facilities should be in locations convenient to user groups and on sites that can be developed economically. The reason is that community or public facilities should be built or developed with an efficient and effective use of taxpayer funds.

5. **Open space system and environmental protection.** Major parks and large open spaces should be located so as to take advantage of, as well as protect, natural processes and unusual landscape features and to provide for a variety of outdoor recreational and other activities. Environmentally critical areas of land and water should be protected from incompatible uses and from pollutants generated by urbanization in the vicinity. Wooded areas that serve a functional purpose in climate, noise, light, and pollution control should be preserved as part of an urban forest and open-space system. Vulnerable urban development should not be located in areas of natural hazards to life and property such as floods, slides and unstable soils. Development using on-site sewage treatment should be prohibited from areas of unsuitable soil and geological conditions. Present and future water supply drainage basins should receive only urban development compatible with protection of the water quality.

Land Use Plan Map:

The Land Use Plan Map will be instrumental in developing a new zoning atlas. In order for the zoning map to be optimally effective, it should closely mirror the Land Use Plan Map. In addition to the Land Use Map, other considerations in drawing the zoning map are:

1. How many sets of districts shall there be?
2. How much space should be allocated to each type of district?
3. What types of land are suitable for each type of district?
4. What should be the physical relationships between various types of districts?
5. Where should the various districts be located, in general?
6. Where should the exact boundary lines of each district run?

In mapping zoning districts, there is usually a compromise between the distracting pattern dictated by existing development and that called for by the Land Use Plan. The Land Use Plan becomes a guide for this decision-making process, as well for the deliberations to be followed in making later amendments to the zoning ordinance. Generally, zoning districts reflect certain principles as follows:

1. Compatibility of use
2. Appropriateness of the land
3. Locational needs of uses
4. Public Services Effects

As a general rule, it is more advisable to run the boundaries of a district along or parallel to rear lot lines, rather than through the center of a street. Where one side of a street is zoned for business and the other for residential use, there is a strong temptation for legislative bodies and courts to authorize business uses on the residential side of the street. Where a district runs parallel to side lot lines it should avoid splitting lots. Land situated similarly should be zoned alike. Care should also be taken that not too many non-conforming uses are created in each district.

Projected Residential Needs:

Table II-1 contains 1990 population estimates and 2020 population projections for the Ridgeland Planning/Study Area by Traffic Analysis Zone. These projections are useful in developing quantitative recommendations for each broad land use category.

Residential densities reflected in the Ridgeland Land Use Plan range from one single-family detached residence for every three acres to seven and one-half dwelling units per acre for multi-family residential uses (apartments and condominiums). The densities used in producing the dwelling unit projections are summarized under the heading "Explanation of Land Use Categories" depicted on the Land Use Plan map in this chapter.

In order to determine future residential acreage, it is necessary to use a projected persons per household ratio. This ratio has been declining since 1970 when it was 3.1. In 1980 it was 2.4, and in 1990 it was 2.20. One reason for this is that family sizes are smaller than in 1970. Another reason is that Ridgeland has a relatively large number of apartments, which tend to have fewer persons per unit. Compared to other metropolitan area suburban municipalities, Ridgeland has more than double the number of apartment units as Clinton, the next highest number (3,700 to 1,300). Even though the ratio is declining, it is not expected to decline to zero. It is expected to level off to about 2.08 by 2020.

Using a projected persons per household ratio of 2.08 and applying it to the projected increase in population of 23,016, we arrive at 11,065 additional dwelling units needed for 2020. Assuming that the present dwelling units per acre ratio will remain the same in 2020, this ratio (4 d.u.'s per acre) is applied to the number of projected additional dwelling units needed for 2020. The result is that 2,766 additional residential acres are needed for 2020 to handle the additional population increase. This acreage will largely come from the Ridgeland Study Area, and annexation will eventually be necessary.

Projected Commercial and Industrial Acreage Needs:

Commercial Acreage Needs:
Since a growth in population also creates a corresponding growth in employment, projections of commercial and industrial acreage needs are based upon the premise that the future need for commercial and industrial acreage is proportionate to the growth of the population of the study area. Therefore, the population of the study area is expected to increase by 151 percent between 1990 and 2020 or 2.5 times. Obviously, in a metropolitan area, residents have the opportunity to work or shop for goods and services in the entire Hinds, Madison, and Rankin Counties' areas or beyond— not in just the defined study area. However, for the purposes of this plan, it is assumed that much of the future commercial needs of the population in the study area will be met within that study area. Table II-8 provides information on the existing commercial and industrial acreage in the study area, providing a means for projecting future needs for commercial and industrial land.

In accordance with the goals and objectives for commercial development, future commercial development is confined to certain areas, specifically the following major thoroughfares.

1. Along U.S. Highway 51
2. Along Old Canton Road
3. Along County Line Road
4. Along Highland Colony Parkway
5. Along I-55

To project commercial land use needs for 2020, it is necessary to determine the current ratio of commercial employees per commercial acre with the presupposition that the same ratio will apply in 2020. This presupposition recognizes the fact that percentages of different land uses tend not to vary greatly over time. The problem in calculating the employees per acre ratio is that the 1990 Census Employment by Industry Sector figures reflect only the employment of Ridgeland residents. It is known that some Ridgeland residents work elsewhere as well as some residents from outside Ridgeland work in the city, but there is no data to determine these numbers with any degree of accuracy. For the purposes of this plan, it is also assumed that the future commercial employment needs of the population in the study area will be met within that study area.

Currently, there are 13.7 employees per commercial acre, and 52.9 percent of the population are commercial employees. It is further assumed that the same percentages will apply in 2020. Thus, 52.9 percent of Ridgeland's 2020 projected population is 20,215 commercial employees. Multiplying the 13.7 employees per commercial acre by the number of 2020 commercial employees yields 2,770 acres needed in 2020 to satisfy commercial land use needs. This means that 2,169.6 additional acres (over the current 600.4 acres) will be needed. There is ample land within the current city limits and study area to satisfy these needs, much of which is already zoned for these purposes.

Industrial Acreage Needs:
As stated previously, industrial acreage needs are based upon the presupposition that the future needs for industrial acreage are proportionate to the growth of the population of the study area. The projected industrial land use needs are derived in a similar fashion as were the commercial needs.

The current number of employees per industrial acre is 10.9, and industrial employees comprise 9.7 percent of the current population. When these ratios are applied to the projected 2020 population, the result is 404 industrial acres needed in 2020, or an additional 243 industrial acres.

Explanation of Land Use Categories:

The Ridgeland Land Use Plan categorizes future land uses in the following manner:

1. Residential Estate
2. Low-density Residential
3. Moderate Density Residential (patio homes, townhouses, zero lot line homes), or Medium Density Residential
4. High-density Residential
5. Manufactured/Mobile Home Residential
6. Residential TND
7. Mixed Use (Residential and Commercial)
8. Schools
9. Low-intensity Commercial (office commercial uses)
10. General Commercial (indoor commercial uses)
11. Heavy Commercial (Highway Commercial, or High Intensity Commercial)
12. Light Industrial (Indoor Industrial & Warehousing)
13. Heavy/Outdoor Industrial
14. Technical Industrial Park
15. Medical Special Use
16. Public/Quasi-Public
17. Parks and Greenways
18. Right-of-Way
19. Conservation Area
20. Flood Plains and Floodways
21. West Jackson Street Overlay District
22. Old Agency Road Corridor Preservation District
23. Pearl River Valley Water Supply District
24. Interstate Enhancement

The following is an explanation of the specific meaning of land use and thoroughfares color codes depicted on the Land Use Plan/Thoroughfares Plan Map contained in this report. Since these categories will be used to determine zoning districts, each residential, commercial, and industrial land use category has its corresponding zoning district(s) noted for ease of reference.
In several instances a land use category includes more than one zoning district because the zoning districts have similar characteristics.

RESIDENTIAL ESTATE (chartreuse/pale green): Maximum density of one single-family detached residence per acre

This land use classification is intended to promote development of large, residential estate size lots with a minimum lot size of one acre. These areas on the Land Use Plan may or may not be served by the municipal sewer system within the next 25 years; therefore, the large lot size is needed to provide ample space for discharge from individual on-site wastewater systems.

LOW-DENSITY RESIDENTIAL (yellow): Maximum density of three single family detached residences per acre. This land use category combines the residential zones R-1 and R-2 for flexibility in developing low-density residential land.

This land use classification is intended to promote the development of single-family detached dwellings on relatively large lots (at least 10,500 square feet).

MODERATE-DENSITY RESIDENTIAL (gold): Maximum density of five single-family detached residential units per acre. This land use category combines the residential zones R-3, R-3A, and R-4 for flexibility in developing medium-density residential land.

This land use classification allows the development of single-family detached dwellings on moderate size lots (at least 6,000 square feet). This category includes the type of single-family residences known as patio homes, townhouses, and zero lot line homes.

HIGH-DENSITY RESIDENTIAL (brown): Maximum density of ten dwelling units per acre.

This land use category combines the residential zones R-5 and R-5A for flexibility in developing high density residential land. This land use classification allows the development of apartments or condominiums on arterial streets or highways, which have the capability of carrying higher traffic volumes generated by residences of this density.

MANUFACTURED HOME RESIDENTIAL (light orange): primarily manufactured/mobile home parks

This classification allows the development of manufactured home parks on arterial streets or highways, which have the capability of carrying higher traffic volumes generated by these types of residential areas.

RESIDENTIAL TND (yellow with horizontal red strips):

This land use category identifies areas which are suitable for development or redevelopment in the manner that brings back the essence of Ridgeland Historic Neighborhoods that were developed on a grid system. This can be accomplished through innovative development using Traditional Neighborhood Developments (TND) principles and design guidelines.

MIXED USE (RESIDENTIAL / COMMERCIAL) (yellow with vertical red strips):

This land use category identifies areas which are suitable for high quality, high density development of both residential and commercial land uses, designed to coexist. The purpose of these areas is to create lively community spaces and stimulate markets for development. No specific density limitations are imposed within this category as these areas are expected to be developed with a high level of planning and design review, high quality of design, and a reasonable level of flexibility in design.

SCHOOLS (blue):

This land use category identifies areas which are suitable for the location of schools, kindergarten through twelfth grade; vocational schools; or colleges. Schools provide the opportunity for connectivity with residential areas along with pubic open space. Planning space for future schools expansion should provides the public the opportunity to walk from the schools to surrounding recreational facilities, shopping, workplaces and churches. Schools can enhance the growth patterns of the neighborhood by supplementing community awareness and identity with strong schools and the stability of the community character.

LIMITED/LOW INTENSITY COMMERCIAL (light red/pink): Restricted Commercial

These areas should include: business and professional offices; personal services such as hair styling shops and photographic portrait studios; instructional services such as dance studios; floral shops; and other similar uses that do not generate high vehicular traffic (more than 70 average daily trips per 1,000 square feet of Gross Floor Area) or high noise levels (i.e., exceeding a DNL or average "Day Night Level" of 65 decibels). This category corresponds, generally, to the C-1 Restricted Commercial District.

GENERAL COMMERCIAL (red): Enclosed Commercial Activities Only. This category includes zoning districts C-2, C-2A, C-3 and C-6 for flexibility in developing commercial land.

These areas should include businesses in which the principal activity is conducted indoors. However, certain land uses that involve some outdoor activities could be permitted in these areas. Examples of outdoor activities that would be included are car washes/vacuum cleaner stations and quick car care clinics. This land use classification would include shopping centers as well as independent commercial uses.

HEAVY COMMERCIAL (HIGHWAY/HIGH INTENSITY) (brownish red):
This land use category is designed for those corridors within the City of Ridgeland that are subject to high traffic volumes and high visibility from traffic passing through the city, particularly along the Interstate 55 corridor. This district is intended to allow for commercial or professional land uses which directly or indirectly benefit from the high volume of traffic and high visibility, while at the same time allowing for the improvement, creation or preservation of a positive visual image of the City of Ridgeland. Interstate 55, and the traffic volume thereon,

provides the greatest amount of visual exposure for the city, and this land use category seeks to strike a balance between achieving high aesthetic qualities and accommodating the market demands for commercial and professional development along this corridor.

LIGHT INDUSTRIAL (light purple): Enclosed Industrial Activities Only. This category corresponds to the I-1 Industrial Zoning District.

> This classification includes manufacturing uses where all or most of the associated activities are conducted indoors. These manufacturing uses are those that do not generate noise, vibration, or offensive odors detectable to human senses off the premises.

HEAVY INDUSTRIAL (dark purple): All Industrial Uses, including outdoor. This corresponds to the I-2 Industrial Zoning District.

> This classification includes manufacturing uses where all or part of the associated activities are conducted outdoors, or where the use requires large volumes of water or generates noise, vibration, or offensive odors detectable to human senses off the premises.

TECHNICAL INDUSTRIAL PARK (purplish pink): For light industrial, technological, and professional firms located adjacent to major transportation arteries and thoroughfares as well as residential areas.

MEDICAL SPEICAL USES (blue green): private medical clinics, assisted living facilities and nursing homes

> This land use classification includes all existing and proposed medical care facilities and campuses. New medical service developments in this district are intended to meet the needs of the aging population in regard to accessibility issues, an increasing national retirement population, and fast paced changes in the health care delivery system. The district promotes proximity to other services, residential areas, existing critical infrastructure, and education facilities.

PUBLIC/QUASI-PUBLIC USES (green):

> This land use classification includes all existing and proposed public/quasi-public uses such as churches, schools, governmental buildings and facilities, cemeteries, etc.

PARKS AND OPEN SPACE (dark green):

> The Land Use Plan reflects the location of existing parks, proposed parks, and areas that should be preserved as open space because of steep slopes or other development constraints. Additionally, this land use category is also intended to identify those portions of the city where significant buffering is desirable to enhance the quality of development, or to aid in directing market forces to fulfill the design of the land use plan.

GREENWAYS (light green):

The Land Use Plan reflects the location of greenways developed with bike and pedestrian trails that improve connectivity and conserve wildlife habitat. Land in this district uses conservation practices and incorporates greenways in drainage areas to provide green surroundings, offers recreational and fitness opportunities to families and individuals of all ages and abilities, provides a buffer between normally incompatible adjacent land uses, and protects and enhances the storm drainage capacity of the community.

RIGHT-OF-WAY (gray):

City involvement with acquisition of roadway right-of-ways, landscaping of public right-of-way areas, and parking along the railroad right-of-way that supports the on-going downtown development are methods the City can use to promote the joint safety of vehicular and pedestrian traffic.

Future right-of-way purchases for roadways should include extra widths for an adopted trail system that has been integrated with the City's transportation plan. This will allow for an orderly and cost efficient approach in the purchase of future right-of-way and roadway development.

The City can enhance the right-of-way by adding a landscaped median within the right-of-way to improve highway safety and appearance, limit left turns to reinforce access restrictions that will provide safer sidewalks/trails paralleling the highway, and street tree plantings will help add scale and enhance the visual experience.

CONSERVATION AREA (green diagonal hatch): Consist of areas of land along drainage corridors, right-of-ways, parks and neighborhood connections for the purpose of maintaining a natural look and feel..

The Land Use Plan reflects the location of open space resources which have a high-value as priority conservation areas. The City may designate undeveloped land and drainage ways as conservation areas and public open space. By delineating undeveloped areas as "conservation areas", new developments green space will be a mandatory component of the growth. These spaces are encouraged to be linked together, thus creating a sequence of open space trails that provide for storm water retention areas and provide enhancement in the quality of future development and the surrounding environment. A density bonus program may be appropriate for projects that incorporate improved or enhanced design principles which achieve conservation purposes.

100-YEAR FLOODPLAINS (light blue diagonal hatch):

These areas are shown on the latest available Federal Emergency Management Agency (FEMA) "Flood Insurance Rate Map" as 100-year floodplain (i.e., subject to a one percent chance of flooding in any year). The designated areas are subject to modification from time to time as FEMA amends the flood maps.

FLOODWAY (Turquoise net hatch):

These areas are actual creek channels or areas needed to convey water under normal conditions. These areas are shown on the latest available Federal Emergency Management Agency (FEMA) "Flood Insurance Rate Map". The designated areas are subject to modification from time to time as FEMA amends the flood maps.

WEST JACKSON STREET DISTRICT (black diagonal shading):

This is an overlay district the purpose of which is to preserve and promote a historically relevant commercial district.

OLD AGENCY ROAD CORRIDOR PRESERVATION DISTRICT (green boundary):

This is an overlay district the purpose of which is to preserve an historically significant corridor.

PEARL RIVER VALLEY WATER SUPPLY DISTRICT (black dashed boundary):

This is an area that is within the city limits of Ridgeland but that is under the control of the Pearl River Valley Water Supply District.

INTERSTATE ENHANCEMENT (black pattern):

The interstate enhancement area is confined to the public rights-of-way along interstates 55 and 220. The purpose of this district is to set forth a commitment by the City of Ridgeland to improve and enhance the city's aesthetic quality along these corridors. This district represents an area in need of continuous enhancement through the use of landscaping, lighting or other means to cast a positive visual image of the City of Ridgeland as one travels these corridors.

FINDINGS AND RECOMMENDATIONS:

1. There are some areas zoned for highway commercial but are not located on highways. These areas should be zoned more appropriately
2. Convenience commercial uses can be easily absorbed into the C-2 or C-2A zones, rather than a stand-alone zone. The C-3 zone should be eliminated or called the Neighborhood Commercial Zone and restructured more tightly for use in selected residential areas.
3. The amount of existing medium-density residential land is close to the amount of land in high density residential. In addition, there is very little medium-density residential land west of I-55. It is not advisable, at this time, to set aside any more land for medium-density residential. There are vast amounts of land in the Residential Estate category out of which additional medium-density residential land can be carved should the market dictate in the future.

4. The amount and percentage of high-density residential land is high. The city of Ridgeland has 11.23 percent of its total residential land in high-density residential uses. By comparison, the city of Meridian, which has about 1,300 more residential acres than Ridgeland, has only 3.73 percent of its residential land in high-density residential uses. Even though the amount of high density residential land is roughly equal to the amount of medium-density land, there is no high density residential land west of I-55. However, there appears to be no need for more high density residential land in the next five to ten years. If any land is set aside for this use, it should be located on arterial streets/roads to handle this high traffic generating use.

5. Patio homes, townhouses, and zero lot line homes are generally considered to be in a medium density residential category. However, the greatest minimum lot size of these three, represented in the zoning ordinance by the R-3, R-3A, and R-4 zoning districts, is 6,000 square feet. The minimum lot size of the next lower density category; represented by the R-2, R-1, and R-1A zone; is 10,500 square feet. The minimum lot size differences between the R-2, R-1, and R-1A zones range from 1,500 to 2,000 square feet. Therefore, a medium-density land use category should be created between the low-density residential category and the patio home/townhouse category. The minimum lot size for this category should be 8,000 square feet.

6. Along Highland Colony Parkway, allow a mixture of high quality indoor retail, office development, and high-tech commercial and industrial uses in addition to public/quasi-public uses such as churches, schools, and cemeteries.

7. With 21.4 percent of the land available for development within the current corporate limits, consideration should be given to annexing more land to accommodate future urban growth.

Future Land Uses within the Annexed Area

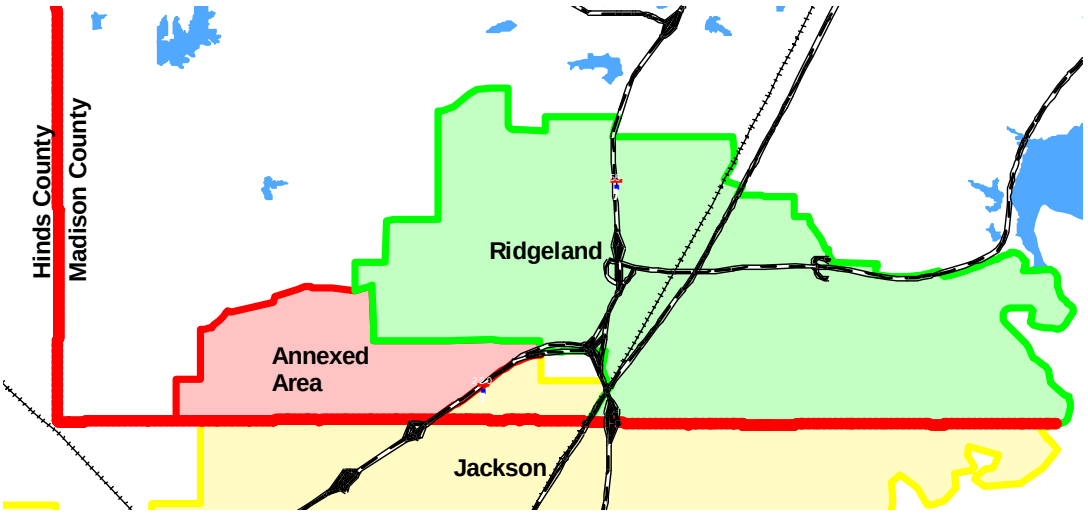
The City of Ridgeland successfully annexed an area consisting of approximately four square miles in 2005. The following graphic sets forth the area that was annexed.

The Future Land Use map designates future land uses for this annexed territory, as well as, the entire city and the planning area. This text is provided as a supplement to the Future Land Use map in order to more adequately describe the opportunities within the annexed area, and to more fully and accurately define future land uses within the annexed area.

COLE ROAD AREA

The Cole Road area is truly a unique community. This area maintains a rural atmosphere while being virtually surrounded by urban development. The Cole Road area is one of the last minority communities that remains in Ridgeland, and is a community made up of family members.

While the area bears a future land use designation of Technical Industrial Park, zoning the areas as agricultural will enable the residents to continue their rural lifestyle and preserve the character established in this neighborhood. It is fully expected that at some point in the future the adjacent commercial and industrial uses along Highland Colony Parkway will spill into the Cole Road area. Nonetheless, a need for some neighborhood enhancements in the form of a neighborhood park and a through connection to Highland Colony Parkway does exist.



BUSINESS PARK AREA

The existing business park along Marketridge Drive and Business Park Drive is well established and consists of a variety of light industrial and technological businesses. Although the land uses

are consistent in this area, the architectural style varies. This area is expected to continue to build out in a manner consistent with the existing land uses; however, there exists an opportunity to improve the aesthetic value of the business park through the application of Ridgeland's land development regulations coupled with careful review of development projects.

HIGHLAND COLONY PARKWAY CORRIDOR

The Highland Colony Parkway corridor stretches from County Line Road to Highway 463 in Madison, and epitomizes the positive return communities can recognize from infrastructure investments. Since the construction of the parkway in the 1990s, it has developed into a commercial corridor featuring high quality commercial development including high tech industries, financial institutions, communications industries, professional disciplines such as law offices and an appropriate mix of public/quasi public uses such as schools, fire stations and churches. More and more businesses are creating jobs along this corridor which will strengthen market forces for related commercial development. Ridgeland presently has two primary corridors providing retail opportunities, which are along County Line Road (east) and Highway 51.

Ridgeland is very limited in its directions for future growth. The most obvious direction for residential development is west. As more and more rooftops appear, the demand for retail development in the western portions of the city will increase. Given the increased number of jobs along Highland Colony Parkway and the westerly growth of residential development, Highland Colony Parkway is the logical location to support future retail and commercial development.

Future development along the Highland Colony Parkway corridor must be held to standards that meet or exceed the character of existing development along the parkway. These standards include architectural appearance, landscaping, signage, compatibility of land uses, open space and other factors that result in high quality development.

Mixed use developments are proving successful along the corridor, and the same concept could be appropriately applied to the corridor within this annexed area. Particularly attractive to support a mixing of uses are the two lakes lying west of Highland Colony Parkway and north of County Line Road. Although this area is shown as general commercial, it is conceivable that this area is suitable for mixing professional office, residential and retail. This mixing of uses, though, requires very careful, detailed site planning to create a harmonious mix of uses. The existing lakes provide recreational opportunities as well as scenic value.

LOW DENSITY RESIDENTIAL AND RESIDENTIAL ESTATE DESIGNATION

Low density residential use designations have a greater presence in the northern portions of the annexed area, while conversely, residential estate is prevalent along County Line Road. Although if this pattern were reversed, the resulting development would also be appropriate along County Line Road. The present design aims to lessen additional traffic congestion along County Line Road. County Line Road is a major east-west transportation artery, and is presently only two lanes wide. Other east-west arteries are available such as the Natchez Trace Parkway.

Since low density residential development is three to four times more dense than residential estate, the future land use plan is designed to place the higher traffic generators closer to transportation arteries other than County Line Road.

PARK AND OPEN SPACE DESIGNATION PARALLELING WEST COUNTY LINE ROAD

In an additional effort to avoid worsening traffic congestion along County Line Road, a park and open space corridor is designated to serve as a limitation on the intensity of development. This corridor is to be preserved as a visual barrier and screen, although recreational uses, such as a walking trail or the continuation of Ridgeland's bike trails, would be an appropriate use within this corridor. The visual screening created by this corridor will also serve to preserve the quality and character of development in neighboring Jackson. Along the south side of County Line Road, residential neighborhoods have built up to and adjoin County Line Road, and these areas enjoy a natural northern view.

It is believed that requiring this reservation of space will assist the city in carrying out other elements of this land use plan. For example, it is not desirable for commercial development to extend along County Line Road west, as it would increase traffic congestion and create compatibility problems with existing residential development along the south side of the road in Jackson. In return for this reservation of space, the city may want to consider offering developers some type of incentive, such as a density bonus.

SUPPLEMENTAL LAND USE PLAN DATA

In developing the Ridgeland Area Master Plan, the city formulated focus area land use plans for seven different focus areas (see pages 49 through 85 of the *Ridgeland Area Master Plan 2008, first edition)*. By reference, those focus area plans are incorporated into this comprehensive plan as a guide to the future development and redevelopment of these specific areas. Specifically, these focus area plans should serve as a guide to not only for zoning changes, but also for site specific review and approval purposes. Each focus area plan contains a variety of recommendations including, but not limited to, goals, recommended urban form and built environment, transportation and other improvements for the various areas.

CHAPTER THREE: TRANSPORTATION PLAN

Introduction

As stated in Chapter Two, the Land Use Plan, the Central Mississippi Planning and Development District is the "Metropolitan Planning Organization" or "MPO", designated by the Governor of Mississippi as the agency responsible for coordinating a federally-mandated "Transportation Planning Process" for the three-county metropolitan area of Hinds, Madison and Rankin counties. One of the responsibilities of the CMPDD as the "MPO" is the development and maintenance of an Area-wide Transportation Plan. Under federal regulations, this Area-wide Transportation Plan must include a projection of the metropolitan area's transportation needs for the next 20 - 25 years. The horizon date for the Area-wide Plan is the year 2020, or the same as the horizon date for the Ridgeland Comprehensive Plan.

In developing the Area-wide Transportation Plan, computerized traffic simulation "models" (mathematical formulas that express the actions and interactions of transportation system) are used to forecast future traffic volumes. The CMPDD performed 2020 projections of population, number of dwelling units, employment (by place of work) and school enrollment (by school location) as "input" for the traffic simulation models; these projections were developed for "Traffic Analysis Zones" or "TAZs". Map 1 in Chapter 2 depicts these Traffic Analysis Zones within the "study area" for the Ridgeland Comprehensive Plan.

According to Section 17-1-1 of the Mississippi Code, the Transportation Plan must include a Thoroughfares Plan "---depicting in map form the proposed functional classification of all existing and proposed streets, roads, and highways for the area encompassed by the Land Use Plan and for the same time period as covered by the Land Use Plan. Functional classifications shall consist of arterial, collector and local streets---and these functional classifications shall be defined as to right-of-way and surface width requirements; these requirements shall be based upon traffic projections."

Methodology used in Preparing the Thoroughfares Plan

Concurrently with preparation of the Land Use Plan for the Ridgeland Study Area (Chapter 2), the CMPDD developed a preliminary Thoroughfares Plan, classifying streets and highways according to the function that they can be expected to perform by the target year of the plan: 2020. According to the Federal Highway Administration (FHwA), "functional classification is the process by which streets and highways are grouped into classes, or systems, according to the character of service they are intended to provide" (Highway Functional Classification, U. S. Department of Transportation, July, 1974). The only controlled access highways in the Ridgeland study area are Interstate 55 and Interstate 220. They are shown in red on the Thoroughfares Plan. All state-maintained highways other than these two are classified as "principal arterials" (shown in blue) or "minor arterials" (shown in green), including U.S. Highway 51. All city and county-maintained thoroughfares are classified using the traditional groupings: principal arterial, minor arterial and collector (shown in brown). By definition, a "local" street is not a "thoroughfare". For the purposes of this plan, all highways, arterials, and collector streets are considered to be major streets.

The following are FHwA definitions of each classification:

1. Principal Arterials: This system of streets serves the major centers of activity, has some of the highest traffic volumes and the longest trip desires.

2. Minor Arterials: The minor arterial street system interconnects with and augments the principal arterial system. It provides service to trips of moderate length and contains facilities that place more emphasis on land access than the principal arterial system.

3. Collectors: The collector street system provides land access service and traffic circulation within residential neighborhoods, commercial and industrial areas. It distributes trips from the arterials to their ultimate destinations.

Minimum right-of-way and surface width requirements for the Thoroughfares Plan are specified below:

PRINCIPAL ARTERIAL (Blue): Proposed minimum of four basic lanes (48 foot surface width or more); minimum 80 foot right-of-way.

MINOR ARTERIAL (Green): Minimum of three-12 foot lanes; minimum of 70 foot right-of-way.

COLLECTOR (Brown): 28-36 foot surface width; minimum of 60 foot right-of-way.

LOCAL (No Color): two lanes; minimum of 50 foot right-of-way.

Recommendations for improvements to the streets and highways in the Ridgeland area are based upon traffic projections performed as part of the previously mentioned 1997 Area-wide Transportation Plan. Table III-1 contains 1996 traffic counts performed by the Mississippi Department of Transportation on various arterial or collector streets, roads and highways in the area, along with projected 2020 traffic volumes for the same thoroughfares. The recommended improvements shown in Table III-1 were derived, in part, by determining where traffic capacity deficiencies are likely to occur by the year 2020 or before. The "Traffic Capacity Indices" reflected in Table III-2 were used to determine the relative capability of streets and highways in the area to carry traffic for the forecast year of 2020. These values do not necessarily represent the actual traffic carrying ability of streets and highways.

This chapter also took into consideration the Transportation Plan Update for Ridgeland, Mississippi, prepared by Waggoner Engineering, Inc. and is also reflected on the Land Use and Transportation Plan Map. The Land Use Plan contains a transportation classification for freeways. For the purpose of this plan, these freeways are considered as principal arterial routes.

Ridgeland Proposals from the Jackson Urbanized Area's Transportation Plan for the Year 2020:

Stage 1 - 1997-2000

1. County Line Road - widen to 5 lanes, Pear Orchard Dr. to Old Canton Rd.
2. Old Canton Road - widen to 5 lanes, Lake Harbour Dr. to St. Augustine Dr.
3. Spillway Road - widen to 3 and 5 lanes, Old Canton Rd. to Breakers Lane
4. U.S. Highway 51 - widen to 5 lanes, Natchez Trace to Tisdale Rd. *
5. Old Agency Road - relocated, Natchez Trace Parkway. *

Stage 2 - 2001-2010

1. I-55 - widening - widen to 6 lanes, County Line Road to MS 463. *
2. Natchez Trace Parkway - new 2-lane roadway, I-20 to Madison Co. line & Hinds Co. line to I-55. *
3. Sunnybrook Road - Widen to meet future traffic and development needs.
4. McClellan Drive - extend to Ridgecrest Drive to Old Canton Road.

Stage 3 - 2011-2020

1. Lake Harbor Drive - widen to 4 lanes, U.S. 51 to Northpark Dr.
2. Lake Harbor Drive Ext. - new 4-lane extension, U.S. 51 to Highland Colony Parkway
3. Ridgewood Road - widen to 5 lanes, Centre St. to U.S. 51

Other Needs

1. Spillway Road - improve as needed.

* Ridgeland has no direct responsibility for these improvements.

Transportation Plan Update:

In July 1996 Waggoner Engineering updated the Ridgeland Transportation Plan. There is some overlap with the Metropolitan Urban Area Plan, but the update has a number of other recommendations. Table III-1 includes recommendations from the Jackson Metropolitan Area 2020 Plan, the Waggoner Engineering plan and some additional improvements proposed by CMPDD (no. 29 through 35). Each improvement has been assigned a phase or term in which the improvement will be accomplished. For complete descriptions of these improvements, see the Transportation Plan Update.

In March 2005, Ridgeland again updated its detailed transportation plan by Waggoner Engineering. The new roadways proposed in the Waggoner plan have been included as part of the future land use and transportation plan. In addition to these new roadways, the Waggoner plan contains more detailed transportation improvements, including roadway improvements, widening and pedestrian trails. The March 2005 Waggoner plan is incorporated herein by reference.

TABLE III-1

TRANSPORTATION PLAN UPDATE RECOMMENDATIONS SUMMARY

NO.	PROJECT AND PROJECT PHASE NO.	RECOMMENDED IMPROVEMENTS	1996 ADT (or 1999 ADT)	PROJECTED ADT
1	Lake Harbour – Old Canton to Breakers: 1	Widen to 5 lanes: U/C	16,786 (1999)	32,238
2	Rice – Old Canton to Pear Orchard: 1	Widen to 4 lanes	5,028 (1999)	30,000
3	Rice – Pear Orchard to Natchez Trace Parkway: 1	Realign and widen to 4 lanes: U/C	5,960	4,100
4	County Line – North Frontage to Ridgewood Rd: 1	Widen to 7 lanes	39,862	36,500
5	Ridgewood Road – Center to U.S. Highway 51:1	Widen to 4 lanes	5,800	12,200
6	Wheatley – Lake Harbour to Nolan Circle: 1	Widen to 3 lanes	3,650	n/a
7	Northpark – Towne Center to Lake Harbour: 1	Widen to 3 lanes	6,839	12,700
8	Country Line – Pear Orchard to Old Canton: 1	Widen to 5 lanes: funded & Designed	19,913	20,200
9	North/South Connector-Highland C. to L. Castle: 1	New 2-lane road	n/a	n/a
10	Lake Harbour 0 Pear Orchard to Northpark: 1	Widen to 3 lanes	n/a	9,900
11	Old Canton-Rice Road to N. City Limits: 2	Widen to 4 lanes with median	17,974 (1999)	29,298
12	Rice-Harbor Drive to Old Canton: 2	Widen to 4 lanes with median	10,500 (1999)	15,000
13	Old Agency Relocated – Natchez Trace Pkwy. Ext.: 2	Widen to 2 lanes	n/a	8,106
14	Ridgeland Ave. – Sunnybrook to U.S. 51:2	Widen to 3 lanes	n/a	6,098
15	Old Canton – Lake Harbour to Rice Road: 1	Widen to 5 lanes	14,867	17,246
16	Pear Orchard – Northpark to Lake Harbour: 2	Widen to 4 lanes	12,259	12,379
17	Sunnybrook – Jackson to L. Castle: 2	Widen to 3 lanes	2,800	6,717
18	East/West Connector – Highland Colony to new I-55 interchange: 2	New 4-lane road	n/a	n/a
19	County Line – Ridgewood Rd. to Wheatley St.: 3	Widen to 7 lanes	42,580	33,500

20	I-55 East/West Connector – new interchange to U.S. 51:2	New 4-lane road	n/a	n/a
21	Lake Harbour Ext. – U.S. 51 to Highland Colony: 1	New 4-lane road	8,390	10,200
22	Towne Center – Northpark to Old Canton: 1	New 3-lane road	n/a	n/a
23	Replace Natchez Trace Prkwy Bridges @ Old Canton & Rice Road (new):1	Widen to 5 lanes: has been funded	7,900	n/a
24	Lake Castle Ext. – Livingston to Lake Cavalier Rd.: 3	New 4-lane Road	n/a	n/a
25	Hickory Rd. Ext. – Lake Castle to Old Agnecy Rd.: 3	Extended as 2-lane road	n/a	n/a
26	Hickory Rd. Ext. – Old Agency to Highland Colony Parkway:3	New 2-lane road	n/a	n/a
27	Walter Payton Ext. – Livingston to Hickory Rd. Ext.: 3	Extended as 2-lane road	n/a	n/a
28	Lake Cavalier Rd. relocation – Existing Rd. to Livingston Rd.: 3	Relocate 2 lane collector	n/a	n/a

TABLE III-2

CITY OF RIDGELAND, MISSISSIPPI

THOROUGHFARES PLAN

TRAFFIC CAPACITY INDICES

FUNCTIONAL CLASSIFICATION	24-HOUR CAPACITY
Principal and Minor Arterials:	
Four Lanes (Undivided)	20,000
Four Lanes Divided	24,000
Six Lanes Divided	30,000
Collectors:	
Two Lanes	10,000

SOURCE: Adapted from Jackson Urbanized Area Transportation Plan: Development of Year 2000 Major Streets and Highways Plan, CMPDD; December, 1980.

The first three stages of the Jackson Urbanized Area's Transportation Plan are scheduled for funding. There is some overlap between the two plans, but the last five recommendations on Table III-1 are new ones offered by CMPDD. It is not within the scope of this plan to put them in priority with cost estimates and sources of funding. That is for a capital improvements program at some future date.

CHAPTER IV: PUBLIC FACILITIES PLAN

SECTION I – Parks and Recreational Facilities:

Introduction and Methodology

As with other sections of this *Public Facilities Plan*, the approach taken in the evaluation of Ridgeland's needs in terms of parks/recreational facilities and open space is to apply accepted standards to the current supply and projected 2020 needs. The 2020 needs are based upon the population projections prepared by Central Mississippi Planning and Development District. In this case, the standards used are contained in the *Mississippi State Comprehensive Outdoor Recreation Plan* (SCORP), which was updated by the Mississippi Research and Development Center in the mid-1980s. SCORP contains "prototype standards" for various classifications of parks and facilities, and these prototype standards are based upon acres or units needed for every 1,000 persons.

Prototype Standards:

The SCORP contains prototype standards for eight classifications of parks/recreational facilities and open space facilities. However, the first two classifications, "playlots" and "neighborhood playgrounds," are not included in this evaluation of future needs. "Playlots" are parks that are intended for use by young children and are generally located at an elementary school. "Neighborhood Playgrounds," which are usually intended for both pre-school and school-age children are also commonly located on a public school site. Therefore, for the purposes of this plan, it is assumed that most of the city's needs for playlots and neighborhood playgrounds will be met through the use of public school facilities.

The prototype standards for other SCORP classifications are to be used as general guidelines for the development of park facilities and may not contain such details as restrooms. As general guidelines, the standards do not have to be followed exactly. Communities may deviate from the standards depending on their particular needs. The standards are as follows:

Neighborhood Parks

Description: Neighborhood parks provide a variety of recreational opportunities, both passive and active, potentially organized or unorganized for all age groups.

Facilities: Neighborhood parks usually include children's play apparatus, paved multipurpose courts, sports fields, small picnic areas and shelters, drinking fountains, walking/jogging or nature trails, and offstreet parking and lighting.

Minimum Population Served: 5,000

Acres per 1,000 persons: 3.5 acres for every 5,000 persons in the service area.

Service Area: ½ mile in urbanized areas; 3 miles in rural areas.

Optimum Size: 5 to 7 acres.

Population Served: All ages.

Location: Neighborhood parks are usually located central to the population being served, without the need to cross arterial streets or highways. These parks are commonly located in an area characterized by some natural features such as trees, streams, and ponds/lakes.

Community Playfields

Description: Community playfields are large outdoor recreational areas -- primarily athletic complexes -- designed to serve competitive and recreational needs of children, pre-teens, teenagers, and adults. Playfields may provide a variety of organized activities and may have the potential to provide for competitive events and tournaments.

Facilities: The predominant facilities in this classification are athletic fields for sports such as soccer, football, baseball, etc. Playfields may also include court games such as tennis. Other potential facilities include lighting, sanitary facilities, concessions, storage areas, adequate parking, and spectator seating. Playfields may include some picnic facilities, shelters, children's play areas, and special purpose facilities such as a swimming pool.

Minimum Population Served: 10,000

Acres per 1,000 persons: 10 acres for every 10,000 persons in the service area.

Service Area: 5 miles in urbanized areas; 10 miles in rural areas.

Optimum Size: 10 to 15 acres.

Population Served: Entire population of a community, focusing on ages 9 to 39.

Location: Playfields may be located on the outskirts of a community, or may be a portion of a "major community park." In areas around public schools, the physical education and athletic facilities may qualify to serve as community playfields. In rural areas, community playfields may be located in conjunction with other major outdoor recreational areas or facilities such as lakes and reservoirs.

Major Community Parks

Description: A major community park is a large natural and/or landscaped area, designed to accommodate large numbers of people for a wide variety of both intensive uses and passive pursuits.

Facilities: There is almost no limit to the variety of facilities that may be found in the major community park, but these typically include such items as play equipment, picnic facilities, paths, trails, pavilions, zoos or museums, and golf or swimming facilities.

Minimum Population Served: 20,000

Acres per 1,000 persons: 20 acres for every 20,000 persons in the service area.

Service Area: 5 miles in urbanized areas; 10 miles in rural areas.

Optimum Size: 24 to 40 acres.

Population Served: All ages.

Location: In or near urbanized areas, major community parks area commonly located along an unusual land feature such as floodplains, rivers, or lakes. In rural areas, a major community park may be a county park.

Single or Special Purpose Facilities:

Description: The chief characteristic of a single/special purpose recreational facility is usually uniqueness or singleness of purpose. These include an unlimited variety of facilities providing individual as well as group activities.

Facilities and Standard per 1,000 persons:

- Baseball diamonds: (regulation 90 feet) 1 for every 6,000 persons
- Softball diamonds: 1 for every 3,000 persons.
- Tennis courts: (best in battery of four) 1 court for every 2,000 persons
- Soccer fields: 1 for every 4,000 persons
- Basketball courts: 1 for every 1,000 persons
- Swimming pools (50 meter): 2 for every 30,000 persons
- Neighborhood centers: 1 for every 10,000 persons
  Community centers: 1 for every 25,000 persons
- Golf courses (18 hole): 1 for every 25,000 persons
- Walking/bicycle trails: 1 for every 5,000 persons

Service Area: Generally limited to serving a population within ½ hour travel time of the facility.

Population served: All ages.

Location: Single/special purpose facilities should be as central and convenient to the users as possible.

Urban Greenspace or Open Space

Description: Urban greenspace or open space includes areas provided mainly for their aesthetic and/or environmental enhancement qualities. They may be used for passive or active recreational activities, festivals, special observances/occasions, or other community activities.

Facilities: Urban greenspace or open space can include various possibilities and combinations such as natural wooded or open lands (fields), floodplains, river corridors, streambanks, parkways, street medians and sholderways, areas around public buildings, town squares, etc. Improvements may include bicycle trails and bicycle racks, hiking or nature trails, or bridle trails.

Acres per 1,000 persons: .75 to 1 acres per 1,000 persons.

Service Area: Variable, may service primarily people living in a particular area such as a neighborhood or subdivision, or may service anyone passing through an area.

Optimum Size: Variable, may range from a few feet, as in the case of floral areas, to several hundred acres, as in the case of a floodplain.

Population Served: All ages.

Location: The location of urban greenspace or open space often depends on the availability of land and water resources. Open space may be a part of a park system or serve as linkage ways between recreation areas and facilities. It may be viewed as part of an urban beautification program or downtown revitalization effort, or it may be part of easements such as electrical power line or gas line easements (a “linear park”). One excellent location for urban greenspace is to reserve floodways for this purpose.

Regional Parks

Description: Regional parks serve multiple governmental units and are usually administered by counties, regional bodies, or through other types of cooperative agency agreements. Regional parks serve both active and passive recreational needs for both day and overnight activities.
Facilities: Regional parks may contain picnic areas, nature centers, trail systems, scenic drives, campgrounds, water areas for swimming, fishing and boating, golf courses, concession and sanitary facilities, athletic complexes, sports fields, single/special purpose facilities, and parking.

Minimum Population: 50,000.

Acres per 1,000 persons: 1,000 acres for every 50,000 persons.

Service Area: Multiple county, regional, and/or multiple city. Regional parks serve mainly persons located within one hours travel time of the park.

Optimum Size: 1,000 to 2,500 acres.

Population Served: All ages.

Location: The location of regional parks is largely dependent upon the availability of natural or manmade resources such as lakes and reservoirs.

Findings and Recommendations (to be used in conjunction with the city's Master Recreation Plan):

The City of Ridgeland has the following public or semi-public recreational facilities:

1. Friendship Park, located at 475 Lake Harbour Drive, encompasses 9.3 acres that include a one mile walking/jogging trail, rest room facilities, playground equipment, parking lot, fitness court, and lighted pavilion. Plans for the park include new restroom facilities, new fitness court, and expanded parking.

2. Hite-Wolcott Park, located at 349 McClellan Drive, encompasses 43 acres that include 4 lighted baseball fields, 3 lighted softball fields, 2 concession stands, batting cages, volleyball area, playground equipment, and parking lots.

3. Midway Park is 1.5 acres and has a basketball goal and court.

4. Ridgeland Tennis Center, located at 201 McClellan Drive, encompasses 6 acres and includes 12 lighted tennis courts, a pro shop, men's and women's locker rooms, a 2000 square foot covered porch for viewing, and a parking lot.

5. School Street Soccer Fields- Hart Property is 100 acres located at 135 West School Street. (See Master Plan for future development of this park)

6. Breakers Soccer Fields located on Spillway Road is 4 acres with 2 regulation soccer fields.

7. To follow the recommendations given in the Comprehensive Master Plan for the City of Ridgeland's Recreation and Parks Department.

Table IV-5 depicts current and estimates of the year 2020 demand for recreational areas and facilities for the City of Ridgeland.

TABLE IV-5

CURRENT AND FUTURE DEMAND FOR RECREATION AREAS AND FACILITIES

TYPE AREA/FACILITY	CURRENT POPULATION	SERVICE POPULATION	NO. EXISTING/ NO. NEEDED	2020 POPULATION	SERVICE POPULATION	NO. NEEDED BY 2020
Playlots	15,691	500	0/31	30,341	500	61
Neighborhood Parks	15,691	5,000	1/2	30,341	5,000	5
Community Play Fields	15,691	10,000	1/2	30,341	10,000	2
Major Community Parks	15,691	20,000	0/1	30,341	20,000	2
Baseball Diamonds	15,691	4,000	4/0	30,341	4,000	4
Softball Diamonds	15,691	2,000	3/5	30,341	2,000	12
Tennis Courts	15,691	2,000	12/0	30,341	2,000	3
Soccer Fields	15,691	4,000	4/0	30,341	4,000	4
Basketball Courts	15,691	1,000	1/15	30,341	1,000	29
Swimming Pools (50 meter)	15,691	10,000	0/2	30,341	10,000	3
Neighborhood Centers	15,691	10,000	2/0	30,341	10,000	1
Jogging Trails	15,691	5,000	1/2	30,341	5,000	5
Urban Green-space and Open Space (acres)	15,691	1,000	16 ACRES	30,341	1,000	30 ACRES

SOURCE: Existing Population: Leon Younger & PROS 1998/2020 Population Projections: CMPDD

The above table is to be used solely as a guide to determine the type of facilities needed. The number of facilities needed are based upon population standards and need not be followed precisely. Because of the close proximity to the Ross Barnett Reservoir facilities, there is little need for a regional park. Due to this and the amount of participation in sports, greater attention should be placed on obtaining more baseball, softball, and soccer fields.

SECTION II - PUBLIC BUILDINGS AND FACILITIES:

City Hall

The Ridgeland City Hall is 16,000 square feet and was constructed in 1980 with renovations in 1986. The building includes offices for a total of 33 full time employees that include the Public Works Department, Recreation and Parks Department, Finance and Administration staff, Director of Human Resources, City Clerk, as well as the Mayor and Mayor's Executive Secretary. Additionally, the Ridgeland Chamber of Commerce has offices inside the building. Using the architectural standard of 330 square feet for each employee, the current demand for space is 10,890 square feet. The building did contain a municipal courtroom, but it has been moved to the new police building. The space taken up by the courtroom will be converted to office and meeting room space for the community development department. This should help to provide adequate office space in the building for the near future. At the building's current size, it can provide space for approximately 50 employees. If the current ratio of 1.3 city hall employees

per 1000 residents continues to the year 2020, the demand for city hall space will increase. This situation should be reviewed periodically and adjustments made accordingly.

Fire Protection

Introduction and Methodology

From a study of pertinent conditions and performance records over many years, certain fire protection standards have been developed. For each deviation from these standards, deficiency points are assigned, the number depending upon the importance of the item and degree of deviation. The total number of deficiency points charged against a county or municipality determines the relative classification -- one through ten. Table IV-6 shows the fire protection "features" considered by the Mississippi State Rating Bureau in classifying a municipal or county fire protection system. Table IV-7 indicates the Mississippi State Rating Bureau classifications assigned based on accumulated points of deficiency. The lower a fire rating the better the fire department. Lower fire ratings largely affect a municipality's fire insurance rates. Ridgeland's current fire rating is five.

TABLE IV-6

RELATIVE VALUES AND MAXIMUM DEFICIENCY POINTS

FEATURE	**PERCENT**	**POINTS**
Water Supply	39%	1,950
Fire Department	39%	1,950
Fire Service Communications	9%	450
Fire Safety Control	13%	650
TOTAL	100%	5,000

TABLE IV-7
RELATIVE CLASS AS DETERMINED BY POINTS OF DEFICIENCY

POINTS OF DEFICIENCY	**CLASSIFICATION**
0-500	FIRST
501-1000	SECOND
1,001-1,500	THIRD
1,501-2,000	FOURTH
2,001-2,500	FIFTH
2,501-3,000	SIXTH
3,001-3,500	SEVENTH
3,501-4,000	EIGHTH
4,000-4,500	NINTH
MORE THAN 4,500	TENTH

SOURCE: *Grading Schedule for Municipal Fire Protection*; New York, N.Y.: Insurance Services Office, 1974: pp. 2-3.

Findings and Recommendations:

The City of Ridgeland currently has three fire stations with 45 firemen. Fire Station No.1, constructed in 1990, is 11,200 Square Feet and Fire Station No.2, which was built in 1987, is 5,300 square feet. Fire station No.3 was constructed in 1998, and it has 5,100 square feet. The Fire Department now has four pumper trucks and one ladder truck. According to the Fire Chief, an additional fire station and pumper truck will be needed by the year 2000. There are plans to expand the service area in the near future relative to annexation. The city is looking for land for a new fire station to be located west of the Interstate. The city will continue to supply fire service to any annexed area in a manner that will maintain or improve current fire rating.

Police

Introduction and Methodology:

The City of Ridgeland currently has a police force of 39 sworn personnel. Also, 22 civilian employees, including clerical, secretarial, and dispatchers are employed at the police station. The police station is located on West School Street and is a 10,090 square foot building with three holding cells for prisoners. The City pays a fee to Madison County for the use of their jail facilities for the long term holding of prisoners. Using an architectural standard of 330 square feet for each employee, the current space need is 20,130 square feet. There is a current deficit of 10,040 square feet. The following formula is used for projecting space needs and building cost. It is provided by the International Association of Chiefs of Police and is used nationwide by law enforcement agencies for new construction and renovation of police facilities. This formula is used in combination with population projections for the Ridgeland Study Area to project the space needs of the Ridgeland Police Department for the year 2020.

FORMULA:

STAFF SIZE x AREA ALLOWANCE x UNIT COST x INFLATION FACTOR
x REGIONAL ADJUSTMENT x ADDED COST FACTOR = PROJECTED COST

YEAR 2020 BUILDING SPACE NEEDS AND COST PROJECTIONS:

STAFF SIZE	132	132	132
AREA ALLOWANCE	330 sq. ft.	330 sq. ft.	330 sq. ft.
UNIT COST	$85.00	$100.00	$112.00
INFLATION FACTOR	1.02	1.02	1.02
REGIONAL ADJUSTMENT	.813	.813	.813
ADDED COST FACTOR	1.234	1.234	1.234
PROJECTED COST	$3,788,896	$4,457,525	$4,992,427

Findings and Recommendations:

Although the Southeast average is 2.8 officers per 1000 people, the national average of 2.3 officers per 1000 residents is recommended. Using the national average, the year 2020 projected need is 88 officers. Based on the current ratio of one civilian employee per 2 officers, the

projected need is 44 civilian personnel. A 21,271 square foot police facility is currently under construction with a projected completion date of March 1999. It is expected to meet the city's needs for the foreseeable future. However, using the architectural standard of 330 square feet for each employee, the projected building space need is 43,560 square feet. This will still leave a deficit of 22,289 square feet for the year 2020. This means that space needs should be evaluated every five to ten years to determine if additions are needed.

Library Needs

Introduction and Methodology:

The Ridgeland Library was established in the early 1960's as a branch of the Madison County Library System. The current facility was built in 1971 as a joint city hall/library. When city hall moved out in 1988, the city hall section was remodeled to accommodate the library. In 1991, the entire building was remodeled and enlarged; there have been no major changes since that time. The needs for the entire system, as well as those for the Ridgeland branch, are presented here.

The CMPDD evaluated both the current (1997) adequacy of the library system and the future year 2020 needs of the system in terms of accepted standards used by the American Library Association (ALA) and "experience formulas" developed through comparisons of libraries having similar size service areas as compared to the Ridgeland branch. Table IV-8 reflects the ALA standards for minimum size of book collection and minimum building space requirements according to the population of the service area. Table IV-9 reveals experience formulas which are useful in determining how the Ridgeland library "measures up" against libraries in circulation and size expressed as total square footage. It should be noted here that the ALA standards were developed in the 1960's, and have not been updated. However, it is the only criteria available at this time.

TABLE IV-8
Guidelines for Determining Book Stock Needs
And Minimum Space Requirements

Service Area Population	Size of Book Collection	Minimum Total Floor Space
Under 2,499	10,000 volumes	2,000 square feet
2,500-4,999	10,000 volumes plus 3 books per capita for population over 3,500	2,500 square feet or 0.7 square feet per capita, whichever is greater
5,000-9,999	15,000 volumes plus 2 books per capita for population over 5,000	3,500 square feet or 0.7 square feet per capita, whichever is greater
10,000-24,999	20,000 volumes plus 2 books per capita for population over 10,000	7,000 square feet or 0.7 square feet per capita, whichever is greater
25,000-49,000	50,000 volumes plus 2 books per capita for population over 25,000	15,000 square feet or 0.6 square feet per capita, whichever is greater

Source: American Library Association

Table IV-9
Experience Formulas for Book Stock, Circulation and Size

Population Served	Book Stock: Volumes Per Capita	Circulation: Volumes Per Capita	Size: Square Footage Per Capita
Under 10,000	3.5 to 5.0	10	.7 to .8
10,000 – 35,000	2.75 to 3.0	9.5	.6 to .65
35,000 – 100,000	2.5 to 2.75	9.0	.5 to .6
100,000 – 200,000	1.75 to 2.0	8.0	.4 to .5

Source: Joseph Wheeler and Hebert Goldhor, Practical Administration of Public Libraries: (New York: Harper and Row, 1982).

Population Projections for Service Areas:

The service areas were delineated using the 1990 Census of Population: Census Tracts and Block Groups. Because the Ridgeland branch is part of the Madison County Library System, the service area is somewhat larger than the study and somewhat arbitrary, but for the purposes of this study, the service area and the study area are one and the same. In addition to other branches of the system in Canton, Flora, and Madison; there is also a Holmes Community College library in Ridgeland. All of these libraries are available to the people in the study area. Population projections for the service areas were performed based upon the Traffic Analysis Zones for part of the County, and the population projections for the remainder of the County were derived by subtracting the TAZ projections from the total county 2020 projection and distributing the amount proportionately by Census Tracts. The total county-wide projections performed using this methodology compare closely with the projections developed earlier for the Land Use Plan. Population projections by Census Tract for the year 2020 are shown in Table IV-10.

Table IV-10
Madison County Population Projections
By Census Tracts

TRACT	1980	1990	2000	2010	2020
301	**8,853**	**16,699**	**25,699**	**41,729**	**51,586**
302	**3,282**	**7,297**	**16,059**	**18,568**	**20,565**
303	**4,801**	**5,757**	**15,462**	**17,809**	**26,203**
304	**3,172**	**3,295**	**3,418**	**3,187**	**3,105**
305	**6,389**	**7,276**	**8,163**	**7,240**	**6,857**
306	**3,149**	**3,380**	**3,611**	**3,458**	**3,185**
307	**2,092**	**1,537**	**1,691**	**1,606**	**1,448**
308	**2,224**	**1,914**	**1,866**	**1,819**	**1,804**
309	**5,175**	**4,659**	**4,542**	**4,428**	**4,391**
310	**2,476**	**1,980**	**1,930**	**1,881**	**1,866**
TOTAL	**41,613**	**53,794**	**82,441**	**101,725**	**121,009**

Current Library System Needs:

Table IV-11 indicates the present library needs in terms of book stock and building size for the Ridgeland Library according to the 1995 population of the service area as defined by the CMPDD.

Table IV-11
Determination of Current Year Library Needs
Using Experience Formulas for Book Stock, Circulation and Size
and American Library Association Minimum Standards

1995 Service Area Population	24,446
1997 Book Stock	33,437
Book Stock for Libraries with similar size service areas (by experience formulas)	67,226
1997 Book Stock need (by ALA Standards)	48,892
1997 Book Stock Deficit/Surplus	-15,455
1997 Circulation	89,132
Circulation for Libraries with Similar Size Service Areas	232,237
Size of Building (in square feet)	10,500
Size Compared with Libraries of Similar Size Service Areas (in square feet)	14,668
Size Deficit/Surplus When Compared With Similar Size Service Areas (in square feet)	-4,168

Source: - Existing Population: Claritas Corp. American Profile 1996.
- Book Stock Circulation and Building Size Information: Madison County Library System
- Standards: American Library Association
- Experience Formulas: Joseph Wheeler and Herbert Goldhor, Practical Administration of Public Libraries, (New York: Harper and Row, 1982).

Findings and Recommendations:

The needs of the Madison County Library System were projected to the year 2020. For the Ridgeland branch, the results of these projections are presented in Table IV-12. Using American Library Association standards, the Ridgeland branch has a current deficit of 15,455 volumes and will need a total of 76,428 volumes by the year 2020, an addition of 42,991 volumes. As part of the Madison Library System, the Ridgeland branch has a space deficit of 4,168 square feet and will need 22,928 square feet of building space by 2020. It must be stressed that these deficits are the responsibility of the Madison County Library System and not of the City of Ridgeland.

Based on the Public Facilities plan for Madison County, there is a need to relieve the current "popular reading" pressure on existing libraries and to reach people in unserved areas. This would be in the form of temporary (for terms of 3-5 years) rented facilities of 1,000-1,500 square feet in shopping centers of a town center or a mobile unit. One location for such a facility is along the Highland Colony Parkway. Another suggested location is at Camden, possibly near a school.

Furthermore, due to the close proximity of the Madison and Ridgeland branches, and as a result of surveys taken by the library system, the Madison branch will focus more on building a collection of fiction and family-oriented literature. The Ridgeland branch will focus more on building their business and reference collections.

At the time this section was being prepared, it was learned that the Madison County Library System had retained a library planning consultant to prepare a facilities plan for the Madison County Library System. When completed, this facilities plan may change the library recommendations herein. At such time, the Madison County Library System plan should be reviewed in light of updating this section of the Comprehensive Plan.

Table IV-12
Determination of Ridgeland's Year 2020 Library Needs for Book Stock and Building Size Using American Library Association Standards

2020 Projected Service Population	38,214
2020 Book Stock Need (by ALA Standards)	76,428
2020 Book Stock Deficit/Surplus	-38,214
Minimum ALA Standard for Library Serving this Size Population in 2020 (in square feet)	22,928
Size Deficit/Surplus when Compared with ALA Minimum Standards in 2020 (in square feet)	-12,428

Source:

- Existing Population: Claritas Corp. American Profile 1996
- Book Stock Circulation and Building Size Information: Madison County Library System
- Standards: American Library Association
- Experience Formulas: Joseph Wheeler and Herbert Goldhor, Practical Administration of Public Libraries, (New York: Harper and Row, 1982).

SECTION III - UTILITIES AND DRAINAGE:

Sewer

Currently, the City of Ridgeland provides sewer service to all areas within the city limits. The city budgets $200,000 annually for upgrades, renovations, and rehabilitation of existing facilities. Plans are to continue using the City of Jackson sewage treatment plant. Over the next two years the City will construct the White Oak Creek and the La Rue interceptors.

Drainage

Table IV-13 shows population projections by Ridgeland's drainage basins. These projections are used to help determine future sewer and drainage needs. The land area inside each drainage basin was measured in acres and categorized by the existing zoning and proposed land use. The residential land uses were segregated by allowed density of development and population figures were projected at maximum build-out with 25% of the total area removed to allow for roads and

right-of-way. The persons-per-household figure was 2.38 and was taken from the Jackson Urbanized Area Transportation Plan For The Year 2020. This is the same methodology that was used to derive the Traffic Analysis Zone population projections. The boundaries of drainage basins and the traffic analysis zones are different, but the population projections are approximately the same. It is recommended that the city preserve greenspace in floodways, reserve drainways and drainage easements, and continue to create retention basins.

Water Improvements

Plans for improving water services are that the city will continue to upgrade the water system where necessary to provide better fire protection and domestic service for projected 2020 planning area.

TABLE IV-13

2020 POPULATION PROJECTIONS BY RIDGELAND'S DRAINAGE BASINS

Drainage Basin	Total Industrial Acreage	Total Commercial Acreage	Total Residential Acreage	Technical Industrial Park	2020 Projected Population
Purple Creek	166	974	1,107	0	6,572
Brashear Creek	42	422	1,246	0	13,617
Brashear Creek*	0	685	6,008	0	12,174
School Creek	0	447	694	0	8,631
White Oak	0	275	1,481	17	5,767
White Oak Study Area	0	0	1,334	0	7,142
Culley Creek	0	15	0	0	0
Culley Creek*	4	155	3,051	0	5,446
TOTAL	212	2,973	14,921	17	59,349

*These counts for Brashear Creek and Culley Creek Basins are partly within the Ridgeland City Limits and partly within the Madison City Limits.

SECTION IV - PUBLIC SCHOOLS

Introduction and General Methodology:

Madison County has two public school districts, the Madison County School District and the Canton Separate School District. The Madison County School District has three attendance zones that serve kindergarten through grade 12. Map II-1 reflects the boundaries of the three zones.

In projecting the facility needs of the Madison County School District --- specifically the need for classrooms to serve the rapidly growing southern and western portions of the county (Zones II and III)--- the CMPDD used the population projections by Census Tract to the year 2020.The CMPDD also used 2020 population projections by Traffic Analysis Zone (see Table IV-4) developed as part of the preparation of the 2020 Jackson Metropolitan Area Transportation Plan in the effort. A detailed description of the methodology used in producing those population projections is contained in Chapter 2.

School Age Population/ Enrollment Projections By Attendance Zone:

In order to determine how many students would be in each age range for the forecast year 2020 from kindergarten through the grade 12, an age trend analysis was performed based upon trends from the 1980 Census to the 1990 Census for three age groups: 5-9 year old; 10-14 year old; and 15-19 year old. These age groupings reflect the age stratifications used by the Census Bureau and are the only manner in which age statistics are available from the Census Bureau. Although these age groupings do not correspond exactly with grade equivalents used in the Madison County School System, they are close enough to produce reasonably valid conclusions regarding future enrollment projections for each public school classification by grade: elementary (K-5); middle (6-8) and high (9-12).

Table IV-2 reveals the age trends and projections for each Census Tract by Attendance Zone for the year 2020 and the percentage that each age group represents of the total population of each Census Tract.

Attendance Zone II (see Map II-2) in southern Madison County contains primarily Census Tract 301 and 302 (Tract 301 was subdivided for the 1990 Census into 301.01, 301.02, and 301.03, but the outer tract boundaries of 301 remained intact). Attendance Zone III in western Madison County contains primarily Census Tract 303 and small portion in Census Tract 304. Since the enrollment projections and classroom needs projections for Attendance Zones II and III are combined in this plan, the geographic consistency of the boundaries between Attendance Zones and Census is not important.

As can be seen in Table IV-2, the school-age population (ages 5 through 19 years) as a percent of total population in each Census Tract declined in every Tract from 1980 to 1990.

Obviously, this trend will not continue indefinitely. Therefore, to arrive at projections of school-age population for the forecast year 2020, an average of the percentage of school-age population for 1980 and 1990 was calculated, and this average percentage was applied to the control total 2020 population for each Census Tract to arrive at 2020 school-age population projections for each age cohort. Therefore, for example, the 2020 total population projection for Census Tracts 301 and 302 in southern Madison County is 72,151 and the total projected school-age population is 15,460.

Since a portion of the population of Attendance Zone III resides in Census Tract 304, the final page of Table IV-2 reflects the combined population forecast for Tracts 303 and 304 with the

assumption that approximately 10 percent of the school-age population of Census Tract 304 will reside in Attendance Zone III.

2020 Classroom Need Projection By Attendance Zone:

Table IV-3 reflects the classroom need projections for each Attendance Zone in the Madison County School District. Table IV-3 also indicates the 1994-1995 school enrollment for each school in the Madison County system and the number of classrooms in each school, including the new Olde Towne Ridgeland Elementary and Middle School. This information was obtained from the Madison County School District Capital Improvement Plan performed in 1995 by Jerry R. Hutchinson, a private consultant.

The classroom need projections for Attendance Zone II on the second page of Table IV-3 include ONLY the school-age population in Census Tracts 301 and 302; the population in Census Tracts 303 and 304 is included in Attendance Zone III. However, the final page of Table IV-3 presents the combined totals for Zones II and III. In order to arrive at a projection of 2020 classroom need, the school-age populations described earlier and reflected in Table IV-2 were used as the starting point. Since it is anticipated that some of the school-age population of the County will continue to attend private schools during the next twenty four years, it was necessary to produce projections of enrollment for those private schools and subtract that projected private school enrollment from the total projected school-age population by attendance zone. Table IV-4 presents 2020 private school enrollment projections by school, including: St. Andrews Lower, Middle and Upper Schools in Ridgeland; Madison-Ridgeland Academy; St. Joseph Junior and Senior High (which will be relocating their campuses from Jackson to Madison); and the Tri-County Academy in Flora. The enrollment projections for these private schools, with the exception of the St. Joseph projections, were performed by the CMPDD as part of the preparation of the 2020 Jackson Metropolitan Area Transportation Plan. Those private school enrollment projections were produced through a simple trend-line analysis.

Table IV-3, therefore, presents the projected school-age population or enrollment minus the projected private school enrollment (for Attendance Zones II and III); there are no private schools in Attendance Zone I. For example, the enrollment projections for **Attendance Zone II** on the second page of Table IV-3 for grades K-5 indicate a projected enrollment of 3,795 (in Census Tracts 301 and 302 ONLY). This projection was produced by subtracting the projected private school enrollment (1,624 students) in Attendance Zone II for approximately the same cohort (K-5) from the projected 2020 school-age population of Census Tracts 301 and 302 in Attendance Zone II, or 5,419 persons in ages 5 through 9 years.

Findings and Recommendations:

Attendance Zone I:

Table IV-3 indicates that based upon the 2020 enrollment projections, no additional classrooms will be needed for grades K - 5 in Attendance Zone I only. However, at least twenty-two classrooms will be needed at Velma Jackson Middle/High School to accommodate school-age

population growth in grades 6 - 12. A ratio of one classroom for every twenty-four students was assumed throughout these projections.

Attendance Zone II and III:

The final page of Table IV-3 reflects the combined enrollment and classroom need projections for Attendance Zones II and III. It will be noted that the total enrollment in all schools in Attendance Zones II and III is expected to increase from 5,799 students to 18,391 students --- in other words, in twenty-five years Madison County School District schools can expect to have more than three times the present enrollment in those two Attendance Zones. Other findings and recommendations:

1. There will be a need for 150 additional classrooms in the "middle school" classification over the next twenty-four years. Since the Flora Middle School (with twelve classrooms) was closed at the end of the 1995-1996 school year to make room for the relocated Madison County School District administration, it is recommended that a new "Livingston Middle/High School" (grades 6-8) containing at least 100 classrooms be built on 16th Section land near the junction of Mississippi Highway 463 (Mannsdale Road) and Stribling Road. A middle school in this location could serve the students in both Attendance Zones II and III west of Interstate 55. As proposed in the Madison County Transportation Plan, Gluckstadt Road (called Gluckstadt Parkway) should ultimately be upgraded to a four-lane partially-access facility extending from Mississippi Highway 43 westward to Mississippi Highway 463. Two points of ingress/egress should be provided to the new school: one from the Gluckstadt Parkway and the other directly off of Mississippi Highway 463.

2. The greatest need for classrooms in Attendance Zones II and III will be in the high school classification: it is anticipated that over 200 additional classrooms will be needed in twentyfour years for students in this age group. It should be noted that because of the Census Bureau's stratification of age cohorts from 15 to 19 years, the projection of 232 additional rooms may be inflated, since most youths are out of high school by age 18. However, this is offset by the fact that fourteen year old students, which are counted in the "middle school" classification in the school size population projections would be added to this category. It is recommended that a new high school be built on Sunnybrook Road, north of Holmes Community College in Ridgeland. For a school to be built on this road, it will be necessary to widen Sunnybrook Road and put improve-ments in place that will make the increased traffic flow more smoothly. In addition, the proposed interchange at I-55 and new road from the interchange to Highway 51 may necessitate a cloverleaf at the new high school for traffic control and access.

3. The projections in Table IV-3 indicate that an additional 86 elementary school classrooms will be needed over the next twenty-four years in Attendance Zones II and III. However, these enrollment projections were produced using the Census Bureau's age stratifications, which include ages 5 through 9, but do not include ten-year-old. Therefore, it is anticipated that over 100 additional classrooms will actually be needed to meet the needs of children in these grades. Since much of the County's population base is

shifting west of Interstate 55, one new school site should be evaluated in this area: possibly on the proposed Gluckstadt Parkway.

4. The existing Madison Avenue Elementary School should be enlarged to accommodate some of the additional K through 5 enrollment projected in Attendance Zone II. Additional access to this school campus should be provided from Rice Road and St. Augustine Road.

TABLE IV-2
MADISON COUNTY SCHOOL DISTRICT
SCHOOL AGE POPULATION TRENDS AND PROJECTIONS
BY ATTENDANCE ZONE

Attendance Zone I: Rural Eastern Madison County

AGE COHORTS	APPROX. SCHOOL EQUIVALENTS	1980 CENSUS	% OF TOTAL POP. THIS TRACT	1990 CENSUS	% OF TOTAL POP. THIS TRACT	AVERAGE % OF POP. COHORT: 1980 - 1990	2020 POP. PROJ. THIS TRACT/THIS COHORT
CENSUS TRACT 309:							
5-9 years	Elementary	588	11.36%	442	9.49%	10.42%	458
10-14 years	Middle	611	11.81%	496	10.65%	11.23%	493
15-19 years	High	580	11.21%	473	10.15%	10.68%	469
Total These Cohorts		1,779	34.38$	1,411	30.29%	32.33%	1,420
Total Pop. This Tract		5,175		4,659			4,391
CENSUS TRACT 310:							
5-9 years	Elementary	259	10.46%	259	13.08%	11.77%	220
10-14 years	Middle	255	10.30%	170	8.59%	9.44%	176
15-19 years	High	324	13.09%	193	9.75%	11.42%	213
Total These Cohorts		838	33.84%	622	31.41%	32.63%	609
Total Pop. This Tract		2,476		1,980			1,866
TOTAL SCHOOL AGE POP. THESE TRACTS IN ATTEND. ZONE I		2,617		2,033			2,029

TABLE IV-2 CONTINUED

Attendance Zone II: Southern Madison County

AGE COHORTS	APPROX. SCHOOL EQUIVALENTS	1980 CENSUS	% OF TOTAL POP. THIS TRACT	1990 CENSUS	% OF TOTAL POP. THIS TRACT	AVERAGE % OF POP. COHORT: 1980 - 1990	2020 POP. PROJ. THIS TRACT/THIS COHORT
CENSUS TRACT 301:*							
5-9 years	Elementary	675	7.62%	1,093	6.55%	7.08%	
10-14 years	Middle	549	6.20%	866	5.19%	5.69%	
15-19 years	High	861	9.73%	965	5.78%	7.75%	
Total These Cohorts		2,085	23.55%	2,924	17.51%	20.53%	
Total Pop. This Tract		8,853		16,699			
CENSUS TRACT 302:							
5-9 years	Elementary	289	8.81%	605	8.29%	8.55%	
10-14 years	Middle	286	8.71%	481	6.59%	7.65%	
15-19 years	High	290	8.84%	440	6.03%	7.43%	
Total These Cohorts		865	26.36%	1,526	20.91%	23.63%	
Total Pop. This Tract		3,282		7,297			
CENSUS TRACT 301 and 302:		12,135		23,996			72,151
5-9 years	Elementary	964	7.94%	1,698	7.08%	7.51%	5,419
10-14 years	Middle	835	6.88%	1,347	5.61%	6.25%	4,507
15-19 years	High	1,151	9.48%	1,405	5.86%	7.67%	5,534
TOTAL SCHOOL AGE POP. THESE TRACTS IN ATTEND. ZONE II		2,950		4,450			15,460

*** Subdivided in 1990 Census to 301.01, 301.02, and 301.03**

TABLE IV-2 CONTINUED

Attendance Zone III: Western Madison County

AGE COHORTS	APPROX. SCHOOL EQUIVALENTS	1980 CENSUS	% OF TOTAL POP. THIS TRACT	1990 CENSUS	% OF TOTAL POP. THIS TRACT	AVERAGE % OF POP. COHORT: 1980 - 1990	2020 POP. PROJ. THIS TRACT/THIS COHORT
CENSUS TRACT 303:							
5-9 years	Elementary	452	9.41%	527	9.15%	9.28%	2,433
10-14 years	Middle	484	10.08%	511	8.88%	9.48%	2,484
15-19 years	High	557	11.60%	476	8.27%	9.93%	2,603
Total These Cohorts		1,493	31.10%	1,514	26.30%	28.70%	7,520
Total Pop. This Tract		4,801		5,757			26,203
CENSUS TRACT 304:							
5-9 years	Elementary	343	10.81%	226	6.86%	8.84%	274
10-14 years	Middle	341	10.75%	333	10.11%	10.43%	324
15-19 years	High	385	12.14%	302	9.17%	10.65%	331
Total These Cohorts		1,069		831			929
Total Pop. This Tract		3,172		3,295			3,105
CENSUS TRACT 303 and 304:		7,973		9,052			29,308
5-9 years	Elementary	795	9.97%	753	8.32%	9.15%	2,707
10-14 years	Middle	825	10.35%	844	9.32%	9.84%	2,808
15-19 years	High	942	11.81%	778	8.60%	10.21%	2,934
TOTAL SCHOOL AGE POP. THESE TRACTS IN ATTEND. ZONE III		2,562		2,375			8,449

***Part of Census Tract 304 is in the Canton School District. The estimates shown in this column assume that approximately 10% of the school-age population of Census Tract 304 will reside in the Madison County School District in what is now Attendance Zone III.**

SOURCES: 1980 and 1990 Population by Tract and Cohort: U.S. Bureau of the Census
2020 Projections by Tract and Cohort: CMPDD

TABLE IV-3
CLASSROOM NEED PROJECTIONS: 2020
MADISON COUNTY SCHOOL DISTRICT

Attendance Zone 1: Eastern Madison County

SCHOOL	NUMBER OF CLASSROOMS	1994-1995 ENROLLMENT	PROJECTED 2020 SCHOOL-AGE POP.	CLASSROOM NEED @ 1:24 PUPIL CAPACITY	PROJECTED CLASSROOM DEFICIT
Elementary Schools: (K-5)					
Luther Branson (K-5)	21	334			
Velma Jackson Elem.	15	315			
TOTALS (K-5)	36	649	678	28	0
Middle /High (6-12)					
Velma Jackson Sec.	34	770			
TOTALS (6-12)	34	770	1,351	56	22

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TABLE IV-3 CONTINUED: CLASSROOM NEED PROJECTIONS

Attendance Zone II: Southern Madison County

SCHOOL	NUMBER OF CLASSROOMS	1994-1995 ENROLLMENT	PROJECTED 2020 SCHOOL-AGE POP.	CLASSROOM NEED @ 1:24 PUPIL CAPACITY	PROJECTED CLASSROOM DEFICIT
Elementary Schools: (K-5)					
Ridgeland Elementary	35	1,054			
Madison Ave.	35	965			
Madison Station	35	754			
Olde Towne Ridgeland	34				
TOTALS (K-5)	139	2,773	3,795	158	19
Middle Schools (6-8)					
Rosa Scott	40	1,1127			
Olde Town Ridgeland	25				
TOTALS (6-8)	65	1,1127	2,856	119	54
High Schools (9-12)					
Madison Central	67	1,361	4,673	195	128

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TABLE IV-3 CONTINUED: CLASSROOM NEED PROJECTIONS

Attendance Zone III: Western Madison County

SCHOOL	NUMBER OF CLASSROOMS	1994-1995 ENROLLMENT	PROJECTED 2020 SCHOOL-AGE POP. (Excluding private schools)	CLASSROOM NEED @ 1:24 PUPIL CAPACITY	PROJECTED CLASSROOM DEFICIT
Elementary Schools: (k-5)					
East Flora	28	334			
TOTALS	28	334	2,272	95	67
Middle Schools (6-8)					
Flora Middle (to be closed)		204			
TOTALS	0	204	2,294	96	96
High School (9-12)					
(no high school in this zone)	0	0			
TOTALS	0	0	2,501	104	104

Combined Attendance Zones II and III:

SCHOOL	NUMBER OF CLASSROOMS	1994-1995 ENROLLMENT	PROJECTED 2020 SCHOOL-AGE POP. (Excluding private schools)	CLASSROOM NEED @ 1:24 PUPIL CAPACITY	PROJECTED CLASSROOM DEFICIT
Elementary Schools: (k-5)	**167**	**3,107**	**6,067**	**253**	**86**
Middle Schools (6-8)	**65**	**1,331**	**5,150**	**215**	**150**
High School (9-12)	**67**	**1,361**	**7,174**	**299**	**232**
TOTALS, ZONES II & III	**299**	**5,799**	**18,391**	**766**	**467**

SOURCES: 1994-1995 Enrollment and Number of Classrooms: Madison County School District Capital Improvement Plan; Jerry R. Hutchinson, Ed. D., Consultant,Education Dimensions Unlimited, 1995.

2020 School-age population Projections and Projections of Classroom Needs: CMPDD, 1996.

TABLE IV-4
PRIVATE SCHOOL ENROLLMENT AND PROJECTION
MADISON COUNTY, MISSISSIPPI

Private School	1994-1995 Enrollment	2020 Proj. School Enrollment	1994-1995 Enrollment by Grade			1994-1995 Enrollment by Grade		
			K-4	5-9	10-12	K-4	5-9	10-12
Attendance Zone II								
St. Andrews Middle/Upper School	615	2,264		420	195		866	402
St. Andrews Lower School (1)	483		483			996		
Madison-Ridgeland Academy	912	1,512	379	351	182	628	582	302
St. Joseph Jr. High	(2)	(3)		203			203	
St. Joseph Sr. High	(2)	(3)			157			157
TOTALS, ZONE II	2,010	3,776	862	974	534	1,624	1,651	861
Attendance Zone III								
Tri-County Academy	267	545	92	109	66	188	222	135
TOTALS, ZONE III	267	545	92	109	66	188	222	135

SOURCES: 1994-1995 Enrollment: Private Schools 2020 Enrollment Projections: 2020 Jackson Metropolitan Area Transportation Plan: CMPDD

FOOTNOTES:

(1) St. Andrews Lower School is located in Jackson, but it is understood that the Lower School campus will be consolidated with the Middle/Upper School in Ridgeland. The 2020 enrollment projection reflects that anticipated consolidation.

(2) Both St. Joseph Jr. High and Sr. High, in Jackson in 1996, will be relocating to Madison.

(3) No enrollment projections for St. Joseph were made for a campus in Madison in 1995 as part of the development of the 2020 Jackson Metropolitan Area Transportation Plan, because the school's intentions to relocate were not known at that time.