

**MADISON COUNTY
COMPREHENSIVE PLAN**

MARCH 2012

Prepared by

Central Mississippi Planning and Development District

1170 Lakeland Drive – P.O. Box 4935

Jackson, Mississippi 39296-4935

Phone: 601-981-1511

Fax: 601-981-1515

www.cmpdd.org

MADISON COUNTY COMPREHENSIVE PLAN

TABLE OF CONTENTS

Table of Contents

INTRODUCTION	2
Purpose of the Plan	2
Elements of the Plan.....	2
How to Use This Plan	3
CHAPTER I: GOALS, OBJECTIVES, AND POLICIES	6
General Goals	7
Residential Goals	9
Commercial Goals.....	12
Industrial Goals.....	15
Transportation Goals.....	16
Public Facilities.....	19
Environmental Goals.....	21
Implementation Goals.....	23
CHAPTER II: LAND USE PLAN.....	26
Introduction.....	26
Madison County: Population, Housing, and Employment.....	26
Year-2010 Population and Housing.....	26
Madison County Population Projections.....	27
Housing Projections.....	27
Employment Projections.....	29
Explanation of Land Use Categories.....	29
CHAPTER III: TRANSPORTATION PLAN/MAJOR THOROUGHFARES PLAN.....	34
Introduction.....	34

Thoroughfares Plan: Functional Classifications.....	34
Minimum Rights-of-Way and Surface Width Requirements.....	35
Relationship of This Transportation/Thoroughfares Plan With the 2035 JUATP(MultiPlan).....	36
Proposed Thoroughfare Improvements.....	37
Airports.....	41
CHAPTER IV: PUBLIC FACILITIES PLAN.....	43
Introduction.....	43
Section 1: Public Library System.....	43
Section 2: Fire Protection.....	47
Section 3: Sheriff’s Office/Department.....	49
Section 4: Public Parks and Recreational Facilities.....	52
Section 5: Public Schools.....	58
Section 6: Public Buildings.....	60
Section 7: Stormwater Drainage and Drainage Structures.....	61

INTRODUCTION

PURPOSE OF THE PLAN

The purpose of this Comprehensive Plan is to serve as a policy guide to the decision-making process in county government. County officials recognize the importance of planning in making effective decisions concerning the county's future. This plan is a result of extensive study into existing development patterns as well as population and economic studies. This plan should, however, be reviewed and updated periodically in order for it to continue to be effective and to grow along with unforeseen economic and population patterns.

ELEMENTS OF THE PLAN

Section 17-1-1 of the Mississippi Code defines a Comprehensive Plan as follows: "...a statement of 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. 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 and road improvements, public schools, and community facilities plan.

The second part of a comprehensive plan is the Land Use Plan. This plan designates, in map form, the proposed distribution and extent and 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 this 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 that the Land Use Plan covers. Based on traffic predictions,

the plan includes arterial, collector and local streets, and roads and highways, as defined by minimum rights-of-way and surface width requirements.

The final portion of the comprehensive plan is the Community Facilities Plan, also known as the Public Facilities Plan. Used as a basis for making capital improvement decisions, the community facilities plan includes: housing, schools, parks, and recreation, public buildings and facilities, utilities and drainage.

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 rezoning, variances, special exceptions, and site plan review. It may also be used to aid in locating business, industries, and public facilities. Finally, it forms the basis of a zoning ordinance and a capital improvements program.

Community planning does not attempt to replace market forces of supply, demand, and price but to shape and channel market forces by establishing certain rules for development and conservation. A community plan should foster growth that enhances the community and not “no growth.” 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, 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 on plans. For example, land use decisions requiring an upzoning (zoning to a more intensive

use) or a downing (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 gives the governing authority written, consistent policies about how the county 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, if any, and capital budget, the official map, and development plans), and 2) other measures that routinely require legislative approval (rezoning cases, special use permits/special exception/conditional use permits, variance application, subdivision plats, street closing, site acquisitions, and public works projects. Canton, at present, does not have a capital improvements program, if it did it could use such a program to help implement the comprehensive plan. For both types the plan should at least be consulted to see if the plan speaks specifically to the matter or provides any guidance as to how 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. The comprehensive plan's purpose is to serve as a generalized, 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.

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 on or near the boundary between a conforming and a nonconforming land use category on the land use plan, 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 text, if possible, and it is important that both the plan and the facts showing conformance be placed into the record of the hearing.

Implementation Devices:

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

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

CHAPTER I

GOALS, OBJECTIVES, AND POLICIES

The goals and objectives of the Madison County 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 Madison County 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. Policy statements may, in some cases, be followed by statements explaining the planning principal behind the policy statement.

IMPLEMENTATION PROGRAM: A more statement guiding actions and implying clear commitment.

A second definition of policy 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 the plan, whenever the term policy is used, it should be understood to mean the collective term.

In Madison County, the comprehensive plan is implemented by the zoning ordinance and the subdivision regulations, 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 implementation devices (zoning ordinance and subdivision regulations). 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: Among other things, this Comprehensive Plan seeks to:

- (a) lessen congestion in the streets;
- (b) secure safety from fire, panic and other dangers;
- (c) provide adequate light and air;
- (d) prevent the overcrowding of land;
- (e) avoid undue concentration of population; and
- (f) facilitate the adequate provision of transportation, water, sewerage, schools, parks and other public requirements.

GOAL: To collaborate to solve community problems through the development of coalitions of political and business leadership (inclusive of Chambers of Commerce) in Madison County.

OBJECTIVE: To provide a planning forum among the county's political leadership (including the municipalities) for solving planning and development problems.

OBJECTIVE: To involve the private sector in the development and implementation of this Comprehensive Plan.

POLICY 1: The County shall work with developers to carefully plan the location and design of business establishments, residential area, industrial development and recreational facilities.

POLICY 2: The County Board of Supervisors will work with the MCEDA and the CMPDD to promote collaboration among County and municipal elected officials and

business leaders through such activities as visits to other communities in the United States that have achieved a high level of cooperation.

GOAL: To provide for an orderly arrangement of land uses in the unincorporated areas of Madison County.

OBJECTIVE: To encourage proper land use patterns and to enforce zoning laws to ensure compatibility of land uses. To provide a mechanism through which development and redevelopment will be in accordance with the County's Land Use Plan.

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.

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

POLICY 3: Through the use of the land use plan as a development guide, the character of this community will be more easily defined and developed.

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 4: To use the comprehensive plan as a tool in guiding the future development of Madison County.

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 5: Existing strip commercial development and residential sprawl will be controlled so that future development, in accordance with the comprehensive plan, will be of a more desirable nature.

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

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

POLICY 6: To meet with property owners in the Gluckstadt area or through a survey and ask property owners if they want future development to follow a German theme in order to create a unique blend of function, circulation, and image

RESIDENTIAL GOALS

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

OBJECTIVE: To provide a mix of residential densities in the County to suit different needs and tastes, ranging from patio homes to large lot estates.

OBJECTIVE: To locate higher density residential developments only in areas where the infrastructure will support such development and where such development is compatible with neighboring land uses.

POLICY 7: Higher density residential development, including R-2 Single-Family Residential Developments with minimum lot sizes of 10,600 square feet (3.08 units per acre), shall be located only on arterial highways, County roads or streets in order to accommodate the higher traffic generations rates of higher density residential development.

IMPLEMENTATION PROGRAM: These policies will be guided by the Land Use Plan and the Transportation Plan. New development will be encouraged in areas located close to existing public facilities in order to reduce the County's servicing costs and in order to preserve the property values of existing residential areas.

GOAL: To provide an adequate supply of quality housing for moderate-income households to meet the growing need of increased numbers of production workers seeking to live near their place of employment; and to protect residential property values through proper land use planning.

OBJECTIVE: To provide housing to meet the needs of moderate income families (80 to 120 percent of the median family income in Madison County, or families with a household income ranging from \$45,550 per year to \$68,325 per year) at an affordable cost; to limit residential densities through zoning policies that prevent overcrowding of land; and to preserve residential property values by preventing commercial encroachment into areas that are not intended to develop with mixed uses. (Note: According to the 2009 American Community Survey, the median household income in Madison County was \$56,938.)

POLICY 8: The Housing Element of this Comprehensive Plan will include an inventory of available housing for moderate income families, as identified in the 2010 Census.

POLICY 9: Residential neighborhoods shall be protected from the encroachment of commercial and industrial development.

POLICY 10: The Land Use Plan shall be used to identify vacant land into which commercial and industrial uses can expand without encroachment into residential areas. “Commercial creep” shall be discouraged.

POLICY 11: The extension of existing commercial districts adjacent to residential neighborhoods shall be permitted only if they meet buffering and other requirements that reduce blighting influences.

POLICY 12: The rezoning of individual lots within established residential neighborhoods for any commercial purpose shall be strictly prohibited.

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 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 that the neighborhood is changing. 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 that 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 incompatible with residential uses due to noise, traffic and other blighting influences.

POLICY 13: Landscaping, berms, fences or walls shall be used to minimize the impact of arterial street traffic upon residential neighborhoods.

POLICY 14: The County shall use transitional zoning to buffer the impact of higher intensity commercial development upon residential neighborhoods; this shall be accomplished by zoning areas between residential neighborhoods and commercial areas as C-!A Restricted Commercial, which primarily permits office type uses.

COMMERCIAL GOALS

GOAL: To meet the future needs of business and industry by making (planning and zoning) land available for new commercial and industrial development within the County; and to maintain property values throughout the County by carefully planning the location and design of all commercial and industrial development.

OBJECTIVE: To produce a desirable land use pattern by guiding the location and design of commercial development through proper planning and zoning of commercial sites.

POLICY 15: Commercial uses will be located in areas in close proximity to their service populations and will be designed to produce an architecturally pleasing and harmonious business environment that will maintain property values over time.

POLICY 16: Madison County shall plan/zone commercial areas only along arterial streets, roads and the highways that are capable of handling the increased traffic loads generated by commercial land uses.

- POLICY 17: Office-type commercial uses (C-1A) shall be used as a transition between higher intensity commercial uses (C-1 General Commercial or C-2 Highway Commercial) and all residential areas.
- POLICY 18: Mixed use districts (large-scale developments containing a mixture of office, retail, and residential uses) are encouraged to locate along arterial highway, roads and streets in Madison County.
- POLICY 19: Commercial development in the Mannsdale area will be limited and will be governed by a zoning overlay district that imposes requirements beyond basic commercial zoning regulations.
- POLICY 20: Madison County will encourage commercial development in the Camden area to serve the community there. In particular, a grocery store is needed.
- POLICY 21: The only type of commercial development that will be considered on U.S. Highway 51 south of Yandell Road will be limited office-type commercial development, and this will only be permitted in certain carefully selected areas.
- POLICY 22: New “strip commercial” development shall be discouraged to reduce traffic congestion and safety hazards. Instead, Madison County encourages commercial development in planned developments, in shopping centers, on sites utilizing shared accessways, on loop streets, or on service roads.
- POLICY 23: Strip commercial development will not be allowed to spread beyond parcels where it already exists unless the proposed expansion

includes the use of existing accessways (i.e., that it does not include additional accessways).

PLANNING PRINCIPLE: The term “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 districts.” 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 influence on nearby residential properties. Strip zoning is often wasteful of land and public facilities.

As traffic congestion on the arterial street increases, the speed limit is lowered, and it eventually becomes necessary to either widen the street or to build a 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 by expanding. Therefore, some sort of transitional zoning at the common boundaries between strip commercial and residential zones is necessary.

POLICY 24: In order to prevent further strip development as much as possible, zoning regulations setting minimum lot widths at 200 feet in selected areas have been established. Services roads, with new businesses backing onto arterial streets and with access to arterial streets limited to selected intersections shall be required.

INDUSTRIAL GOALS

GOAL: To meet the future needs of business and industry by making (planning and zoning) land available for new commercial and industrial development within the county; and to maintain property values throughout the county by carefully planning the location and design of all commercial and industrial development.

OBJECTIVE: The need for expansion of industrial areas will be determined based upon future predictions of industrial activity and the Land Use Plan.

POLICY 25: Industries will be encouraged first to locate and expand within existing industrial areas to take advantage of more cost effective existing infrastructure.

POLICY 26: Madison County will encourage industrial development in areas with relatively flat (less than 5 percent slope) topography, high capacity utility systems and direct connections to rail and highway facilities. Large industrial parks will be preferred to small isolated parcels to ensure the preservation of adequate amounts of land for storage, parking, and loading, well-planned internal circulation systems, and generally, a more unified site design.

POLICY 27: The Madison County Board of Supervisors will work to develop and adopt zoning regulations designed to preserve and maintain selected

existing areas of the county that currently allow for manufacturing uses.

POLICY 28: Key sites shall be identified by the Board of Supervisors and MCEDA that are suitable for development or redevelopment as manufacturing sites, and these sites shall be zoned exclusively for that purpose.

POLICY 29: The county's Zoning Ordinance shall be amended to permit appropriate light assembly and high tech manufacturing uses in office areas and commercial areas. These uses should not store their materials outside, nor should there be any visible signs of manufacturing activity outside.

POLICY 30: In addition to the above policy, a new separate Technical Industrial Park zoning district has been established to provide areas adjacent to major transportation arteries and thoroughfares where light industrial, technological and professional firms can locate with the assurance of a high permanent level of design quality, extensive site amenity, open space, and environmental protection.

POLICY 31: The county will explore the development of sites for light industry in the Camden area.

TRANSPORTATION GOALS

GOAL: To develop transportation infrastructure throughout the county, including highways, arterial streets and Interstate interchanges, for the safe and efficient movement of traffic.

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

POLICY 32: The Madison County Board of Supervisors hereby endorses the development of a full access-controlled roadway through Madison County consisting of the construction of a direct connection from Mississippi Highway 22 to Mississippi Highway 43 and Mississippi 16, with re-construction of Highway 43 as a full-access-controlled roadway. These Madison County full access-controlled highways are envisioned to become a portion of a metropolitan area beltway system to connect Interstate highways I-55 and I-20 with U.S. Highway 49, North and South. Improvements to Highway 22 and Highway 16 are included in the Mississippi Department of Transportation's VISION-21 program.

OBJECTIVE: To provide better county-wide traffic circulation by improving existing roadways or constructing new north-south and east-west transportation routes.

POLICY 33: Madison County desperately needs additional east-west arterial roads. Toward that end, the Board of Supervisors hereby adopts as policy the widening of Gluckstadt Road/Yandell Road as a four-lane principal arterial roadway and the construction of a bridge over the Canadian National Railroad tracks and U.S. Highway 51, forming a direct connection between Gluckstadt Road and Yandell.

POLICY 34: The Board of Supervisors hereby endorses the construction of the Reunion Parkway with connections to a new Interstate 55 interchange and U.S. Highway 51 at Green Oak Lane.

POLICY 35: The Board of Supervisors favors the widening of Mississippi Highway 463 from Highland Colony Parkway to Reunion Parkway, but opposes the

widening of 463 from Reunion Parkway to Mississippi Highway 22.

POLICY 36: The Board of Supervisors hereby endorses the construction of a connecting minor arterial roadway from the Nissan-South Interstate 55 interchange eastward to U.S. Highway 51 at Sowell Road and westward to the proposed Calhoun Station Parkway.

POLICY 37: The Board of Supervisors hereby endorses the eastward extension of Stribling Road as a minor arterial roadway to connect with the proposed Calhoun Station Parkway and the Nissan-South interchange.

IMPLEMENTATION PROGRAM: These Transportation Goals and Objectives shall be implemented through concerted efforts of the Madison County Board of Supervisors, the CMPDD, and elected officials from the four Madison County municipalities.

- The county and municipalities within the county, as members of the CMPDD's Metropolitan Planning Organization policy committee, have participated in the incorporation of the county's Transportation Plan into the 2035 Jackson Urbanized Area Transportation Plan which was adopted in March 2011. This 2035 plan will identify funding sources for all improvements included in the county's Transportation Plan.
- One of the implementation mechanisms to be explored shall be the use of toll roads.
- The county shall consider developing a three-to-five year Capital Improvements Program that will include implementation of the roadway improvements proposed in the county's Transportation Plan.
- The Board of Supervisors will continue to explore the establishment of public improvement districts and special assessment roadway as a means of implementing road improvement proposed in Chapter 3 of this Comprehensive Plan.

GOAL: To incorporate alternate transportation elements into developments and transportation plans initiated by private developers and Madison County.

OBJECTIVE: To plan transportation corridors that include elements that facilitate pedestrian circulation through green belts that contain bicycle lanes, walking trails, and connectivity to adjacent residential/commercial areas.”

PUBLIC FACILITIES

GOAL: To provide adequate fire protection for rural areas outside municipalities.

OBJECTIVE: To provide adequately staffed and equipped fire stations to cover the rural areas.

POLICY 38: The county shall determine those areas that need improved fire protection and shall strive to provide it. In rural areas, the Mississippi State Rating Bureau uses a standard service area for each fire station of 4 to 5 road miles.

GOAL: To provide a law enforcement system that supports the continuation of the county’s low crime rate.

OBJECTIVE: To provide the Sheriff’s Department with adequate facilities to meet the needs of that Department through the year-2035 and beyond as identified in the Law Enforcement element of the Public Facilities Plan.

POLICY 39: The Sheriff’s Department will explore the cost-benefit of locating a Sheriff’s Department “sub-station” was needed in the Camden area.

GOAL: To reduce flooding in Madison County within all floodplains designated by the Federal Emergency Management Agency.

OBJECTIVE: To improve storm water drainage in areas that are prone to flooding.

POLICY 40: To examine closely the drainage for all proposed new higher density developments prior to approval, because they tend to create drainage problems.

POLICY 41: To require developers to construct storm water retention/detention basins in all new developments of 5 acres or more.

POLICY 42: To require developers to elevate all structures within floodplains to at least one foot above the level of FEMA-designated 100-year floods.

GOAL: To provide for an adequate water supply for all residential, commercial, industrial and other development in Madison County.

OBJECTIVE: To explore other means of supplying water.

POLICY 43: The county will supplement ground water supplies with surface water sources in order to maintain a continuous supply of water.

GOAL: To provide library services for the citizens of Madison County.

OBJECTIVE: To determine the library needs for the different areas of the county and to provide facilities to meet those needs by the year-2035.

POLICY 44: The county will make provision for the county's library branches to meet their needs as identified in the Public Facilities Plan element of this Plan.

GOAL: To provide improved park and recreational opportunities for the citizens of Madison County.

OBJECTIVE: To meet the recreational needs of the county as identified in the Parks and Recreation section of the Public Facilities Plan of this Comprehensive Plan.

POLICY 45: The County Board of Supervisors will consider reorganizing the Parks and Recreation Commission that was established in the 1970's.

GOAL: To provide quality education to all students throughout the county, meeting the skill needs of businesses and industries.

OBJECTIVE: To work with Holmes Community College, the Canton School District and the Madison County School District to meet the long-range education needs of the county.

POLICY 46: The County Board of Supervisors will cooperate with the Canton School District and the Madison County School District to meet the facility (buildings/classrooms, etc.) needs identified in the Public Schools section of the Public Facilities Plan of this Comprehensive Plan. That element of the Public Facilities Plan includes enrollment projections through the year-2035 for both school districts. The specific capital facility and operational needs of the Madison County School District are being addressed in a Comprehensive Education Plan to be prepared by a consultant as part of a Fund for Improvement of Education grant secured by the School District in cooperation with the CMPDD.

ENVIRONMENTAL GOALS

GOAL: To recognize and consider environmental constraints in the establishment of land use patterns and to promote the preservation of sensitive natural areas within the county, especially areas prone to flooding.

OBJECTIVE: To manage flood plain development.

POLICY 47: Areas subject to flooding will be monitored and managed by a Flood Plain Management Plan,

and the Flood Plain Management Ordinance. Development will be limited and guided according to Flood Plain Management Plan and the Comprehensive Plan.

OBJECTIVE: To handle storm water runoff from new development so as to lessen its adverse impact on nearby properties.

POLICY 48: Provide the means to control the amount and rate of storm water runoff in new developments through the Subdivision Regulations Ordinance. The county has a new subdivision ordinance with storm water provisions.

POLICY 49: Provide for density increase incentives for reducing the amount and/or rate of runoff.

GOAL: To recognize and consider constraints of extreme soil characteristics.

OBJECTIVE: To decrease the rate and amount of soil erosion in the county.

POLICY 50: Areas of extreme soil erosion will be determined. Appropriate steps to slow or stop the erosion will be taken.

GOAL: To support preservation of farmlands, especially prime farmlands, and encourage cooperation between farm interests and development interests.

GOAL: To promote the control and regulation of the adverse effects of development such as noise, light, odor, etc. within the county.

GOAL: To recognize the value of the natural environment and its importance in creating the rural/suburban atmosphere of Madison County by identifying and protecting natural features in proposed developments and transportation plans.

OBJECTIVE: To preserve and incorporate desirable natural elements, such as trees, green belts, water courses, and unique topography, into developments.

POLICY 51: To amend the existing Madison County Subdivision Ordinance to require developers to identify the elements listed above through a site survey and how the developers plan to utilize these elements to enhance aesthetic value, market appeal, and market value of the property.

POLICY 52: To develop procedures that will allow more preservation of trees on private property during development.

POLICY 53: The County should seek funding to survey and identify brownfield sites for redevelopment or cleanup. A brownfield site is real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.

IMPLEMENTATION GOALS

GOAL: To consider adoption and use of a Capital Improvements Program as a major tool for the implementation of this Comprehensive Plan.

OBJECTIVE: To base the Capital Improvements Program in part upon the Public Facilities Plan element of this Comprehensive Plan in accordance with Section 17-1-1 of the Mississippi Code.

POLICY 54: If developed and used, the Capital Improvements Program will be the means of financing the long-range facility needs identified in the Public Facilities Plan.

GOAL: To guide growth and development throughout Madison County by comprehensive planning, zoning, subdivision regulations, and building codes that deliver an efficient and predictable development process.

OBJECTIVE: To use the adopted Land Use Plan as a guide for development of the area.

POLICY 55: The adopted Land Use Plan shall be consulted before any development or policymaking occurs.

OBJECTIVE: To revise the County's Zoning Ordinance and Subdivision Regulations to reflect modern planning practices and standards.

POLICY 56: The present Zoning Ordinance, which was amended in 2005 contained in separate sections, will be consolidated and revised consistent with the adopted Comprehensive Plan.

POLICY 57: The county Subdivision Regulations include required retention and detention ponds to reduce flooding problems experienced in many areas.

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 by providing open space "buffering" to reduce possible conflicts where different land use classifications adjoin.

OBJECTIVE: To preserve the desirable characteristics of existing development within the unincorporated portions of

Madison County and the environmental and historical resources located within it.

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, parks and other public requirements.

GOAL: To maintain a continuous program of public communication in order to keep the planning goals constantly before the eyes of every citizen.

OBJECTIVE: To increase the public awareness of planning goals by reminding citizens of programs that have already been activated and those which have been proposed.

POLICY: The public shall be informed of the county's planning goals.

IMPLEMENTATION PROGRAM:

Goals will be publicized through public hearings, the media, and websites of Madison County, the CMPDD, MCEDA, the municipalities, Chambers of Commerce, the school districts, and other organizations.

CHAPTER II

LAND USE PLAN

INTRODUCTION

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 the basis of quantitative recommendations for each land use category.”

To map the county’s future land uses, the District used updated digital maps from the county’s Geographic Information System (GIS) office. Existing land uses were updated so as to properly make any necessary changes in the future land use map.

MADISON COUNTY POPULATION, HOUSING AND EMPLOYMENT:

Year-2010 Population and Housing

As stated in the introduction to this Comprehensive Plan, the CMPDD is the Metropolitan Planning Organization or MPO, which is responsible for coordinating a Federally-mandated Transportation Planning Process for Hinds, Madison and Rankin Counties. One of the District’s responsibilities as the MPO is to develop a long-range Areawide Transportation Plan for the area projected to become “urbanized” or closely settled within the next twenty-five to thirty years. In order to develop that long-range transportation plan, it was necessary to obtain year-2010 base year data as input into a computerized traffic simulation model that simulates traffic loads on a defined street and highway network. The District compiled year-2010 population and housing counts by Traffic Analysis Zone for the “projected urbanized area” from the 2010 Census of Population. The year-2010 population and housing data also

provided the base-year for the 2030 projections that the District is performing in conjunction with the development of this Land Use Plan.

Madison County Population Projections

The CMPDD used a linear regression procedure to develop county-wide population projections for Madison County. The District used the period 1970 to 2010 as base data to perform the linear regression, because this time frame provided more data points, which could be used to determine the regression line. This procedure basically averages the population trend into a straight line to estimate the projected population for the years 2020, 2030, and 2035. The result of this procedure is that CMPDD estimated the target year (2035) population to be 132,800.

TABLE II-1

2035 MADISON COUNTY POPULATION PROJECTIONS

YEAR	POPULATION	PERCENT INCREASE/DECREASE
1970	29,737	-----
1980	41,613	39.9
1990	53,794	29.3
2000	74,674	38.8
2010	95,203	27.5
2020	108,202	13.7
2030	124,601	15.2
2035	132,800	6.6

Sources: U.S. Bureau of the Census and CMPDD estimates.

Madison County is one of the state’s top five fastest growing counties. However, the projections for 2020, 2030, and 2035 show that the county’s rate of growth in these decades will slow somewhat.

Housing Projections

The definition of “Comprehensive Plan” under Section 17-1-1 of the **Mississippi Code** includes four required elements; and the fourth element is a “Community Facilities Plan,” meaning that all public facilities must be addressed in that element. Housing is listed as one of the facilities that must be addressed in the

Community Facilities Plan. However, since Madison County does not own or manage any public housing, in this chapter, housing will not be addressed as a public facility but as a land use indicator of growth and of types of housing needed to accommodate future populations.

From the 2010 Census, we know that the population is 95,203 persons and that the total number of housing units in Madison County is 38,558. The total number of occupied housing units is 35,829 units. The county-wide vacancy rate is 7.1 percent. To arrive at an average number of persons per household, the 2010 population of 95,203 is divided by the total occupied housing units (35,829). The result is 2.66 persons per household unit.

Although this number of persons per household is expected to change by 2035, it represents an acceptable “yardstick” for projecting housing need based upon the projected population. Therefore, the 2035 projected population of 132,800 was divided by 2.66 to determine approximately how many housing units will be needed by 2035. This calculation yielded a total of 49,925 housing units that will be needed to accommodate the county’s 2035 population. If we divide the additional projected 2035 population of 37,597 (132,800 – 95,203) by 2.66, the result is 14,134 additional housing units that will be needed by 2035.

Table II-2 shows this calculation.

TABLE II-2

PROJECTED HOUSING UNITS

Year	Population	Housing Units	Added Pop.	Added H.U.
2010	95,203	38,558	-----	-----
2035	132,800	49,925	37,597	14,134

In the 2000 Census, the percentage of single-family units in Madison was reported as 72 percent, duplexes or townhouses as 2 percent, townhouses as 5 percent, apartments as 14 percent, and manufactured homes as 7 percent. For the purposes of this plan, it is assumed that the percentages will be the same in 2035 in order to determine how the additional projected housing units will be distributed.

Once these percentages are applied to the number of additional housing units for 2035, the results are as follows: single-family units – 10,176, duplexes – 283, townhouses – 707, apartments – 1,979, and manufactured homes – 989. It is therefore expected that the largest demand for housing will continue to be

single-family homes. However, there will also continue to be a need for apartments and manufactured housing into the future.

Employment Projections

In 2000, total employment for Madison was 30,235. In 2010, Madison County's total employment is 43,530, a 44 percent increase. The number of total employment represents 45.7 percent of the county's population, and the number of manufacturing employees (6,250) represents 6.6 percent of the county's population. The unemployment rate is 7.6 percent.

For the 2035 employment projections, it is assumed that total employment will be 45.7 percent of 132,800 or 60,690 persons. Using the 2010 percentage of manufacturing employees, Madison County in 2035 will have 8,765 manufacturing employees of the 60,690 total employed persons.

EXPLANATION OF LAND USE CATEGORIES DEPICTED ON LAND USE MAP

The following is an explanation of the specific meaning of land use color codes depicted on the Land use Plan/Thoroughfares Plan map which is found at the end of this chapter.

AGRICULTURAL (white): Maximum development of one residential unit for every two acres.

This land use classification depicts areas that are expected to remain predominantly agricultural with no significant concentrations of residential, commercial, industrial or other development during the period from 2010 to 2035. Based upon the Madison County Sewerage Master Plan adopted by the Board of Supervisors, most of the areas shown as "agricultural" on the Land Use Plan will not have public sewerage by 2035; or if the area is to be traversed by a proposed interceptor sewer, it is still expected to remain agricultural because of its relatively remote location.

RESIDENTIAL CLASSIFICATION: Residential land use classification proposed to be based upon dwelling unit density.

1. **Residential Estate (chartreuse):** This classification generally includes existing subdivisions containing lots with a minimum area of two acres or more or areas of the County that should remain Residential Estate

due to their proximity to existing large lot subdivisions. The preservation of these neighborhoods for large lot development is important in order to protect the property values of people living in existing Residential Estate subdivisions or other large lot developments.

2. **Low Density Residential (peach):** This classification includes existing subdivisions with lots generally ranging from 30,500 square feet in area up to 1.99 acres. Areas shown on the Land Use Plan as low density residential either have sewer service or are expected to have sewer service by 2030. This land use classification is sometimes used as a “transitional” residential density between Residential Estate areas and smaller lot residential areas.
3. **Moderate Density Residential (yellow):** This classification includes existing subdivisions with lot sizes generally 15,000 square feet or greater or areas that are expected to be developed with lots with a density of approximately 2.1 units per acre. Areas shown on the Land Use Plan as moderate density residential either have sewer service or are expected to have sewer service by 2035.
4. **Garden Residential, Patio Homes and Other Lots less than 15,000 square feet in area (orange):** This residential classification includes lots generally having an area of less than 15,000 square feet down to “patio homes” with lots with 6,000 square feet in area. These higher density residential neighborhoods should be located only adjacent to arterial highways, county roads or streets that can accommodate the increased traffic generated by such development. Areas shown on the Land Use Plan as garden/patio home residential either have sewer service or are expected to have sewer by 2035.
5. **High Density Residential (tan):** The maximum density for apartment or condominium development included in this classification should be 10.0 units per acre, with a minimum of 30 percent of the gross site area reserved for “useable” open space (including all required yards and easements, but excluding parking lots); lakes/ponds and land with steep slopes or bayous should not be counted in calculating required open space. All areas shown on the Land Use Plan as high density residential now have sewer service or are expected to have sewer service by 2035.

- 6. Manufactured/Mobile Home Parks (brown):** This classification includes manufactured homes located in a “park” where the individual space or “pad” where the home is parked is rented or leased or both the manufactured home and the space are rented or leased.

- 7. Mixed Site-Built and Manufactured Home Subdivision (gold):** This classification includes subdivisions devoted exclusively to allowing a mixture of site-built homes and manufactured homes on individual lots within the subdivision.

COMMERCIAL CLASSIFICATIONS: All commercial classifications shown on the Land Use Plan either now have public sewer service or are required to have on-site wastewater disposal systems. Those commercial uses not connected to a central sewage treatment plant must have an on-site wastewater treatment system with a minimum lot size of three acres.

- 1. Office Commercial (Restricted or Limited Commercial) (pink):**
Offices of all types.

- 2. General or Indoor Commercial (red):** This classification includes independent indoor commercial retail or service uses and shopping centers/malls.

- 3. Major Thoroughfare Commercial (purple):** These commercial uses typically involve either significant outdoor activity or the display or storage of goods/materials outside of enclosed structures. When translated into land use regulations in the Madison County Zoning Ordinance, the following uses should be permitted outright: vehicle sales and service; plant nurseries; boat and marine sales and service; etc. **SPECIAL EXCEPTIONS ONLY:** outdoor commercial recreational and entertainment enterprises such as water amusement parks; outdoor building material sales or storage; heavy construction equipment sales and service; truck stops; manufactured home and recreational vehicle sales and service; truck stops; veterinary clinics with outside dog runs; etc. No Outdoor or Major Thoroughfare Commercial areas are proposed on the Land Use Plan next to single-family residential areas unless a minimum 50 foot buffer is proposed between the outdoor commercial use and an existing or proposed single-family residential use.

INDUSTRIAL CLASSIFICATIONS:

1. **Technical (limited) Light Industrial (light gray):** All indoor industrial uses, including indoor manufacturing and warehouses where all storage is inside. SPECIAL EXCEPTION ONLY: mini-warehouses.
2. **Heavy Industrial (dark gray):** Outdoor manufacturing and storage of materials out-of-doors; or manufacturing uses that use large amounts of water to process products or discharge large volumes of wastewater into the sewerage system. SPECIAL EXCEPTION ONLY: sand and gravel pits; salvage (junk) yards.

PUBLIC/QUASI-PUBLIC USES:

1. **Parks and Open Space, Including Existing or Proposed Parks and Required Setbacks for Commercial and Industrial Uses Bordering Single-Family Residential Uses or Zones (light green):** The designation of an area as “open space” is not intended as a recommendation for acquisition of the property by the county for use as a park or other public use. In area traversed by significant streams or severe topography, the recommended ‘best use’ bordering the streams (because of flood potential) or within such steep slope areas is open space. This classification also includes the Madison County Trace Parkway.
2. **Public/Quasi-Public Uses Other Than Parks and Open Space (dark green):** All governmental facilities, civic organizations, hospital, churches, schools, cemeteries, nursing homes, and major public or private utility facilities such as electrical power generation plants and substations, water tanks, etc.

FLOODPLAINS AND FLOODWAYS:

1. **Base Flood (100-year Flood) or Floodplains (light blue):** Those areas for which base flood (100-year) elevations have been determined by the Federal Emergency Management Agency (FEMA). Any construction in these areas must be elevated by fill or other means to or above the elevation of the 100-year flood.

2. Floodways (turquoise): These areas are the actual creek channels needed to convey water under normal conditions as identified by the Federal Emergency Management Agency (FEMA). All construction in floodways is prohibited.

CHAPTER III

TRANSPORTATION PLAN/MAJOR THOROUGHFARES PLAN

INTRODUCTION

According 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. 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.”

THOROUGHFARES PLAN: FUNCTIONAL CLASSIFICATIONS

Concurrently with preparation of the Land Use Plan for Madison County, the CMPDD developed a “Thoroughfares Plan,” classifying roads, streets and highways according to the function that they can be expected to perform by the target year of the plan: 2035. 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 proposed Madison County Thoroughfares Plan is shown on the Land Use Plan/Thoroughfares Plan. Each highway, road or street was functionally classified by the CMPDD according to criteria prescribed by the Federal Highway Administration (FHWA).

The following are FHWA definitions of each classification; the color codes on the Thoroughfares Plan are the colors prescribed by the FHWA in classifying roadways:

1. **Urban Interstate Highways (blue on the Thoroughfares Plan):** These are the controlled-access highways on the Interstate system. In Madison County, the Interstate highways are I-55 and I-220.
2. **Other Urban Freeways and Expressways (gold on the Thoroughfares Plan):** These are the non-Interstate controlled-access facilities. There are presently no other urban freeways or expressways in Madison

County. However, one controlled-access highway is proposed on the Thoroughfares Plan: the relocation/reconstruction of Mississippi Highway 43 from Canton to the Reservoir into Rankin County.

3. **Urban Principal Arterials (red on the Thoroughfares Plan):** This system of streets serves the major centers of activity, has some the highest traffic volumes and the longest trip desires.
4. **Urban Minor Arterials (green on the Thoroughfares Plan):** The minor arterial street system interconnects with and augments the principal arterial system. It provides service to trips of moderate length and includes facilitates that place more emphasis on land access than the principal arterial system.
5. **Collectors (purple on the Thoroughfares Plan):** 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.
6. **Urban Locals (No color on the Thoroughfares Plan):** These roads and streets provide direct access to adjoining land and to higher systems; they provide the lowest level of mobility, and through traffic movement is discouraged on local facilities. By definition, local streets and roads are not “thoroughfares.”

MINIMUM RIGHTS-OF-WAY AND SURFACE WIDTH REQUIREMENTS

The general minimum right-of-way and surface width requirements for non-Interstate and non-freeway roadways shown on the Thoroughfares Plan are specified below:

Principal Arterial (red): Generally, proposed minimum of four basic lanes (48 foot surface width or more); generally, a minimum 100 foot right-of-way. However, some roadways may be classified as principal arterials because of their function, but the projected traffic may not necessitate the widening of the roadway to four or more lanes.

Minor Arterial (green): Generally, 3-12 foot lanes; minimum of 70 foot right-of-way

Collector (purple): 28-36 foot surface width; minimum of 60 foot right-of-way

Local (no-color): 2 lanes; minimum of 50 foot right-of-way

RELATIONSHIP OF THIS TRANSPORTATION/THOROUGHFARES PLAN WITH THE 2035 JACKSON URBANIZED AREA TRANSPORTATION PLAN (MULTIPLAN)

As stated in the Introduction to this Comprehensive Plan, the CMPDD is the “Metropolitan Plan Organization” or “MPO” (designated by the U.S. Department of Transportation and recognized by the Mississippi Department of Transportation) for the Jackson Metropolitan Area (Hinds, Madison and Rankin Counties) and is responsible for coordinating a Federally-mandated Transportation Planning Process for the Metropolitan Area. One of the primary Federal requirements for MPO’s is the development of an Areawide Transportation Plan. CMPDD in cooperation with the Mississippi Department of Transportation and the other four MPO’s in the state is developing the Mississippi Unified Long-Range Transportation Infrastructure Plan (MULTIPLAN), which will include an update of the 2030 Jackson Urbanized Area Transportation Plan, which will have a horizon date of 2035, that was adopted by CMPDD’s Metropolitan Planning Organization policy committee in March 2011.

Therefore, in conjunction with the development of the MULTIPLAN, CMPDD has prepared an updated Transportation Plan for Madison County. In accordance with Mississippi law, the county Transportation Plan depicts in map form the proposed functional classifications principal and minor arterial, collector and local) for existing and proposed streets, roads and highways for the same time period as that covered by the Land Use Plan (i.e., to the year 2035).

Computer-simulated traffic projections for the year 2035 from the 2035 Jackson Urbanized Area Transportation Plan are presented in this chapter of the Chapter of the Comprehensive Plan. These 2035 traffic projections were compared to generalized roadway capacities shown I Table III-1 to assist the CMPDD in determining what thoroughfare improvements are needed in Madison County. The improvements in this Madison County Thoroughfares Plan are included in the 2035 Jackson Urbanized Area Transportation Plan.

**TABLE III-1
GENERALIZED ROADWAY CAPACITIES**

Functional Classification	24 Hour Capacity
Freeways (Interstate Highways and other Controlled-Access Freeways or Expressways)	
4 lane	68,000
6 lane	102,000
Arterial Highways, Road or Streets	
2 lane (without left turn lanes)	11,000
2 lane (with left turn lanes)	15,000
4 lane undivided	23,000
4 lane divided	27,000
6 lane divided	39,000
8 lane divided	51,000
Collector Streets	
2 lane (without left turn lanes)	10,000
2 lane (with left turn lanes)	12,000
4 lane undivided	20,000
4 lane divided	24,000
One-Way Streets	
2 lane arterial	12,500
3 lane arterial	20,000
2 lane arterial	10,000
3 lane arterial	18,000

Source: 2030 Jackson Urbanized Area Transportation Plan, CMPDD, 2005.

PROPOSED THOROUGHFARE IMPROVEMENTS

As was mentioned earlier, the recommended transportation system improvements will be based upon projected traffic volumes, and projected traffic volumes will be based upon the anticipated future land uses for 2035 the projected traffic volumes for 2035 were recently published in the 2035 Jackson Urbanized Area Transportation Plan, Volume I: Streets and Highways Plan.

Obviously, these projections are estimates and are based on the assumptions that the population and land uses will be as described. Realistically, as time passes, these projections should be adjusted to reflect changing conditions. The roads that presently do not show a deficiency for 2035 may show a substantial increase in Average Daily Traffic in the near future that will require an adjustment in the projected ADT.

Existing or Already Committed Road Projects in Madison County:

- Sowell Road from Old Jackson Road to U.S. 51 – new 2 lane road
- Hoy Road from Rice Road to N. Old Canton Rd. – center turn lane
- Hoy Road from U.S. 51 to Rice Rd. – widen to 4 lanes divided
- Old Canton Rd. Natchez Trace to Calumet Dr. – widen to 4 lanes divided
- Old Canton Rd. Hoy Rd. to St. Augustine Dr. – center turn lane
- Lake Harbour Dr. from U.S. 51 to Northpark Dr. – widen to 5 lanes
- Calhoun Station Pkwy from Gluckstadt Rd. to Church Rd. – new 3 lane
- Calhoun Station Pkwy from Sowell Rd. to MS 22 – new 3 lane road
- Stribling Rd. from Church Rd. to Catlett Rd. – new 2 lane road
- I-55 at Gluckstadt Road – interchange modification
- I-55 from Old Agency Rd. to MS 463 – split diamond interchange and frontage roads
- Connector Road from U.S. 51 to MS 43 – new 4 lane divided

Major Corridors Forecast to be Deficient by 2015, 2025, and 2035:

In the Jackson Urbanized Area Transportation Plan, traffic volumes and volumes-over-capacity ratios for the years 2015, 2025, and 2035 were developed to show which corridors were expected to be deficient in terms of ability to handle traffic volumes by each of the target years.

Major corridors forecast to be deficient by the year 2015:

- U.S. 51 from Tisdale Road to Green Oak Lane
- E. County Line Road from I-55 to Ridgewood Road
- Bozeman Road from Cedarmon Drive to Hwy 463
- Hwy 463 (Main Street) from Herron Street to Magnolia Street
- Old Jackson Road from Cloverleaf Drive to W. Sowell Road

Major corridors forecast to be deficient by the year 2025:

- U.S. 51 from Yandell Road to Green Oak Lane
- Hwy 463 (New Mannsdale Road) from Bozeman Road to I-55

- Boze Road from Reserve Crossing to Cedarmont Drive

Major corridors forecast to be deficient by the year 2035:

- I-55 from Southern End of the Service Roads to Old Agency Road
- I-55 at I-220
- I-55 SB off ramp at W. County Line Road
- U.S. 51 from E. Sowell Road to Church Road
- U.S. 51 from Jackson Street to Rice Road
- Old Canton Road from Main Street to Madison Avenue
- Weisenberger Road from Grandview Parkway to U.S. 51
- MS 43 from Hart Street to Nissan Parkway
- Gluckstadt Road from Distribution Drive to I-55
- Hwy 463 (Main Street) from I-55 to Grandview Boulevard
- New Mannsdale Road from Bennett Road to Moss Road
- Mannsdale Road from Robinson Springs Road to N. Livingston Road

Staged Improvement Program:

Based upon need and availability of funding, the Staged Improvements Program, which is also found in the 2035 Jackson Urban Area Plan, arranges future road projects in three stages: Stage 1 – 2011-2015, Stage 2 – 2016-2025, and Stage 3 – 2026-2035. It should be pointed out that there will be some improvements made to some roads that serve Madison County but are not located completely within the county. Total improvements also include intersection improvements, new bridge construction, bridge replacements, roadway maintenance, enhancements, and corridor preservation projects, but these are not listed here.

Stage I (2011-2015) Improvements for Madison County:

- I-55 from MS 463 to Old Agency Road – widen to 6 lanes, new interchange
- Hoy Road from Rice Rd. to N. Old Canton Rd. – center turn lane
- Lake Harbour Dr. from Highland Colony Pkwy to U.S. 51 – new 4 lane
- Madison Ave. from Highland Colony Pkwy to U.S. 51 – widen to 4 lanes divided
- Reunion Pkwy from Bozeman Rd. to U.S. 51 – new 4 lane
- I-55 at Reunion Pkwy – new interchange
- I-55 at Gluckstadt Rd. – interchange improvement
- MS 463 from Reunion Pkwy to Madison Central Dr. – widen to 5 lanes

- Hoy Rd. from U.S. 51 to Rice Rd. – widen to 5 lanes
- Lake Harbour Dr. from U.S. 51 to Northpark Dr. – widen to 5 lanes
- Old Canton Rd. from Hoy Rd. to St. Augustine Dr. – center turn lane
- Pear Orchard Rd. at Rice Rd. – signalization
- Ridgewood Rd. at Centre St. – signalization
- MS 43 – U.S. 51 Connector from MS 43 to U.S. 51 – new 4 lane
- Harbor Dr. from Rice Rd. to Lake Harbour Dr. – widen to 4 lanes
- Wheatley St. Extension from Madison Ave. to Ridgeland Ave. – new 4 lane

Stage II (2016-2025) Improvements for Madison County:

- I-55 from MS 22 to MS 463 – widen to 6 lanes
- I-220 from I-55 to Hinds County Line – widen to 6 lanes
- McClellan Dr. Extension from Highland Colony Pkwy to U.S. 51 – new 4 lane
- Yandell Rd. from I-55 to N. Old Canton Rd. – Realign and widen to 4/5 lanes divided
- Bozeman Rd. from Gluckstadt Rd. to MS 463 widen to 4 lanes
- Rice Rd. from Hoy Rd. to Old Canton Rd. – widen to 5 lanes
- U.S. 51 from MS 16 to Weisenberger Rd – widen to 4 lanes
- Cox Ferry Rd. from Railroad Ave to Cane Creek Rd. (Flora) – new 2 lane

Stage III (2026-2035) Improvements for Madison County:

- I-55 at Green Acres Rd. – new interchange
- U.S. 51 Weisenberger Rd. to Tisdale Rd. – widen to 5 lanes
- Hoy Rd. from Rice Rd to N. Old Canton Rd. – widen to 5 lanes
- Rice Rd. from U.S. 51 to Old Canton Rd. – widen to 5 lanes
- Ridgewood Rd. from U.S. 51 to Centre St. – widen to 5 lanes
- South Wheatley St. from Lake Harbour Dr. to County Line Rd. – widen to 5 lanes
- Weisenberger Rd. from Gluckstadt Rd. to U.S. 51 widen to 5 lanes

Vision Projects/Unfunded Needs:

For the staged road projects there is available funding. Beyond the first three stages of making road improvements, there is the Vision Plan. The Vision Plan includes the city's important, but unfunded needs.

Why is there no funding for these projects? The reasons are varied. According to the 2035 Jackson Urbanized Area Transportation Plan, "Delayed funding for

a transportation improvement project may be the result of the project's size, cost, design complexity, acquisition difficulties, jurisdictional concerns, and/or environmental concerns. A project may be delayed because its efficiency is minimized until other projects are completed or it does not alleviate existing transportation deficiencies that will only be exacerbated over time.”

“The remaining unfunded transportation improvements are included in the Vision Plan so that they can be a constant reminder of future needs and annually re-analyzed to determine if adjustments or changes are needed.”

- East Sowell Rd. from N. Old Canton Rd. to MS 43 – new 4 lane
- Endris Rd. Extension from N. Old Canton Rd. to Rankin Rd. – new 4 lane
- Green Acres Rd. from U.S. 51 to King Ranch Rd. – widen to 4 lanes
- Green Acres Rd. Extension from U.S. 51 to MS 16 – new 4 lane
- Green Acres Rd. Extension from King Ranch Rd. to Heindl Rd. – new 4 lane
- Hart Rd. from Rankin Rd. to MS 16 widen to 4 lanes
- Welch Farms Rd. from MS 463 to Madison Ave. – new 4 lane
- Steed St. Ext. from Sunnybrook Rd. to Wheatley St. – new 3 lane

AIRPORTS

The only general aviation airport in Madison County is the Madison Airport (Bruce Campbell Field) in Madison on Old Canton Road. The city of Madison owns the airport under a fifty year agreement with the Federal Aviation Administration. However, if the airport is ever closed, the land reverts to Federal ownership, plus any Federal funds used to improve the airport must be refunded.

A study conducted for the City of Madison by Michael Baker, Jr., Inc. in 1988-1989, recommended relocation of the airport to a site north of Gluckstadt. However, the development of residential subdivisions in the Gluckstadt community forced reconsideration of that site.

By February, 1998, a new airport study committee was appointed by the Madison County Board of Supervisors to conduct an airport feasibility study. Neel-Schaffer, Inc. and Allen and Hoshall engineers were retained by the Board of Supervisors to conduct the feasibility study. Although a site in the Deerfield area was considered for relocation of the Madison airport, once again residential development in that area has forced reconsideration of that location.

Bruce Campbell Field in Madison continues to be a heavily used air facility. Although the airport is in a residential area, its location there has not presented significant problems for the community. In fact, additional upscale residential subdivisions and offices have located close to the airport. Therefore, it is not recommended that another location be selected for an airport.

CHAPTER IV

PUBLIC FACILITIES PLAN

INTRODUCTION:

The final element of a comprehensive plan is the Public Facilities Plan. Its purpose is to determine if current public facilities meet existing needs and future needs. Facilities costs and financing are not considered here, but are typically included in a Capital Improvements Program (CIP) if the county decides at some time to prepare one.

SECTION 1: PUBLIC LIBRARY SYSTEM

An evaluation of existing facilities is the first step in determining the need for library system improvements. However, according to the American Library Association, the system's needs for the next 20 years should be considered. Since Mississippi law also requires that a comprehensive plan, including a public facilities plan, encompass at least a 20-year period, this time-frame is consistent.

The Madison County Library System began operation in 1986, following the breakup of the former Metropolitan Library System. The Madison County Library System continues to be heavily used by patrons in other counties. Jackson and Hinds County patrons come to the Madison and Ridgeland branches to use the computer facilities, which amount to about one fifth of the patrons. Citizens from Yazoo and Attala Counties also use the Madison County branches.

The system is funded 80 percent by the county, 14 percent by the municipalities in the county, and 6 percent by the state. The system has experienced significant increases in number of visits (317,287 in 2009 over 274,310 in 2007), Circulation (333,485 in 2009 over 272,493 in 2007), and Electronic Resources Users (80,861 in 2009 over 58,680 in 2007) with relatively static funding.

The CMPDD evaluated both the current 2010 adequacy of the library system and the future year-2035 needs of the system in terms of accepted standards used by the American Library Association (ALA). Table IV-1 on the next page reflects the ALA standards for minimum building space requirements according to the population of the service area.

TABLE IV-1

MINIMUM SPACE REQUIREMENTS FOR LIBRARIES

Service Area Population	Minimum Total Floor Space
Under 2,499	2,000 square feet
2,500-4,999	2,500 square feet or 0.7 square feet per capita, whichever is greater
5,000-9,999	3,500 square feet or 0.7 square feet per capita, whichever is greater
10,000-24,999	7,000 square feet or 0.7 square feet per capita, whichever is greater
Over 25,000	15,000 square feet or 0.6 square feet per capita, whichever is greater

Source: American Library Association

Current Library System Needs

According to information provided by the Director of the Madison County Library System, the existing floor area for each of the five libraries is as follows:

Canton	19,000 square feet (including administrative offices)
Madison	9,141 square feet
Flora	8,000 square feet
Ridgeland	10,700 square feet
Camden	<u>5,500</u> square feet
Total	52,341 square feet

Table IV-2 indicates the present library needs in terms of building size for each library in the Madison Library System according to the 2010 population of Madison County. Using the Madison County population estimate of 95,203, and applying ALA size standards, the Library System should now have a total space of 57,122 square feet, a deficit of 4,781 square feet.

TABLE IV-2

DETERMINATION OF CURRENT YEAR LIBRARY NEEDS USING AMERICAN LIBRARY ASSOCIATION MINIMUM STANDARDS

2010 Service area Population	95,203
Total Current Size of All Buildings	52,341 sq. ft.
Est. 2010 Space Needs Using ALA Standard (.6 sq. ft. per capita)	57,122 sq. ft.

Sources: 2010 Population: U.S. Bureau of the Census

Building Size Information: Madison County Library System

Standards: American Library Association

The same method is used to determine the systems space needs for 2035. The 2035 Madison County population has been estimated to be 132,800. As Table IV-3 shows, the system should have a total of 79,680 square feet by the horizon year. When the system’s current square footage is compared, the system’s deficit increases from 4,781 square feet to 27,339 additional square feet needed by 2035.

TABLE IV-3

DETERMINATION OF YEAR-2035 LIBRARY SPACE NEEDS USING AMERICAN LIBRARY ASSOCIATION STANDARDS

2035 Projected Madison County Population	132,800
Minimum ALA Standard for Library Serving this Size Population in 2035 (entire system)	79,680 sq. ft.
Total Present Library Space and Committed Expansions	52,341 sq. ft.
Total 2035 Projected Space Deficit	-27,339 sq. ft.

Sources: - 2035 Population Projection: CMPDD

- Standards: American Library Association

FINDINGS AND RECOMMENDATIONS

The evidence indicates that as the county’s population grows, the library system’s facilities and services will continue to experience growth. Even now, the Summer Reading Program is held at the Multi-Purpose Center in June and July.

Each branch in the system will need to be expanded by 2035, whether they all receive equal additions of square footage or the additions are made according to the needs of the individual branch remains to be determined.

SECTION 2: FIRE PROTECTION

Findings:

Not including the municipalities there are six volunteer fire districts in Madison County with a seventh district in the process of being formed as well as one Fire Gradient District around Canton. The six volunteer fire stations are located as follows:

1. South Madison County Fire District has 2 fire stations (Gluckstadt Station #1 is located on Yandell Road and Gluckstadt Station #2 is located on Stribling Road) and has a Class 8 fire rating with paid & volunteer firemen;
2. Camden Fire Station located in the Camden community has a class 10 fire rating comprised of volunteers;
3. Farmhaven Fire Station located in the Farmhaven community on MS Highway 16 has a fire rating of Class 9 and is manned by volunteers;
4. Southwest Madison County Fire Station on Lake Cavalier Road has a Class 9 fire rating and is manned by volunteers;
5. Flora Fire Station in Flora has a Class 8 fire rating and is comprised of paid and volunteer firemen;
6. Kearney Park Fire Station in Kearney Park has a Class 9 fire rating and is manned by volunteers; and
7. Valley View Fire Station, located on Stump Bridge Road, is in the process of being formed—the county has acquired the property and has appointed a Fire Commission Board, but has not acquired funding to build a station, which will be comprised of volunteers once it is operational

At a minimum, each station has 2 Class A pumper trucks that are used as water sources. Only the municipalities of Canton, Madison, and Ridgeland have ladder trucks.

In Madison County there are a total of 389 certified fire fighters. This includes both paid and volunteer fire fighters as well as those in the municipalities. Of that number, there are 161 volunteer fire fighters in the county. However, the county is in the process of purging its rosters at each fire station to make sure each roster is up to date.

Each of the six fire districts has a service area of five road miles. However, each district typically responds to calls in a larger area due to the rural nature of the county and the locations of the fire stations.

Madison County has one of the lowest if not the lowest fire millage rates in the state.

The county's Fire Coordinator is also the Emergency Medical Service Coordinator and the Code Enforcement Officer.

Recommendations:

For rural area, the Rating Bureau uses a standard of five road miles as the service area for volunteer fire stations. For built-up commercial areas, the Rating Bureau uses a radius of 1.5 to 2 miles as the maximum fire service area. The Flora Fire Station serves the Town of Flora commercial and residential areas.

In order to development a "yardstick" for determining those areas of the county that were adequately served by volunteer fire stations, the CMPDD superimposed a five mile radius over the location of each of the present and proposed fire stations, even though the actual standard is five road miles for rural areas. What this map reveals is that there are four sections of the county that do not appear to have adequate fire protection, specifically:

- an area north of Canton along both sides of U.S. Highway 51;
- an area immediately east and southeast of Canton;
- an area along both sides of Virililia Road between Canton and Flora; and
- extreme southwestern Madison County in the Cox Ferry Road and MS Highway 22 area.

There is a need for trained volunteer firefighters and a centrally located training/storage facility somewhere in the Canton area.

Currently, the county does not have a training facility, so the fire coordinator has to find space throughout the county that is adequate to hold training classes. And this is a difficult task. In addition to finding the space, it is also difficult to get volunteers to attend classes if the volunteer lives in north Madison County and the classes are being held in Ridgeland. A central location is needed to not only meet space requirements, but to store equipment as well.

The final need addressed is a need for a countywide Fire Prevention and Protection Education Program. This program would allow county staff to go to schools, churches, and other civic organizations to conduct education and training classes on fire prevention and protection measures citizens should

take. The county does not have such a program at this time and would need additional funding to start a program.

SECTION 3: SHERIFF'S OFFICE/DEPARTMENT

Findings

The Sheriff serves as the chief law enforcement officer for Madison County. His department's primary functions are to prevent crime and to build community safety through education, investigation, and enforcement.

The Madison County Sheriff's Office and Jail (detention Center) are located on U.S. Highway 51 south of Canton. The Sheriff's Office address is 2941 Highway 51, and the Detention Center address is 2935 Highway 51.

In 1991, the 1968 jail was abandoned, and in 2000 it was demolished. Also in 1991, a new 250 bed jail and Sheriff's Office were opened next to the 1968 jail site. An additional 144 bed jail was opened in 2003, and later 132 more beds were added, bringing the total beds to 526. On a daily average, 400 to 486 of the Detention Center's beds are occupied.

Inmates may be housed in one, two, four, eight, ten, or twenty-man cells. Handicapped cells are available for inmates with disabilities. Kitchen, laundry, and medical facilities are located inside the Detention Center. That facility houses both pre-trial and sentenced inmates.

The Sheriff's Office has 139 total employees, 46 of which are Patrol or "Road" Deputies. The "Road" Deputies work three shifts, and there are never less than three deputies on patrol at any one time. There are five investigators, six narcotics officers, and five court deputies. Of the remaining 62 employees, 62 are located at the jail, 12 are in communications, and three are administrative staff.

In addition to the regular staff, there are 23 Reserve Deputies. Reserve Deputies play a key role in helping the department during emergencies, as well as during planned annual civic, cultural, and sporting events such as the PGA Golf Tournament held at Annandale Golf Club and the Chapel of the Cross Day and many other such events.

The Madison County Sheriff's Office performs narcotics investigations for the entire county, which includes the municipalities. In addition, the Sheriff's

Office transports inmates to hospitals, the courts, and other locations when necessary.

In 2008, the Sheriff's Office conducted 756 criminal investigations. In 2009, the number of criminal investigations went down slightly to 755, and down even further in 2010 to 705 investigations. The number of calls for service to Madison County Dispatch, which includes calls for assistance, and fire and animal control calls numbered over 25,000 for the past three years: 2008 - 25,932, 2009 - 25,863, and 2010 - 25,465.

The Sheriff's Office needs more office space, as well as, storage space. In order to cover the department's case load, it needs to hire more investigators, but the department doesn't have any available space for the additional investigators. Whereas, patrol officers only require 1 large meeting room to hold occasional shift meetings, investigators require office space in order to complete their duties.

The department also needs additional space to store case evidence. Due to the court system and the length of time it takes to go to trial and complete a case, the department has seen an increase in the length of time it has to store evidence for a case, which has created a significant need for additional evidence storage.

Recommendations

1. Using the same ratio of deputies to population for the 2035 population of 132,800 persons as for the 2010 population of 95,203, the county will need approximately 88 deputies by 2035 to patrol the unincorporated areas. The current unincorporated population of Madison is approximately 31,310. It is expected to grow to 43,691 by 2035.
2. The current ratio of sheriff's Office employees to every 1,000 of total population is 1.46 to 1. This ratio is used to determine the number of civilian employees in 2035. However, it does seem too much to expect the civilian employees to track equally with the deputies. Using this ratio to project the need for civilian personnel to the year 2035, there will be a need for 105 civilian personnel (including jailers) in 24 years for a total of 193 total Sheriff's Office employees projected for 2035. This does not mean that for each deputy hired a civilian must also be hired, but it is to be used as a rough guide for determining the number of civilians needed.

3. Currently, the Administration Building, which houses the office of the Sheriff, plus the old jail plus the two new pods contain a total of approximately 42,000 square feet.
4. Currently, the county has one jail bed for every 60 persons residing in unincorporated parts of the county, based upon the current ratio (31,310 persons divided by the number of jail beds in 2010 (526) equals 60. Using this same ratio for 2035, the number of jail beds needed will be between 600 and 700 beds.
5. In terms of office space, an architectural standard of 330 square feet for each employee, the current space need is 10,560 square feet, which includes room for storage, restrooms, filing, office equipment. This is based upon the current total number of deputies (62), less the 46 patrol deputies (who do not need office space), or 17 offices needed, plus an office for the Sheriff. In addition, the current total of 77 civilian employees, less the 62 jailers (who also do not need office space), means that approximately 15 civilians needs office space. Therefore, approximately 32 employees currently need office and related space times the architectural standard of 330 square feet = 10,560 square feet of the total building space of 42,000 square feet.
6. Assuming the same percentages of personnel who need office space will stay the same to the year 2035, there will be a total office and related space need of 15,510 square feet. This is based upon the assumption that 30 percent of the deputies and 20 percent of the civilian personnel will need office space: 88 deputies times .30 and 105 civilian employees times .20 = 47 employees, and 47 times 330 square feet = 15,510 square feet.
7. The county does not have a juvenile detention facility. One may be needed in the future.
8. One of the suggestions resulting from a survey and the public meeting held in the county in the spring of 2011 was the potential need for a Sheriff's Office sub-station in the county. The responses on the survey were about evenly divided as to whether sub-stations were needed. If substations are needed, the most likely locations are in the Camden area and in Flora.

SECTION 4: PUBLIC PARKS AND RECREATIONAL FACILITIES

Introduction and Methodology

Madison County government does not have a parks and recreation department or any park facilities. However, each municipality does operate such facilities for its citizens. If at some point the county does decide to establish recreational facilities, the following standards may be used as a guide to help determine recreational needs.

As with other sections of this *Public Facilities Plan*, the approach taken in the evaluation of Madison County's needs in terms of parks/recreational facilities and open space is to apply accepted standards to the current supply and projected 2035 needs. The 2035 needs are based upon the population projections prepared by the CMPDD. 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 county's needs for playlots and neighborhood playgrounds will be met through the use of public school facilities. Furthermore, since the municipalities in Madison County have developed their own Comprehensive Plans and recreational plans, this section addresses only the needs of unincorporated areas of the county.

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 off-street 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.

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 sport 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. Major community parks provide facilities for both intensive uses and passive pursuits.

Facilities: There is almost no limit to the variety of facilities that may 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 floodplain, 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:

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 (25 yard): 1 for every 10,000 persons

Swimming pools (50 yard): 1 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 may be located in other types, but 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), floodplain, river corridors, streambanks, parkways, street medians and shoulderways, 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 park system or serve as linkage ways between recreation area 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 powerline or gasline easements (a “linear park”).

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 system, 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 hour 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.

Recommendations:

1. In accordance with the Goals, Objectives, and Policies (Chapter I), the Board of Supervisors should consider appointing a volunteer Parks and Recreation Commission to review the County's parks and recreation needs, recommend the best locations for facilities, and investigate funding sources of funding for parks and recreational facilities to serve the counties citizens in the unincorporated areas.
2. Residents of unincorporated Madison County will, of course, continue to use the facilities in the County's municipalities, and the CMPDD has prepared Comprehensive Plans for all four municipalities. The demand for parks and recreational facilities is based upon the assumption that there will be additional needs beyond which those that the cities and towns can meet. Therefore, when the County's Parks and Recreation Commission is established, it should review the County's needs using the standards listed above as a yardstick.

SECTION 5: PUBLIC SCHOOLS

Findings

Madison County has two public school districts: the Madison County School District and the Canton Separate School District. Although the Madison County School District is not part of Madison County government, school enrollment figures do indicate if the population is growing and if new school facilities are needed.

The CMPDD developed a Comprehensive Plan for the City of Canton, and the study area for that plan encompassed the Canton Separate School District. The Canton Comprehensive Plan included a Public Schools element with school enrollment projections and recommendations for improvements. Therefore, this Comprehensive Plan does not include recommendations for the Canton Separate School District.

Madison County Schools Enrollment:

Table IV-4 shows a ten year comparison of enrollment figures by high school zone for 2001 to 2011.

TABLE IV-4

TEN YEAR ENROLLMENT COMPARISON BY HIGH SCHOOL ZONE

High School Zone	2001 Enrollment	2011 Enrollment	Ten-year Difference	Percent Change
Ridgeland HS	1,784	2,721	937	52.5
Madison Central HS	6,019	7,934	1,915	31.8
Velma Jackson HS	1,223	1,010	-213	-17.4
Total Enrollment	9,026	11,785	2,759	30.6

Sources: Madison County School District; CMPDD.

The above table shows that enrollment for two of the three high school zones increased over the ten year period by significant amounts. The third high school zone, Velma Jackson, showed a decrease in enrollment for the ten year period. Projections done by CMPDD through the year 2012 show this pattern continuing. The enrollment trends thus far show this pattern continuing into the near future, indicating a need from time to time for a new school, approximately one every four or five years.

For example, the Gluckstadt area has had an elementary school and a middle school for a few years, and now a new high school will open this fall.

Enrollment Projections for 2035

As previously stated in this plan, the CMPDD is the Metropolitan Planning Organization, responsible with the Mississippi Department of Transportation for coordinating a Federally-mandated Transportation Planning Process for the Jackson Metropolitan Area. The CMPDD has prepared a **2035 Jackson Urbanized Area Transportation Plan**, which will include urbanizing areas of Madison County. The preparation of that areawide transportation plan will involve the application of a computerized traffic simulation model that will be used to produce traffic projections through the year 2035. One of the data inputs for that model is school enrollment by school location. The CMPDD has developed a control total for public school enrollment in the Madison County School District for the year 2035: by the year 2035, enrollment in that public school system is forecast to increase from 11,785 in 2011 to 17,638.

Since decisions with regard to new school locations are based in part upon residential development patterns, which often shift, the CMPDD cannot make recommendations regarding future school locations, except in a general sense. New schools should be located on collector roads, or better yet, arterial roads to handle the large amounts of traffic generated by the school. Schools should also be located near population centers to reduce travel to school.

SECTION 6: PUBLIC BUILDINGS

The CMPDD reviewed space demands for five buildings that are used as county administrative offices or for various courts. These buildings are shown in Table IV-5 as follows with the estimated total square footage and the estimated number of employees in each:

TABLE IV-7

EXISTING ADMINISTRATIVE/COURT BUILDINGS

COUNTY BUILDING	ESTIMATED SQUARE FOOTAGE	ESTIMATED NUMBER OF EMPLOYEES
Justice Court Building	5,000	17
Old Courthouse	12,000	4
Chancery Court Building	16,475	30
Madison County Office Building	28,000	38
Circuit Court Building	28,000	7
Madison County South Annex	10,300	15
Health Department	12,600	n/a
Youth Services Building	3,400	6
Human Services Building	15,650	12
TOTALS	131,425	149

Source: County Zoning Administrator and Building and Grounds Director

The approximate number of employees is listed for the above buildings because the actual number of employees in these buildings shifts over time. The application of an architectural standard of 330 square feet per employee for personnel housed in eight of the administrative/court buildings results in the following estimate of office space needs which includes room for storage,

restrooms, filing, office equipment; however, this does not include courtroom space, conference room space and other space needs.

Justice Court Building: 17 employees need 5,610 square feet;

Old Courthouse: 4 employees need 1,320 square feet;

Chancery Court Building: 39 employees need 12,870 square feet;

Madison County Office Complex: 38 employees need 12,540 square feet;

Circuit Court: 7 employees need 2,450 square feet;

Madison County South Annex: 15 employees need 4,950 square feet;

Youth Services Building: 6 employees need 1,980 square feet; and

Human Services Building: 12 employees need 3,960 square feet.

Thus, if this architectural standard is applied as a standard for measuring current county office needs, it appears that of the above buildings, only the Justice Court Building has a space deficit, but it does not appear to be significant.

Currently, the county appears to have adequate space in its administrative offices and court buildings for the foreseeable future. Generally, as space needs occur, personnel are shifted around, commercial buildings are purchased or leased to meet those space needs, before new buildings are constructed. For now, only the Justice Court Building space needs to be examined carefully to determine how critical its needs are.

SECTION 7: STORMWATER DRAINAGE AND DRAINAGE STRUCTURES

One of the goals in Chapter I of this Comprehensive Plan is “to reduce flooding in Madison County within all floodplains designated by the Federal Emergency Management Agency.” Accordingly, in developing the Land Use Plan in Chapter II, the CMPDD used the FEMA Flood Insurance Rate Maps (FIRM’s) to determine those areas that are subject to flooding.

The objective under that goal is “to improve storm drainage in areas that are prone to flooding.” Policy 42 states: “To require developers to elevate all structures within floodplains to at least one foot above the level of FEMA-designated 100-year floods. By requiring structures in floodplains to be

elevated one foot above the level of the 100-year floodplains, flooding in these areas can be minimized.

Bridges and Drainage Structures

The following table shows those bridges and culverts in unincorporated Madison County that require critical maintenance according to the State Aid Division of the Mississippi Department of Transportation. This table also indicates the creek intersected by the structure, the road or “facility carried” by the structure, and the year the structure was built.

A sufficiency rating of less than 50 qualifies the structures for financial assistance through the State Aid Division of MDot for upgrading/replacement and suggests that certain improvements are needed. All such structures are in need to a varying extent of upgrading or replacement. Those structures with a sufficiency rating under 50 are assigned a replacement priority ranking. The higher the priority, the greater is the need. However, no priority ranking was available at this time.

TABLE IV-8

COUNTY DRAINAGE STRUCTURES REQUIRING CRITICAL MAINTENANCE

<u>Location</u>	<u>Facility/Road Carried</u>	<u>Features Intersected</u>	<u>Year Built</u>	<u>Sufficiency Rating</u>
1. Sec.27-T7N-R1E	Old Agency Rd.	White Oak Creek	1979	26.8
2. Sec. 7-T8N-R1W	Old Hwy. 49	Sibley Creek	1957	38.9
3. Sec. 10-T8N-R1W	Cane Creek Rd.	Burnt Corn Creek	1981	40.9
4. Sec. 20-T8N-R1W	Petrified Forest Rd.	Creek	1979	40.9
5. Sec. 29-T8N-R1E	Gus Green Rd.	Creek	1987	39.9
6. Sec. 21-T8N-R2E	Gluckstadt Rd.	Bear Creek	1963	32.2
7. Sec. 28-T9N-R1E	Stokes Road	Creek	1958	39.7
8. Sec. 33-T9N-R1W	Moore Avenue	Burnt Corn Creek	1973	47.7
9. Sec. 34-T9N-R1W	Moore Avenue	Cane Creek	1973	13.9
10. Sec. 23-T9N-R2E	King Ranch Rd.	Creek	1976	32.2
11. Sec. 24-T9N-R3E	Moss Rd.	Walnut Creek Br.	1979	39.0

Madison County Comprehensive Plan

12.Sec. 27-T9N-R3E Hart Road	Walnut Creek	1978	38.8
13.Sec. 17-T10N-R4E Dry Creek Rd.	Dry Creek	1974	38.9
14.Sec. 11-T10N-R5E Permenter Rd.	Pellaphalia Creek	1971	34.9
15.Sec. 34-T11N-R3E Way Road	Hagin Creek	1993	36.0
16.Sec. 25-T12N-R5E Rocky Hill Rd.	Rambo Creek	1978	40.9