

# **A County Comprehensive Plan**

**for**

**Long County,  
Georgia**

**2005**

**Prepared by**

**Grant Services & Consulting, Inc.**

# Long County Commission

Randall T. Wilson, Chairman

Clifton DeLoach

Mike McGowan

Charles Reddish

Tony Fowler

# Long County Clerk

Mary Ann Odum

## **Prepared By**

Grant Services & Consulting, Inc.

136 Blythe Beach Drive

Brunswick, Georgia 31523

(912)399-2633

## **Project Manager**

Kathy Flournoy



# Table of Contents

## **INTRODUCTION 0.5.0.0**

## **POPULATION ELEMENT 1.0.0.0**

### ***INVENTORY OF EXISTING CONDITIONS AND ASSESSMENT OF CURRENT AND FUTURE CONDITIONS***

1.1.0.0 INTRODUCTION

1.1.1.0 TOTAL POPULATION

1.1.2.0 SEASONAL POPULATION

1.2.0.0 HOUSEHOLDS

1.2.1.0 NUMBER OF HOUSEHOLDS

1.2.2.0 AVERAGE SIZE OF HOUSEHOLDS

1.3.0.0 AGE DISTRIBUTION

1.4.0.0 RACIAL COMPOSITION

1.5.0.0 EDUCATIONL ATTAINMENT

1.6.0.0 INCOME

*GOALS & IMPLEMENTATION* N/A

## **ECONOMIC DEVELOPMENT** **2.0.0.0**

### ***INVENTORY OF EXISTING CONDITIONS AND ASSESSMENT OF CURRENT AND FUTURE CONDITIONS***

2.1.0.0 EMPLOYMENT BY SECTOR

- 2.1.2.0 EARNINGS BY SECTOR
- 2.1.3.0 AVERAGE WEEKLY WAGES
- 2.1.4.0 PERSONAL INCOME BY TYPE
- 2.1.5.0 MAJOR COMMUNITY-LEVEL  
ECONOMIC ACTIVITIES
- 2.1.6.0 SPECIAL AND UNIQUE ECONOMIC  
ACTIVITIES
- 2.2.0.0 DESCRIPTION OF LABOR FORCE  
DATA
- 2.2.1.0 EMPLOYMENT BY OCCUPATION
- 2.2.2.0 EMPLOYMENT STATUS
- 2.2.3.0 UNEMPLOYMENT RATES
- 2.2.4.0 COMMUTING PATTERNS
- 2.3.0.0 DESCRIPTION OF LOCAL  
DEVELOPMENT RESOURCES
- 2.3.1.0 ECONOMIC DEVELOPMENT  
AGENCIES
- 2.3.2.0 ECONOMIC DEVELOPMENT  
PROGRAMS AND TOOLS
- 2.3.3.0 EDUCATIONAL OR TRAINING  
OPPORTUNITIES

## **HOUSING 3.0.0.0**

### ***INVENTORY OF EXISTING CONDITIONS AND ASSESSMENT OF CURRENT AND FUTURE CONDITIONS***

- 3.1.0.0 GENERAL INFORMATION
- 3.1.1.0 TYPES OF HOUSING UNITS
- 3.1.2.0 INVENTORY OF AGE OF HOUSING  
STOCK
- 3.1.3.0 INVENTORY OF CONDITION OF  
HOUSING STOCK
- 3.2.1.0 INVENTORY OF OWNER AND  
RENTER UNITS

3.3.1.0 COST OF HOUSING UNITS

## **NATURAL AND CULTURAL RESOURCES 4.0.0.0**

### ***INVENTORY OF EXISTING CONDITIONS AND ASSESSMENT OF CURRENT AND FUTURE CONDITIONS***

4.1.0.0 INTRODUCTION

4.1.1.0 PUBLIC WATER SUPPLY

4.1.2.0 WATERSUPPLY WATERSHED

4.1.3.0 GROUNDWATER RECHARGE  
AREAS

4.1.4.0 WETLANDS

4.1.5.0 PROTECTED MOUNTAINS

4.1.6.0 PROTECTED RIVERS

4.1.7.0 COASTAL RESOURCES

4.1.8.0 FLOOD PLAINS

4.1.9.0 SOIL TYPES

4.1.10.0 STEEP SLOPES

4.1.11.0 PRIME AGRICULTURAL AND  
FOREST LAND

4.1.12.0 PLANT AND ANIMAL HABITATS

4.1.13.0 MAJOR PARK, RECREATION AND  
CONSERVATION AREA

4.1.14.0 SCENIC VIEWS AND SITES

4.2.0.0 INVENTORY OF CULTURAL  
RESOURCES

- 4.2.1.0 RESIDENTIAL RESOURCES
- 4.2.3.0 COMMERICAL RESOURCES
- 4.2.4.0 INDUSTRIAL RESOURCES
- 4.2.5.0 INSTITUTIONAL RESOURCES
- 4.2.6.0 TRANSPORTATION RESOURCES
- 4.2.6.0 RURAL RESOURCES
- 4.2.7.0 OTHER HISTORIC,  
ARCHAEOLOGICAL AND  
CULTURAL RESOURCES

## **COMMUNITY FACILITIES & SERVICES 5.0.0.0**

### ***INVENTORY OF EXISTING CONDITIONS AND ASSESSMENT OF CURRENT AND FUTURE CONDITIONS***

- 5.1.0.0 INTRODUCTION
- 5.1.1.0 TRANSPORTATION NETWORK
- 5.1.2.0 WATER SUPPLY AND  
TREATMENT
- 5.1.3.0 SEWERAGE SYSTEM AND  
WASTEWATER TREATMENT
- 5.1.4.0 SOLID WASTE
- 5.1.5.0 GENERAL GOVERNMENT
- 5.1.6.0 PUBLIC SAFETY
- 5.1.7.0 RECREATION FACILITIES
- 5.1.8.0 HOSPITALS AND OTHER  
PUBLIC HEALTH SERVICES
- 5.1.9.0 EDUCATION FACILITIES
- 5.1.10.0 LIBRARIES AND OTHER  
CULTURAL FACILITIES

## **LAND USE 6.0.0.0**

### **INVENTORY OF EXISTING CONDITIONS AND ASSESSMENT OF CURRENT AND FUTURE CONDITIONS**

6.1.0.0 EXISTING LAND USE

6.2.0.0 FUTURE LAND USE

## **INTERGOVERNMENTAL CORRDINATION 7.0.0.0.**

### **INVENTORY OF EXISTING CONDITIONS AND ASSESSMENT OF CURRENT AND FUTURE CONDITIONS**

7.1.0.0 INTRODUCTION

7.1.1.0 ADJACENT LOCAL GOVERNMENTS

7.1.2.0 SCHOOL BOARDS

7.1.30 INDEPENDENT SPECIAL  
DISTRICTS

7.1.4.0 INDEPENDENT DEVELOPMENT  
AUTHORITIES

7.1.5.0 OTHER UNITS OF LOCAL  
GOVERNMENT

7.1.6.0 UTILITY COMPANIES

7.2.0.0. INTERRELATED STATE  
PROGRAMS AND ACTIVITIES

7.2.1.0 SERVICE DELIVERY STRATEGY

7.2.2.0 GOVERNOR'S GREENSPACE  
PROGRAM

7.2.3.0 COASTAL MANAGEMENT  
PROGRAM

7.2.4.0 APPALACHIAN REGIONAL  
COMMISSION

7.2.5.0 WATER PLANNING DISTRICTS



- 7.2.6.0 TRANSPORTATION FOR NON-  
ATTAINMENT
- 7.3.1.0 LAND USE CONFLICTS
- 7.3.2.0 LACK OF INFORMATION
- 7.3.3.0 SERVICE PROVISION CONFLICTS
- 7.3.4.0 ANNEXATION ISSUES

**[GOALS & IMPLEMENTATION](#)**

**IMPLEMENTATION**

1.0.0.1.1 COMMITMENT

1.0.0.1.2 IMPLEMENTATION

1.0.0.1.3 PROPOSED IMPLEMENTATION  
ACTIONS

## **0.4.0.0: Lists**

### **Population**

#### **1.1.1.0 INVENTORY**

TABLE P-1- LONG COUNTY: TOTAL POPULATION

TABLE P-2 - LONG COUNTY: TOTAL POPULATION - 1980-2025

TABLE P-3 - GA TOTAL POPULATION 1980-2025

TABLE P-4 - US TOTAL POPULATION 1980-2025

TABLE P-5 - COMPARISON OF POPULATION

TABLE P-6 - COMPARSION OF POPULATION GROWTH (% CHANGE)

#### **1.2.1.0 NUMBER OF HOUSEHOLDS**

TABLE P-7 - LONG COUNTY: TOTAL NUMBER

TABLE P-8 - LONG COUNTY: TOTAL NUMBER 1980-2025

TABLE P-9 - GA NUMBER OF HOUSEHOLDS 1980-2025

TABLE P-10 - US: HOUSEHOLDS 1980-2025

#### **1.2.2.0 AVERAGE SIZE OF HOUSEHOLD**

TABLE P-11 - LONG COUNTY: AVERAGE HOUSEHOLD SIZE

TABLE P-12 - GA AVG. HOUSEHOLD SIZE

TABLE P-13 - COMPARISON OF NUMBER OF HOUSEHOLDS 1980-2025

TABLE P-14 - COMPARISON OF NUMBER OF HOUSEHOLDS 1980-2025  
(% CHANGE)

#### **1.3.0.0 AGE DISTRIBUTION**

TABLE P-15 - LONG COUNTY: POPULATION BY AGE BY AGE  
DISTRIBUTION 1980-1995

TABLE P-16 - LONG COUNTY: POPULATION BY AGE BY AGE  
DISTRIBUTION 2000-2015

TABLE P-17 - LONG COUNTY: POPULATION BY AGE BY AGE  
DISTRIBUTION 2020-2025

TABLE P-18 - GA: POPULATION BY AGE

TABLE P-19 - US: POPULATION BY AGE

TABLE P-20 - LONG COUNTY: AGE DISTRIBUTION

#### **1.4.0.0 RACIAL COMPOSITION**

TABLE P-21 - LONG COUNTY: RACIAL COMPOSITION

TABLE P-22 - LONG COUNTY: RACIAL COMPOSITION 1980-2025

TABLE P-23 - RACIAL COMPOSITION FUTURE TREND (%)

#### **1.5.1.0 EDUCATION ATTAINMENT**

TABLE P-24 - LONG COUNTY: EDUCATIONAL ATTAINMENT

TABLE P-25 - LONG COUNTY: EDUCATIONAL ATTAINMENT (%)

TABLE P-26 - GA: EDUCATION ATTAINMENT

TABLE P-27 - GA: EDUCATION ATTAINMENT (%)

#### **1.5.2.0 DROPOUT RATES**

TABLE P-28 - LONG COUNTY: EDUCATION STATISTICS

TABLE P-29 - GA: EDUCATION STATISTICS

#### **1.5.3.0 STANDARDIZED ACHIEVEMENT TEST SCORES**

TABLE P-30 - EDUCATION COMPARISONS TO SURROUNDING  
COUNTIES (%)

TABLE P-31 - LONG COUNTY: EDUCATION ATTAINMENT 2005-2015

TABLE P-32 - LONG COUNTY: EDUCATION ATTAINMENT 2020-2025

#### **1.6.0.0 INCOME**

TABLE P-34 - LONG COUNTY AND GA: PER CAPITA INCOME  
COMPARISONS

TABLE P-35 - AVERAGE HOUSEHOLD INCOME COMPARISONS

TABLE P-36 - LONG COUNTY: AVERAGE HOUSEHOLD INCOME  
DISTRIBUTION

TABLE P-37 - LONG COUNTY: HOUSEHOLD INCOME DISTRIBUTION (%)

TABLE P-38 - GA: HOUSEHOLD INCOME DISTRIBUTION

TABLE P-39 - GA: HOUSEHOLD INCOME DISTRIBUTION (%)

TABLE P-40 - LONG COUNTY: PER CAPITA INCOME 1980-2025

TABLE P-41 - GA: PER CAPITA INCOME 1980-2025

TABLE P-42 - COMPARISON OF LONG COUNTY'S PER CAPITA INCOME TO  
STATE (%)

## **ECONOMIC DEVELOPMENT**

### **2.1.1.0 INVENTORY EMPLOYMENT BY SECTOR**

TABLE E-1 - LONG COUNTY: EMPLOYMENT BY SECTOR

TABLE E-2 - LONG COUNTY: EMPLOYMENT BY SECTOR (%)

TABLE E-3 - GA: EMPLOYMENT BY SECTOR

TABLE E-4 - GA: EMPLOYMENT BY SECTOR (%)

### **2.1.2.0 INVENTORY EARNINGS BY SECTOR**

TABLE E-5 - LONG COUNTY: EARNINGS BY SECTOR

TABLE E-6 - LONG COUNTY: EARNINGS BY SECTOR (%)

TABLE E-7 - GA EARNINGS BY SECTOR

TABLE E-8 - GA EARNINGS BY SECTOR (%)

### **2.1.3.0 AVERAGE WEEKLY WAGES PAID BY SECTOR TO IND.**

TABLE E-9 - LONG COUNTY AVERAGE WEEKLY WAGES

TABLE E-10 - GA: AVERAGE WEEKLY WAGES

### **2.1.4.0 PERSONAL INCOME BY TYPE**

TABLE E-11 - LONG COUNTY: PERSONAL INCOME BY TYPE

TABLE E-12 - LONG COUNTY: PERSONAL INCOME BY TYPE (%)

TABLE E-13 - GA: INCOME BY TYPE

TABLE E-14 - GA: INCOME BY TYPE (%)

### **2.2.1.0 DESCRIPTION OF LABOR FORCE DATA**

TABLE E-15 - LONG COUNTY: EMPLOYMENT BY OCCUPATION

TABLE E-16 - LONG COUNTY: EMPLOYMENT BY OCCUPATION (%)

TABLE E-17 - GA: EMPLOYMENT BY OCCUPATION

TABLE E-18 - GA: EMPLOYMENT BY OCCUPATION (%)

TABLE E-19 - US: EMPLOYMENT BY OCCUPATION

TABLE E-20 - US: EMPLOYMENT BY OCCUPATION (%)

### **2.2.2.0 EMPLOYMENT STATUS**

TABLE E-21 - LONG COUNTY: LABOR FORCE PARTICIPATION

TABLE E-22 - LONG COUNTY: LABOR FORCE PARTICIPATION (%)

TABLE E-23 - GA: LABOR FORCE PARTICIPATION

TABLE E-24 - GA: LABOR FORCE PARTICIPATION (%)

TABLE E-25 - US: LABOR FORCE PARTICIPATION

TABLE E-26 - US: LABOR FORCE PARTICIPATION (%)

### **2.2.3.0 UNEMPLOYMENT RATES**

TABLE E-27 - UNEMPLOYMENT RATES FOR LONG, GA, US &  
SURROUNDING COUNTIES

TABLE E-28 - GA: LABOR STATISTICS

TABLE E-29 - US: LABOR STATISTICS

### **2.2.4.0 COMMUTING PATTERNS**

TABLE E-30 - LONG COUNTY: LABOR FORCE BY PLACE OF WORK

TABLE E-31 - LONG COUNTY: LABOR FORCE BY PLACE OF WORK (%)

TABLE E-32 - LONG COUNTY: RESIDENTS PLACE OF WORK

TABLE E-33 - LONG COUNTY: RESIDENTS PLACE OF WORK (%)

## **HOUSING**

### **3.1.1.0 TYPES OF HOUSING**

TABLE H-1 - LONG COUNTY, GA: HOUSING CHARACTERISTICS

TABLE H-2 - LONG COUNTY, GA: HOUSING CHARACTERISTICS (%)

TABLE H-3 - LONG COUNTY: TYPES OF HOUSING

### **3.1.2.0 INVENTORY OF AGE AND CONDITION OF HOUSING STOCK**

TABLE H-4 - LONG COUNTY, REGION, GA: HOUSING STOCK BY AGE

### **3.1.3.0 INVENTORY OF CONDITION OF HOUSING STOCK**

TABLE H-5 - % OF HOMES LACKING PLUMBING

TABLE H-6 - % OF HOMES LACKING KITCHEN FACILITIES

### **3.2.1.0 INVENTORY OF OWNER AND RENTER UNITS**

TABLE H-7 - LONG COUNTY: HOUSING CHARACTERISTICS

TABLE H-8 - GA: HOUSING CHARACTERISTICS

TABLE H-9 - REGION: HOUSING CHARACTERISTICS

### **3.3.1.0 COST OF HOUSING INVENTORY**

TABLE H-10 - HOUSING CHARACTERISTICS

## **NATURAL AND CULTURAL RESOURCES**

### **4.1.1.0. PUBLIC WATER SUPPLY**

TABLE N-1 - LONG COUNTY PERMITTED WATER SYSTEMS

### **4.1.4.0 - WETLANDS**

MAP 1 - LONG COUNTY WETLANDS

## **COMMUNITY FACILITIES & SERVICES**

### **5.1.0.0 LONG COUNTY'S COMMUNITY FACILITIES**

TABLE C-1- PUBLIC FACILITIES IN LONG COUNTY

MAP 1 - COMMUNITY FACILITIES IN LONG COUNTY

**5.1.1.0 LONG COUNTY'S TRANSPORTATION NETWORK**

TABLE C-2- LANE MILES BY ROUTE TYPE AND ROAD SYSTEM

TABLE C-3 - LONG COUNTY ROAD NETWORK

TABLE C-4 TRAFFIC ALONG LONG COUNTY'S MAJOR ROADS

TABLE C-5 TRAFFIC ACCIDENTS

**5.1.2.0 WATER SUPPLY AND TREATMENT**

TABLE C-6 - WATER SUPPLY IN LONG COUNTY

**5.1.3.0 SEWAGE SYSTEM AND WASTEWATER TREATMENT**

TABLE C-7 - SOURCE OF WATER SEWAGE DISPOSAL

**5.1.6.0 PUBLIC SAFETY**

TABLE C-8 - CRIMES REPORTED IN LONG COUNTY

TABLE C-9 - PROJECTED LAW ENFORCEMENT NEEDS

TABLE C-10 - PROJECTED FIREFIGHTER NEEDS

**5.1.7.0 RECREATION FACILITIES**

TABLE C-12 RECREATION FACILITIES

**5.1.8.0 HOSPITALS AND OTHER PUBLIC HEALTH SERVICES**

TABLE C-11 - HEALTHCARE FACILITIES SURROUNDING LONG COUNTY

**5.1.9.0 EDUCATION FACILITIES**

TABLE C-13 - FULLTIME STUDENT ENROLLMENT

TABLE C-14 - LONG COUNTY STAFFING RATIOS

**LAND USE**

**6.1.0.0 EXISTING LAND USE**

TABLE LU-1 - ESTIMATED LAND USE BY PARCEL IN ACRES

MAP 1- EXISTING LAND USE MAP

**6.2.0.0 FUTURE LAND USE**

TABLE LU-2 - FUTURE LAND USE DISTRIBUTION IN ACRES

MAP 2 - FUTURE LAND USE MAP

TABLE LU-3 - FARMS IN LONG COUNTY



## **0.0.0.0: Introduction**

Long County is an area that is rich in history, natural beauty, and natural resources. These elements combine to define the character and the identity of the area. Once a prosperous railroad town, the county is now home to a more peaceful and quiet lifestyle for those who appreciate the natural setting and historic landmarks found throughout the county.

### **Plan Setting**

Long County, Georgia's 157th county, was created in 1920, from portions of Liberty County. Long County was named for Dr. Crawford Long, the Georgian responsible for introducing anesthesia to modern medical practice. Long is one of ten counties that comprise the Coastal Georgia Region and the county is a member of the Coastal Georgia Regional Development Center (CGRDC) located in Glynn County. Covering 401 square miles, Long County is in southeast Georgia situated between Jesup in Wayne County and Hinesville in Liberty County.

Ludowici, the governmental seat of Long County, is located in central Long County. Ludowici was named in honor of William Ludowici, a German immigrant who contributed substantially to the construction of the county high school. Ludowici was incorporated August 23, 1905.

### **Why Plan?**

Successful communities must be continually shaped and guided. A community must actively manage its land use, infrastructure and resources, and respond to changing circumstances to continually meet the needs of its residents. Long County residents value the character and diversity of their hometown; have a strong sense of community, and a deep appreciation for the range of historic, cultural and recreational opportunities available to them. Economic development, public services, and education issues have been local concerns for many years. Comprehensive planning, based on quality data, can help the community address each of these concerns.

### **What is the Comprehensive Plan?**

The comprehensive plan is the official guiding document for the future of Long County; designed to formulate a coordinated, long-term planning program for the desired future. It serves as a guide to both the public and private sector by

providing a picture of how land will develop, how housing will be made available, how jobs will be attracted and retained, how open space and the environment will be protected, how public services and facilities will be provided, and how transportation facilities will be improved. Further, the Plan guides elected and appointed officials as they deliberate community development issues; and conveys policy and intended programs of action to residents. In short, the comprehensive plan is a unified document providing consistent policy direction.

The Plan is structured to be a dynamic document, subject to amendment when conditions within any of the cities or county change significantly. Periodic updates are needed to ensure that the Plan continues to meet the needs of Long County. The previous Long County Comprehensive Plan was prepared in 1994. Many of the items recommended for implementation were completed or became irrelevant as years passed. This new plan addresses changes in the community since the last comprehensive plan.

### **How to Use the Comprehensive Plan**

The Comprehensive Plan is not, in itself, an implementation tool, but rather a guide to action. It is intended to serve as a reference point for potential users. For example, the Board of Education may use the plan to determine future student enrollment and corresponding facilities expansion. The Tax Assessors' Office may use the plan to estimate future digests.

A variety of planning documents such as land use regulation ordinances, scenic byway plans or any other documents intended to guide development in Long County, should be used in conjunction with this Comprehensive Plan.

Unlike the above-mentioned sector or single issue planning documents, which generally refer only to issues such as transportation, economic development, parks and recreation, annexation, and community services, this Plan addresses and integrates these issues into one comprehensive document.

### **Planning Development Process**

The comprehensive plan is in the product of extensive local government and citizen involvement through structured discussion sessions.

### ***Advisory Committee***

This planning document was created in tandem with the Long County Hazard Mitigation Plan and began with the creation of an Advisory Committee. Representatives from several areas of local and state government, public and private sector interests met monthly for seven months to evaluate Long County

data and formulate strategies for future development. The committee's roles included communicating the concerns of interested groups regarding the development of the county, and recommending goals, policies and implementation measures.

### ***Public Consultation***

The plan's development was subject to a comprehensive public involvement process. Public involvement was solicited at every published meeting, at scheduled public hearings and through media reports of committee progress.

All meetings were open to the public and participants were encouraged to take part in the discussion and policy formulations.

# 1.0.0.0: Population

Taking a broad look at a community's population growth from the past, to the present and into the future is essential to any comprehensive planning process. This section provides a basis for the Economic Development, Transportation, Community Facilities, Housing and Land Use elements of Long County's 10-year Comprehensive Plan update. The dynamics of Long County's past population trends, present population conditions and future estimates of population growth will lay the groundwork for the community initiatives for growth in the next ten years. Future population forecasts supply a vital picture for the planning of infrastructure improvements and land developments patterns that are consistent with the goals and policies established in the other elements of this Plan.

A combination of data sources, including the United States 2000 Census Bureau, Woods and Poole Economics, Inc., the Georgia Department of Community Affairs, the Georgia Department of Labor, and the Georgia Department of Education are utilized to create the most accurate portrait of Long County's population dynamics.

This element of the comprehensive plan addresses population characteristics and trends for Long County and provides the foundation for other elements of the comprehensive plan. The following aspects are addressed below:

- **Inventory of Existing Conditions and Assessment of Current and Future**

- Conditions**

- Total Population
    - Households
    - Age Distribution
    - Racial Composition
    - Educational Attainment
    - Income

# 1.1.0.0: Inventory

## **Population Growth, 1800s to 1980**

Long County was created on Aug. 14, 1920, when the General Assembly proposed a constitutional amendment to create Long County from Liberty County (Ga. Laws 1920, p. 48). In that year's general election, Georgia voters ratified the proposed amendment on Nov. 2, 1920, which marks the date of Long County's creation. In 1904, Georgia voters had approved a constitutional amendment limiting the number of counties in the state to 145. The next year, the General Assembly created eight new counties, bringing the total number to 145 -- the constitutional limit. Nevertheless, there was continuing pressure to create more counties. Beginning in 1906, lawmakers got around the 145-county limitation by creating new counties through constitutional amendments that were not subject to the limitation. By 1924, Georgia had 161 counties -- 16 of which had been created by constitutional amendment. On Jan. 1, 1932, Milton and Campbell counties merged with Fulton, leaving 159 counties. In 1945, Georgia voters ratified a new constitution -- one which provided an absolute limit of 159 counties, with an additional provision that no new country could be created except through consolidation of existing counties.

Long County was named for Dr. Crawford Long, who in 1842 pioneered the use of anesthesia during surgery.

## **Population since 1980**

The 1980s was a period of heavy migration to Georgia from other states. Between 1980 and 2000, Georgia's population grew by 50 per cent, an increase of 2,728,887 new residents. During that same timeframe, Long County's population increased by 129 per cent. Between 1980 and 1990 total population in Long County increased from 4,524 to 6,316 or 39.6 per cent (Table P-1).

The period of 1990 to 1995 saw Georgia's peak population growth at 11.16 per cent. Likewise, the national population grew by 6.25 per cent during that era. Long County's 34.15 per cent increase was relatively high.

Total population in Long County is projected to increase 23.4 per cent through 2025, lower than state (+39.5 per cent) and national (+27 per cent) averages.

# Existing Conditions

**Table P-1**

Long County Population: 1980-2000

	1980	1985	1990	1995	2000	2010
<b>Total County</b>	4524	5693	6316	8473	10,369	11,576
<b>RDC</b>	351,200	382,100	418,304	437,964	454,169	507,306
<b>State</b>	5,486,900	5,974,500	6,478,216	6,912,256	7,278,606	8,144,760

Source: Woods and Poole Economics, Inc., UGA Data services Unit, 1991

# Existing and Future Conditions

**Table P-2**

Long County: Total Population																		
Category	1980	1985	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2015	2020	2025
<b>Total</b>	4,604	5,693	6,316	8,473	10,369	10,485	10,606	10,713	10,828	10,962	11,078	11,209	11,313	11,445	11,576	12,209	12,835	13,525

Source: Woods & Poole Economics, Inc.

**Table P-2**

Long County: Total Population																		
Category	1980	1985	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2015	2020	2025
<b>Total</b>	4,604	5,693	6,316	8,473	10,369	10,485	10,606	10,713	10,828	10,962	11,078	11,209	11,313	11,445	11,576	12,209	12,835	13,525

Source: Woods & Poole Economics, Inc.

**Table P-3**  
**GA. Total Population 1980-2004**

Category	1980	1985	1990	1995	2000	2001	2002	2003	2004
<b>Total</b>	5,484,440	5,962,720	6,506,530	7,323,980	8,229,820	8,338,460	8,449,130	8,560,620	8,670,510

Source: Woods & Poole Economics, Inc.

**Table P-3(cont.)**  
**GA. Total Population 2005-2025**

Category	2005	2006	2007	2008	2009	2010	2015	2020	2025
<b>Total</b>	8,784,650	8,895,580	9,008,670	9,122,070	9,235,630	9,349,660	9,940,380	10,550,700	11,185,100

**Table P-4  
US Total Population 1980-2004**

Category	1980	1985	1990	1995	2000	2001	2002	2003	2004
<b>Total</b>	227,226,000	237,925,000	249,464,000	266,086,000	282,125,000	284,844,000	287,635,000	290,459,000	293,229,000

Source: Woods & Poole Economics, Inc.

**Table P-4 (cont.)  
US Total Population 2005-2025**

Category	2005	2006	2007	2008	2009	2010	2015	2020	2025
<b>Total</b>	296,135,000	298,933,000	301,819,000	304,712,000	307,603,000	310,519,000	325,767,000	341,658,000	358,301,000

Source: Woods & Poole Economics, Inc.



**Table P-5**

<b>Total Population Comparison</b>										
<b>Category</b>	<b>1980</b>	<b>1985</b>	<b>1990</b>	<b>1995</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>
<b>Long</b>	4,524	5,363	6,202	8,253	10,304	11,749	13,194	14,639	16,054	17,529
<b>Georgia</b>	5,484,440	5,962,720	6,506,530	7,323,980	8,229,820	8,784,650	9,349,660	9,940,380	10,550,700	11,185,100

**Woods and Pool Economics, Inc.**

**Table P-6**

<b>Total Population Comparison ( per cent of Change)</b>										
<b>Category</b>	<b>1980</b>	<b>1985</b>	<b>1990</b>	<b>1995</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>
<b>Long</b>	0 %	18.55 %	15.64 %	33.07 %	24.85 %	14.02 %	12.27 %	10.95 %	9.87 %	8.98 %
<b>Georgia</b>	0 %	8.72 %	9.12 %	12.56 %	12.36 %	6.74 %	6.43 %	6.43 %	6.13 %	6.01 %

**Woods and Pool Economics, Inc.**

Tables P-5 and P-6 indicate that Long County's growth rate is continuing. This growth is attributed to residential spillover from Fort Stewart located in neighboring Liberty County. As the tables indicate, when compared to the state's rate of growth Long County is experiencing rapid growth.

**Households**

The total number of households in Long County has increased by 2,040 from 1,536 in 1980 to 3,576 in 2000 (Table P-7). Total number of households is projected to increase by an additional 872 to 4,736 by 2025. Average household size in Long County has declined through the past two decades, from 2.97 in 1980 to 2.87 in 2000, and is projected to remain stable at 2.86 by 2025 (Table P-4).

From 1980 to 2000, the number of household in Long County increased over six percent per year, more than doubling during this time period, while the State of Georgia and U.S. grew 2.5 percent and 1.38 percent annually, respectively.

**Existing Conditions**

**Table P-7**

<b>Long County: Total Number of Households</b>			
<b>Category</b>	<b>1980</b>	<b>1990</b>	<b>2000</b>
<b>TOTAL Households</b>	1536	2225	3576

Source: U.S. Bureau of the Census

## Existing and Future Conditions

Table P-8

Long County: Number of Households										
Category	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
<b>Total</b>	1,548	1,987	2,209	2,987	3,609	3,864	4,109	4,342	4,548	4,736

Source: Woods & Poole Economics, Inc.

**Table P- 9**

GA Number of Households										
Category	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
<b>Total</b>	1,886,550	2,124,630	2,380,830	2,684,490	3,022,410	3,265,030	3,501,380	3,727,580	3,929,140	4,129,140

Source: Woods & Poole Economics, Inc.

**Table P-10**

United States: Households										
Category	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
<b>Total</b>	80,824,800	86,553,900	92,255,600	98,679,800	105,819,000	112,466,000	118,879,000	124,948,000	130,209,000	134,777,000

Source: Woods & Poole Economics, Inc.

Growth in the number of households in the State of Georgia exceeded annual growth in the U.S. by 81 per cent annually- percentage wise. From 2005 to 2025, it is projected that the number of households in Long County and the State of Georgia each will grow approximately one percent annually.

## Current and Future Conditions

**Table P-11**

Long County: Average Household Size										
Category	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
<b>Persons per Household</b>	2.970	2.850	2.830	2.820	2.870	2.840	2.820	2.810	2.820	2.860

Source: Woods & Poole Economics, Inc.

**Table P-12**

GA Avg. Household Size										
Category	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
<b>Persons per Household</b>	2.830	2.730	2.660	2.650	2.650	2.610	2.590	2.590	2.600	2.630

Source: Woods & Poole Economics, Inc.

**Table P-13**

Comparison of the Number of Households										
Category	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
<b>Long County</b>	1,536	1,866	2,196	2,885	3,574	4,084	4,593	5,103	5,612	6,122
<b>Georgia</b>	1,886,550	2,124,630	2,380,830	2,684,490	3,022,410	3,265,030	3,501,380	3,727,580	3,929,140	4,108,410
<b>US</b>	80,824,800	86,553,900	92,255,600	98,679,800	105,819,000	112,466,000	118,879,000	124,948,000	130,209,000	134,777,000

Woods and Pool Economics, Inc.

**Table P-14**

<b>Comparison of the Number of Households ( per cent)</b>										
<b>Category</b>	<b>1980</b>	<b>1985</b>	<b>1990</b>	<b>1995</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>
<b>Long County</b>	0 %	21.48 %	17.68 %	31.38 %	19.28 %	14.27 %	12.46 %	11.10 %	9.97 %	9.09 %
<b>Georgia</b>	0 %	12.61 %	12.05 %	12.75 %	12.58 %	8.02 %	7.23 %	6.46 %	5.40 %	4.56 %
<b>US</b>	0 %	7.08 %	6.58 %	6.96 %	7.23 %	6.28 %	5.70 %	5.10 %	4.21 %	3.50 %

**Woods and Pool Economics, Inc.**

The number of households is increasing at a steady rate. Housing will not experience any significant impact because according to projections, an overall increase in the number of housing units is expected to occur during the twenty-year planning period. This increase will occur for two reasons: (1) the county's population is projected to experience significant growth; (2) average household size is steadily declining and will likely continue to decline during the first half of the planning period but may reverse in the second half of the 20 years. However, the projection does not indicate that the trend will reverse. Currently, adequate housing and types of housing exists for the county's population.

### **Age**

Population distribution information by age for the years 1980 to 2000 provides a historical basis for which age groups will be the most predominant in the county's future. Also, the information is helpful in determining the type and amount of services the county may need the most in the coming years. In 1990, the three most predominant age groups in Long County were 15-24 years, 5-14 years, and 25-44 years representing 19.4 per cent, 10.0 per cent, and 16.6 per cent of the total population respectively. In 1990, those persons age 65 and above represented the smallest segment of the Long County population at 5.7 per cent.

Table P-15 presents historical trends and projections in the age distribution of Long County. There has been a continual increase of residents in age groupings from 25 - 44 years old (26.8 per cent). An increase in the 25 to 44 years old group is almost always correlated with an increase in lower age groups since they account for most of the children residents. Through 2025, the same age groups will account for most of the population growth in Long County.

**Table P-15**

**Long County Population Distribution by Age: 1980-1995**

<b>Age Group</b>	<b>1980 Total</b>	<b>1980 per cent total</b>	<b>1985 Total</b>	<b>1985 per cent total</b>	<b>1990 Total</b>	<b>1990 per cent total</b>	<b>1995 Total</b>	<b>1995 per cent total</b>
<b>0-4</b>	<b>472</b>	<b>10.3</b>	<b>596</b>	<b>10.5</b>	<b>668</b>	<b>10.6</b>	<b>899</b>	<b>10.6</b>
<b>5-14</b>	<b>779</b>	<b>16.8</b>	<b>873</b>	<b>15.3</b>	<b>965</b>	<b>15.3</b>	<b>1413</b>	<b>16.7</b>
<b>15-24</b>	<b>1035</b>	<b>22.5</b>	<b>1226</b>	<b>21.5</b>	<b>1293</b>	<b>20.5</b>	<b>1700</b>	<b>20.1</b>
<b>25-34</b>	<b>727</b>	<b>15.8</b>	<b>963</b>	<b>16.9</b>	<b>1066</b>	<b>16.9</b>	<b>1418</b>	<b>16.7</b>
<b>35-44</b>	<b>443</b>	<b>9.6</b>	<b>661</b>	<b>11.6</b>	<b>831</b>	<b>13.2</b>	<b>1178</b>	<b>13.9</b>
<b>45-54</b>	<b>374</b>	<b>8.1</b>	<b>456</b>	<b>8.1</b>	<b>551</b>	<b>8.7</b>	<b>774</b>	<b>9.1</b>
<b>55-64</b>	<b>386</b>	<b>8.4</b>	<b>438</b>	<b>7.7</b>	<b>420</b>	<b>6.5</b>	<b>513</b>	<b>6.1</b>
<b>65+</b>	<b>389</b>	<b>8.5</b>	<b>480</b>	<b>8.4</b>	<b>522</b>	<b>8.3</b>	<b>578</b>	<b>6.8</b>

Source: U.S. Bureau of the Census

**Table P-16**

**Long County Population Distribution by Age: 2000-2015**

<b>Age Group</b>	<b>2000 Total</b>	<b>2000 per cent total</b>	<b>2005 Total</b>	<b>2005 per cent total</b>	<b>2010 Total</b>	<b>2010 per cent total</b>	<b>2015 Total</b>	<b>2015 per cent total</b>
<b>0-4</b>	<b>1146</b>	<b>11.1</b>	<b>1217</b>	<b>11.1</b>	<b>1221</b>	<b>10.5</b>	<b>1254</b>	<b>10.3</b>
<b>5-14</b>	<b>1764</b>	<b>17.0</b>	<b>2044</b>	<b>18.6</b>	<b>2295</b>	<b>19.8</b>	<b>2386</b>	<b>19.5</b>
<b>15-24</b>	<b>2007</b>	<b>19.4</b>	<b>1632</b>	<b>14.9</b>	<b>1638</b>	<b>14.1</b>	<b>145</b>	<b>15.9</b>
<b>25-34</b>	<b>1726</b>	<b>16.6</b>	<b>1996</b>	<b>18.2</b>	<b>1885</b>	<b>16.3</b>	<b>1506</b>	<b>12.3</b>
<b>35-44</b>	<b>1496</b>	<b>14.4</b>	<b>1539</b>	<b>14.0</b>	<b>1583</b>	<b>13.7</b>	<b>1845</b>	<b>15.7</b>
<b>45-54</b>	<b>1036</b>	<b>10.0</b>	<b>1166</b>	<b>10.6</b>	<b>1379</b>	<b>11.9</b>	<b>135</b>	<b>11.8</b>
<b>55-64</b>	<b>600</b>	<b>5.8</b>	<b>706</b>	<b>6.5</b>	<b>872</b>	<b>7.5</b>	<b>997</b>	<b>8.2</b>
<b>65+</b>	<b>594</b>	<b>5.7</b>	<b>662</b>	<b>6.1</b>	<b>703</b>	<b>6.2</b>	<b>841</b>	<b>6.9</b>

**Table P-17**

Long County Population Distribution by Age: 2020-2025

Age Group	2020 Total	2020 per cent total	2025 Total	2025 per cent total
0-4	1288	10.0	1305	9.6
5-14	2425	18.9	2517	18.6
15-24	2188	17.0	2297	17.0
25-34	1523	11.9	1832	13.5
35-44	1738	13.5	1404	10.4
45-54	1487	11.6	1744	12.9
55-64	1182	9.3	1231	9.2
65+	1004	7.8	1195	8.3

**Table P-18**

<b>Georgia: Population by Age</b>		
Category	1990	2000
TOTAL Population	6,478,189	8,186,453
0 – 4 Years	495,535	595,150
5 – 9 Years	483,952	615,584
10 – 14 Years	466,614	607,759
15 – 19 Years	497,152	596,277
20 – 24 Years	522,634	592,196
25 – 34 Years	1,174,869	1,299,256
35 – 44 Years	1,015,698	1,353,508
45 – 54 Years	668,951	1,079,992
55 – 59 Years	259,735	375,651
60 – 64 Years	238,779	285,805
65 Years and Over	654,270	785,275

Source: U.S. Bureau of the Census

**Table P-19**

<b>United States: Population by Age</b>		
<b>Category</b>	<b>1990</b>	<b>2000</b>
<b>TOTAL Population</b>	248,709,873	281,421,906
<b>0 – 4 Years Old</b>	18,354,443	19,046,754
<b>5 – 9 Years Old</b>	18,099,179	20,608,282
<b>10 – 14 Years Old</b>	17,114,249	20,618,199
<b>15 – 19 Years Old</b>	17,754,015	19,911,052
<b>20 – 24 Years Old</b>	19,020,312	19,025,980
<b>25 – 34 Years Old</b>	43,175,932	39,577,357
<b>35 – 44 Years Old</b>	37,578,903	45,905,471
<b>45 – 54 Years Old</b>	25,223,086	37,578,609
<b>55 – 59 Years Old</b>	10,351,756	13,383,251
<b>60 – 64 Years Old</b>	10,616,167	10,787,979
<b>65 Years and Over</b>	31,241,831	34,978,972

**Source: U.S. Bureau of the Census**

Long County has a slightly higher percentage of individuals under the age of 18 than the State average (approximately 33 percent). This increase may indicate a need to monitor the school facility situation.



**Table P-20**

<b>Long County: Age Distribution</b>										
<b>Category</b>	<b>1980</b>	<b>1985</b>	<b>1990</b>	<b>1995</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>
<b>Total</b>	4,604	5,693	6,316	8,473	10,369	10,962	11,576	12,209	12,835	13,525
<b>Age 0 to 4</b>	472	596	668	899	1,146	1,217	1,221	1,254	1,288	1,305
<b>Age 5 to 9</b>	386	465	536	770	964	1,113	1,198	1,209	1,241	1,288
<b>Age 10 to 14</b>	393	408	429	643	800	931	1,097	1,177	1,184	1,229
<b>Age 15 to 19</b>	496	535	567	744	904	772	913	1,074	1,163	1,179
<b>Age 20 to 24</b>	538	691	726	956	1,103	860	725	871	1,025	1,118
<b>Age 25 to 29</b>	408	536	560	698	943	1,080	831	697	840	1,006
<b>Age 30 to 34</b>	319	427	506	720	783	916	1,054	809	683	826
<b>Age 35 to 39</b>	249	368	438	618	849	746	879	1,011	777	661
<b>Age 40 to 44</b>	194	293	393	560	647	793	704	834	961	743
<b>Age 45 to 49</b>	189	239	294	407	561	625	772	689	818	945
<b>Age 50 to 54</b>	185	217	257	367	475	541	607	746	669	799
<b>Age 55 to 59</b>	213	220	200	269	311	423	489	549	676	604
<b>Age 60 to 64</b>	173	218	220	244	289	283	383	448	506	627
<b>Age 65 to 69</b>	165	181	187	194	196	249	246	343	401	460
<b>Age 70 to 74</b>	100	131	145	158	164	156	203	205	282	336
<b>Age 75 to 79</b>	57	91	112	121	127	122	119	156	160	231
<b>Age 80 to 84</b>	35	44	48	69	64	90	86	89	115	122
<b>Age 85 &amp; Over</b>	32	33	30	36	43	45	49	48	46	46

Source: U.S. Bureau of the Census

## Race

The minority population of the county has increased during the past 20 years. In 1980, the percentage of whites was 73.8 per cent; blacks, 25.6 per cent; Hispanics, Asians, Indians, and others were 1.59 per cent. In 2000, the percentages of whites decreased to 68.4 per cent; blacks decreased to 24.25 per cent; however, Hispanics, Asians, Indians, and others increased to 7.35 per cent of the total population of the county.

Through 2025 the black population will decrease by 1.5 per cent, while the white population will decline by 11.94 per cent, and the Hispanic population will increase by 160.9 per cent.

**Existing Conditions  
Table P-221**

<b>Long County: Racial Composition</b>			
<b>Category</b>	<b>1980</b>	<b>1990</b>	<b>2000</b>
<b>TOTAL Population</b>	4524	6202	10304
<b>White</b>	3342	4687	7049
<b>Black</b>	1162	1349	2499
<b>American Indian Eskimo or Aleut</b>	0	17	75
<b>Asian or Pacific Islander</b>	7	49	85
<b>Other</b>	14	100	403
<b>Persons of Hispanic Origin</b>	72	178	870

Source: U.S. Bureau of the Census

**Existing and Future Conditions  
Table P-22**

<b>Long County: Racial Composition</b>										
<b>Category</b>	<b>1980</b>	<b>1985</b>	<b>1990</b>	<b>1995</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>
<b>White Population</b>	NA	NA	4,707	5,907	6,877	7,079	7,288	7,498	7,678	7,832
<b>Black Population</b>	NA	NA	1,353	1,911	2,476	2,584	2,712	2,859	2,999	3,165
<b>Native American</b>	NA	NA	25	62	63	66	75	70	61	54
<b>Asian &amp; Pacific Islander</b>	NA	NA	42	104	83	94	112	131	144	160
<b>Hispanic, any Race</b>	69	88	189	489	870	1,139	1,389	1,651	1,953	2,314

Source: Woods & Poole Economics, Inc.

**Table P-23  
Long County Racial Composition by Percentages**

<b>Category</b>	<b>1980</b>	<b>1990</b>	<b>1995</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>
White Population	73.87 %	75.57 %	71.57 %	68.4 %	67.89 %	61.55 %	61.02 %	60.59 %	60.23 %
Black Population	25.69 %	21.75 %	23.16 %	24.3 %	24.11 %	21.90 %	21.74 %	21.61 %	21.50 %
Native American	0	0.27 %	0.75 %	0.61 %	0.80 %	0.77 %	0.81 %	0.84 %	0.87 %
Asian & Pacific Islander	.15 %	0.79 %	1.26 %	0.80 %	0.89 %	0.86 %	0.89 %	0.92 %	0.94 %
Hispanic, and Other	1.59 %	2.87 %	13.80 %	5.78 %	6.31 %	14.92 %	15.53 %	16.04 %	16.46 %

## **EDUCATION**

The educational level of a community is often a determinant of economic development. The skill levels of residents in an area can be inferred from the level of education prevalent in the citizenry. Companies requiring skilled workers may look for areas with high rates of high school graduates while industries requiring highly-skilled workers may seek counties with large numbers of college graduates. The reverse is also true, with the county seeking to attract companies that are a good fit for the educational level of its citizens.

Educational level is also important when evaluating a school system's quality. If the number of high school dropouts is particularly high for a certain area, the school system could be in need of improvement. School system quality can also be a factor in determining quality of life for the citizens of an area. The better the school system, the better the perceived quality of life.

### **Educational Attainment**

Educational attainment in Long County has continually improved since the 1980's. In 1980, 54 per cent of Long County residents over the age of 25 had not completed high school (Table P-24). By 2000, this percentage had dropped to 25 per cent, a 66 per cent decrease. The number of citizens aged 25 or higher completing high school or some college has risen from 39.8 per cent in 1980 to 64.2 per cent in 2000. The percentage of residents completing four or more years of college reached 5.8 per cent in 2000. The level of education in the county, however, is still far below the state average, with nearly 25 per cent of Georgians over the age of 25 completing four or more years of college in 2000.

The number of persons attending college has increased more than 230 per cent; however, the number of college graduates has decreased by 43 per cent. Tables 23 and 24 provide the numbers and relative percentages of Long County residents age 25 and older attaining a maximum of each level of education during the period 1980 through 2000.

## Current Inventory

**Table P-24**

<b>Long County: Educational Attainment</b>			
<b>Category</b>	<b>1980</b>	<b>1990</b>	<b>2000</b>
<b>TOTAL Adult Population 25 &amp; Over</b>	2283	3367	5527
<b>Less than 9th Grade</b>	674	607	551
<b>9th to 12th Grade (No Diploma)</b>	556	617	870
<b>High School Graduate (Includes Equivalency)</b>	753	1446	2300
<b>Some College (No Degree)</b>	156	388	1247
<b>Associate Degree</b>	NA	133	236
<b>Bachelor's Degree</b>	145	117	199
<b>Graduate or Professional Degree</b>	NA	59	124

Source: U.S. Bureau of the Census

**Table P-25**

<b>Long County: Educational Attainment Percentage</b>			
<b>Category</b>	<b>1980</b>	<b>1990</b>	<b>2000</b>
<b>TOTAL Adult Population 25 &amp; Over</b>	100.00 %	100.00 %	100.00 %
<b>Less than 9th Grade</b>	29.52 %	18.03 %	9.97 %
<b>9th to 12th Grade (No Diploma)</b>	24.35 %	18.32 %	15.74 %
<b>High School Graduate (Includes Equivalency)</b>	32.98 %	42.95 %	41.61 %
<b>Some College (No Degree)</b>	6.83 %	11.52 %	22.56 %
<b>Associate Degree</b>	NA	3.95 %	4.27 %
<b>Bachelor's Degree</b>	6.35 %	3.47 %	3.60 %
<b>Graduate or Professional Degree</b>	NA	1.75 %	2.24 %

Source: U.S. Bureau of the Census

Table P-26

<b>Georgia: GA Educational Attainment</b>			
<b>Category</b>	<b>1980</b>	<b>1990</b>	<b>2000</b>
<b>TOTAL Adult Population 25 &amp; Over</b>	3081513	4012329	5185965
<b>Less than 9th Grade</b>	730846	481679	393197
<b>9th to 12th Grade (No Diploma)</b>	613975	683833	718152
<b>High School Graduate (Includes Equivalency)</b>	878923	1189740	1486006
<b>Some College (No Degree)</b>	411517	682350	1058692
<b>Associate Degree</b>	NA	198951	269740
<b>Bachelor's Degree</b>	450267	518433	829873
<b>Graduate or Professional Degree</b>	NA	257201	430305

Source: U.S. Bureau of the Census

Table P-27

<b>Georgia: Educational Attainment GA PCT</b>			
<b>Category</b>	<b>1980</b>	<b>1990</b>	<b>2000</b>
<b>TOTAL Adult Population 25 &amp; Over</b>	100.00 %	100.00 %	100.00 %
<b>Less than 9th Grade</b>	23.72 %	12.00 %	7.58 %
<b>9th to 12th Grade (No Diploma)</b>	19.92 %	17.04 %	13.85 %
<b>High School Graduate (Includes Equivalency)</b>	28.52 %	29.65 %	28.65 %
<b>Some College (No Degree)</b>	13.35 %	17.01 %	20.41 %
<b>Associate Degree</b>	NA	4.96 %	5.20 %
<b>Bachelor's Degree</b>	14.61 %	12.92 %	16.00 %
<b>Graduate or Professional Degree</b>	NA	6.41 %	8.30 %

Source: U.S. Bureau of the Census

## High School Graduation Test Scores

High School graduation test scores decreased in Long County from 1995 to 2001, mirroring trends elsewhere in the state. Overall, test scores have stayed about 20 per cent lower in Long County than the state average. In 2001, however, test scores were only 16 per cent behind the state average.

Tables 28 and 29 provide a review of educational indicators for Long County students since 1995. Long County high school test scores are lagging behind the state by 38.46 per cent. This drop in test scores is a side effort of the reduced dropout rate. Students who would have dropped out previously are now staying in school and taking the tests. Long County has a 25.58 per cent higher dropout rate than the state. Long County is working with those students that have low skill levels and are in danger of dropping out of school.

The percentage of high school graduates continuing on to post-secondary education is lower than the state level. More students are attending Georgia Public Technical schools than the state average.

No significant trends were noted other than the Long County Board of Education is taking the necessary steps to encourage students to improve skills levels.

**Table P-28**

<b>Long County: Education Statistics</b>							
<b>Category</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>
<b>H.S. Graduation Test Scores (All Components)</b>	73 %	78 %	42 %	47 %	51 %	52 %	40 %
<b>H.S. Dropout Rate</b>	5.8 %	5.1 %	13.1 %	6.1 %	9.6 %	11.6 %	8.6 %
<b>Grads Attending Georgia Public Colleges</b>	26.5 %	18.9 %	28.6 %	17.3 %	17.9 %	NA	NA
<b>Grads Attending Georgia Public Technical Schools</b>	8.8 %	9.4 %	17.1 %	15.4 %	8.9 %	9.6 %	NA

**Source: Georgia Department of Education**

**Table P-29**

<b>Georgia: Education Statistics</b>							
<b>Category</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>
<b>H.S. Graduation Test Scores (All Components)</b>	82 %	76 %	67 %	68 %	66 %	68 %	65 %
<b>H.S. Dropout Rate</b>	9.26 %	8.60 %	7.30 %	6.50 %	6.50 %	6.50 %	6.40 %
<b>Grads Attending Georgia Public Colleges</b>	35.0 %	30.0 %	30.2 %	38.8 %	37.5 %	37.3 %	36.1 %
<b>Grads Attending Georgia Public Technical Schools</b>	5.4 %	6.2 %	7.1 %	6.5 %	6.4 %	7.4 %	8.8 %

Source: Georgia Department of Education

Table 30 provides a comparison of Long County education attainment levels as compared to surrounding counties and the state. The table provides the relative percentages of Long County residents and residents of surrounding counties, age 25 and older, attaining a maximum of each level of education during the period 1980 through 2000. Negative percentages indicate a drop in the relative number.

### **High School Dropout Rate**

The high school dropout rate in Long County increased from 1995 to 2000. This trend was seen in Georgia as a whole. The overall average of the dropout rates from 1995 to 2001 for Long County was 8.56 per cent, higher than the state average of 7.29 per cent.

**Table P-30**

<b>Education Comparison to Surrounding Counties &amp; State ( per cent Change 1980-2000)</b>						
<b>Category</b>	<b>Long</b>	<b>Bryan</b>	<b>Liberty</b>	<b>McIntosh</b>	<b>Tattnall</b>	<b>State</b>
<b>Less than 9th Grade</b>	-66.22 %	-50.00 %	-53.83 %	-53.14 %	-50.20 %	-16.14 %
<b>9th to 12th Grade (No Diploma)</b>	-35.36 %	-45.00 %	33.11 %	-20.91 %	22.51 %	30.47 %
<b>High School Graduate (Includes Equivalency)</b>	26.17 %	184.04 %	69.73 %	118.74 %	80.41 %	0.45 %
<b>Some College (No Degree)</b>	230.31 %	601.53 %	325.14 %	288.10 %	117.61 %	50.86 %
<b>Bachelor's Degree</b>	-43.31 %	1291.11 %	183.22 %	230.60 %	127.32 %	9.50 %
<b>Graduate or Professional Degree</b>	28.00 %	734.31 %	94.41 %	159.38 %	65.87 %	29.48 %

Source: U.S. Bureau of the Census

Less than 9<sup>th</sup> Grade Education: Long County as compared to surrounding counties and the state of Georgia has decreased the number of persons with less than a 9th grade education the number of well.

9<sup>th</sup> to 12<sup>th</sup> Grade (No Diploma): Long County has also decreased the number of persons not completing high school. A negative number in this area indicates a lower number of individuals without a diploma.

High School Graduate & GED: Table 45 indicates that an increased number of adults 25 & older have a GED or High School Diploma. Long County lags behind the surrounding counties in this area, but is performing better than the state average.

Some College: When comparing percentages, Long County is very similar to the surrounding counties and performing better that the state average.



Bachelor's Degree: Long County is not performing as well as surrounding counties when comparing percentages. There has been a decrease in individuals obtaining Bachelor's Degree in a 20-year period.

Graduate or Professional Degrees (1980-2000): Table 30 indicates that the number of individuals holding Graduate or Professional Degrees has increased. Although Long County lags behind the surrounding counties, the county performs well as compared to the state in this area.

The predicted educational attainment level for Long County residents indicates a steady 6 per cent decline in the number of persons, age 25 and older, with no high school diploma. Tables 46 and 47 predict that between 2005 and 2025, there will be a 28.88 per cent increase in persons attending college and a 2.40 per cent increase in the number of persons earning a Bachelor's degree.

### Current and Future Assessment Table P-31

Long County Educational Attainment 2005-2015

Category	2005 Total	2005 % total	2010 Total	2010 % total	2015 Total	2015 % total
TOTAL Adult Population 25 & Over	6069	100 %	6422	100 %	6624	100 %
Less than 9th Grade	520	8.57 %	490	7.63 %	459	6.93 %
9th to 12th Grade (No Diploma)	926	15.26 %	1000	15.57 %	1074	16.21 %
High School Graduate (Includes Equivalency)	2652	43.70 %	3032	47.21 %	3411	51.49 %
Some College (No Degree)	1509	24.86 %	1779	27.70 %	2050	30.95 %
Bachelor's Degree	214	3.53 %	240	3.74 %	265	4.0 %
Graduate or Professional Degree	141	2.30 %	158	2.46 %	174	2.63 %

Original Source: U.S. Bureau of the Census

**Table P-32**

Long County Educational Attainment 2020-2025

<b>Category</b>	<b>2020 Total</b>	<b>2020 % total</b>	<b>2025 Total</b>	<b>2025 % total</b>
TOTAL Adult Population 25 & Over	6924	100 %	7406	100 %
Less than 9th Grade	428	6.17 %	397	5.36 %
9th to 12th Grade (No Diploma)	1148	16.56 %	1222	16.50 %
High School Graduate (Includes Equivalency)	3791	54.67 %	4171	56.32 %
Some College (No Degree)	2320	33.46 %	2591	34.99 %
Bachelor's Degree	290	4.18 %	315	4.25 %
Graduate or Professional Degree	191	2.75 %	208	2.81 %

Original Source: U.S. Bureau of the Census

**INCOME**

**Per Capita and Median Household**

Income data is relevant to many elements of a comprehensive growth management plan. Income levels provide information about the labor force, the cost of living, and the limits of the tax base. These factors are important to the economic development, community facilities and housing element of the comprehensive plan.

Income is reported by per capita and by household. Per capita income is calculated by dividing the total income generated and received by residents of the community by the number of residents in the community. The household income statistics include all households including single member households.

Table P-33 compares the Long County per capita income from years 1980 to 2000 to those from the state of Georgia. The table indicates that Long County has a lower per capita income than the state. However, from 1980 to 2000, the per capita income in

Long County had risen by \$ 8,073, representing a 179 per cent increase. In comparison, the state's per capita income increased by \$10,080 which represented a 65.65 per cent increase.

The per capita income in Long County has risen slightly since 1980, from \$4,513 to \$12,586 in 2000. It is expected to increase further to \$16,623 by 2010. This is in contrast to the state per capita income, which was \$8,477 in 1980 and increased to \$25,433 by 2000, and projected to increase to \$28,549 by 2010. Although both the county and the state per capita incomes are expected to rise, the state income will rise more than the county income.

Long County's per capita income and median household income have remained far below the state average.

**Current Inventory**  
**Table P-33**

Per capita income comparisons in 1996 dollars: 1980-2000

Category	1980	1985	1990	1995	2000
Long County	\$4,513	\$6,684	\$8,815	\$10,701	\$12,586
State	\$15,353	\$18,512	\$20,715	\$22,287	\$25,433

Source: Woods & Poole Economics, Inc.

**Table P-34**

Average Household Income comparisons in 1996 dollars: 1990-2000

Category	1990	2000
Long County	\$24,613	\$35,725
State	\$33,259	\$42,158

Source: Woods & Poole Economics, Inc.

**Distribution of Households by Income**

The distribution of households in Long County is predicted to see a move from the majority of households earning less than \$20,000 per year in 1990 to the majority of households earning more \$30,000 by 2010. This coincides with the predicted increase in education levels of the citizens in Long County.

In 2000, the state's largest income bracket was \$30,000 to \$39,999. This is higher than Long County which had the largest population in the \$20,000 to \$29,999 bracket.

**Table P-35**

<b>Long County: Household Income Distribution</b>		
<b>Category</b>	<b>1990</b>	<b>2000</b>
<b>TOTAL Households</b>	2225	3576
<b>Income less than \$5000</b>	NA	NA
<b>Income \$5000 - \$9999</b>	566	428
<b>Income \$10000 - \$14999</b>	299	335
<b>Income \$15000 - \$19999</b>	339	332
<b>Income \$20000 - \$29999</b>	404	641
<b>Income \$30000 - \$34999</b>	137	328
<b>Income \$35000 - \$39999</b>	110	301
<b>Income \$40000 - \$49999</b>	176	397
<b>Income \$50000 - \$59999</b>	55	331
<b>Income \$60000 - \$74999</b>	67	225
<b>Income \$75000 - \$99999</b>	59	177
<b>Income \$100000 or more</b>	13	81

Source: U.S. Bureau of the Census

**Table P-36**

<b>Long County: Household Income Dist ( per cent)</b>		
<b>Category</b>	<b>1990</b>	<b>2000</b>
<b>TOTAL Households</b>	100.00 %	100.00 %
<b>Income less than \$5000</b>	NA	NA
<b>Income \$5000 - \$9999</b>	25.44 %	11.97 %
<b>Income \$10000 - \$14999</b>	13.44 %	9.37 %
<b>Income \$15000 - \$19999</b>	15.24 %	9.28 %
<b>Income \$20000 - \$29999</b>	18.16 %	17.93 %
<b>Income \$30000 - \$34999</b>	6.16 %	9.18 %
<b>Income \$35000 - \$39999</b>	4.94 %	8.42 %
<b>Income \$40000 - \$49999</b>	7.91 %	11.10 %
<b>Income \$50000 - \$59999</b>	2.47 %	9.23 %
<b>Income \$60000 - \$74999</b>	3.01 %	6.29 %
<b>Income \$75000 - \$99999</b>	2.65 %	4.95 %
<b>Income \$100000 or more</b>	0.58 %	2.28 %

Source: U.S. Bureau of the Census

**Table P-37**

<b>Georgia: GA Household Income Distribution</b>			
<b>Category</b>	<b>1980</b>	<b>1990</b>	<b>2000</b>
<b>TOTAL Households</b>	1,869,754	2,366,575	3,007,678
<b>Income less than \$5000</b>	302,864	NA	NA
<b>Income \$5000 - \$9999</b>	319,679	398,078	304,816
<b>Income \$10000 - \$14999</b>	304,354	204,142	176,059
<b>Income \$15000 - \$19999</b>	265,302	210,123	177,676
<b>Income \$20000 - \$29999</b>	215,674	405,424	383,222
<b>Income \$30000 - \$34999</b>	153,940	186,754	187,070
<b>Income \$35000 - \$39999</b>	103,371	160,205	176,616
<b>Income \$40000 - \$49999</b>	62,868	260,712	326,345
<b>Income \$50000 - \$59999</b>	38,203	179,962	278,017
<b>Income \$60000 - \$74999</b>	27,517	161,705	315,186
<b>Income \$75000 - \$99999</b>	47,980	109,354	311,651
<b>Income \$100000 or more</b>	28,437	90,116	371,020

Source: U.S. Bureau of the Census

**Table P-38**

<b>Georgia: GA Household Income Dist ( % )</b>			
<b>Category</b>	<b>1980</b>	<b>1990</b>	<b>2000</b>
<b>TOTAL Households</b>	100.00 %	100.00 %	100.00 %
<b>Income less than \$5000</b>	16.20 %	7.90 %	NA
<b>Income \$5000 - \$9999</b>	17.10 %	8.87 %	10.13 %
<b>Income \$10000 - \$14999</b>	16.28 %	8.62 %	5.85 %
<b>Income \$15000 - \$19999</b>	14.19 %	8.87 %	5.91 %
<b>Income \$20000 - \$29999</b>	11.53 %	17.13 %	12.74 %
<b>Income \$30000 - \$34999</b>	8.23 %	7.90 %	6.22 %
<b>Income \$35000 - \$39999</b>	5.53 %	6.77 %	5.87 %
<b>Income \$40000 - \$49999</b>	3.36 %	11.03 %	10.85 %
<b>Income \$50000 - \$59999</b>	2.04 %	7.61 %	9.24 %
<b>Income \$60000 - \$74999</b>	1.47 %	6.85 %	10.48 %

<b>Income \$75000 - \$99999</b>	2.57 %	4.63 %	10.36 %
<b>Income \$100000 or more</b>	1.52 %	3.81 %	12.34 %

Source: U.S. Bureau of the Census

**Current and Future Assessment  
Table P-39**

<b>Long County: Per Capita Income</b>										
<b>Category</b>	<b>1980</b>	<b>1985</b>	<b>1990</b>	<b>1995</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>
<b>Income per Capita (1996 \$)</b>	\$4,513	\$6,684	\$8,815	\$10,701	\$12,586	\$14,604	\$16,623	\$18,641	\$20,659	\$22,677

Source: Woods & Poole Economics, Inc.

**Table P-40**

<b>Georgia: GA Per Capita Income</b>										
<b>Category</b>	<b>1980</b>	<b>1985</b>	<b>1990</b>	<b>1995</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>
<b>Income per Capita (1996 \$)</b>	\$15,353	\$18,512	\$20,715	\$22,287	\$25,433	\$26,975	\$28,549	\$30,141	\$31,767	\$33,413

Source: Woods & Pool Economics, Inc.

**Table P-41**

<b>Comparison of Long County's Per Capita Income to State (%)</b>										
<b>Category</b>	<b>1980</b>	<b>1985</b>	<b>1990</b>	<b>1995</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>
<b>Long (1996 \$)</b>	-70.61 %	-63.89 %	-57.45 %	-51.99 %	-50.51 %	-45.86 %	-41.77 %	-38.15 %	-34.97 %	-32.13 %
<b>Georgia (1996 \$)</b>	\$15,353.00	\$18,512.00	\$20,715.00	\$22,287.00	\$25,433.00	\$26,975.00	\$28,549.00	\$30,141.00	\$31,767.00	\$33,413.00

**Woods and Pool Economics, Inc.**

Per capita income is predicted to continually rise in Long County but will not meet the state level. However the state's predicted increase averages 5.5 per cent every five years. The predictions for Long County indicate more than an 11 per cent increase every five years.

# 1.2.0.0: Assessment

## Population

Long County has undergone a significant population increase since 1980, increasing 129 per cent. This trend compares with significant population growth rates for the state and the nation. The state and national population increased by 50 per cent and 25.1 per cent respectively during that same period.

Explaining population increase requires examining specific segments of the Long County population. Population increases since 1980 occurred primarily in the 25 to 34 age group. The number of residents in this age group increased by 137.4 per cent. The buildup of the Fort Stewart Military Reservation accounts for most of the population increases of younger people.

In 1999, the last year for which complete Georgia Department of Education data for Warren County is available, over 26.8 per cent of high school graduates attended Georgia public colleges and technical colleges. This figure does not include out-of-state or private Georgia colleges. For younger residents entering the workforce after college, there is a mismatch between their education and the type of jobs available in the community. The economy of Long County is dependent upon the region's economy, as most employment opportunities are available in neighboring counties. A significant portion of Long County's labor force commutes to work. Long County residents enjoy the rural nature of living in the county and the close proximity of work in neighboring counties. In short, there is incentive for younger residents to return to Long County after completing post-secondary education.

Total population in Long County is projected to increase 23.4 per cent through 2025, lower than the state (+35.9 per cent) and national (+27 per cent) averages. A significant portion of that growth will come from the 45-64 years old group. The structure of the region's economy explains the trend. The fastest growing employment sectors in the region are projected in high technology sectors such as transportation, communications & public utilities. Projected growth in these employment sectors correlated with the aging of the residents.

## Households

The number of households in Long County has increased an average 133 per cent since 1980. This rate is above household growth rates for the state (60.2 per cent) and the nation (30.9 per cent). Through 2025, the number of households in Long County will increase by 22.6 per cent, a lower growth rate compared to state (35.9 per cent) and national (27.3 per cent) averages.

Household growth in Long County has increased at higher rates than the total population. Growth in total households necessitates a corresponding increase in the

housing supply to ensure housing meets the community's needs. Between 1980 and 2000, the housing supply in Long County increased by 144.2 per cent. Housing growth has thus outpaced growth in total households, ensuring a sufficient supply of housing.

The increase of total households relative to increased population in Long County can be explained by the average household size. Average household size has remained relatively stable, declining only by .10 between 1980 and 2000. By contrast the state and national average household size declined by .18 and .15 respectively. Through 2025, average household size throughout Long County will remain higher than state and national levels.

## **Age**

Throughout Long County, the younger age population groups accounted for most of the population growth since 1980, as opposed to state, and national trends. Through 2025, 0 to 34 years old age groups will increase by 15.4 per cent while the 65+ age groups will account for 80.5 per cent of the growth. The 35-54 age groups, the backbone of the Long County economy, will increase by 16.4 per cent. While the workforce will become younger, local governments will have to support an aging population that will increasingly be dependent on non-wage sources of income. From a housing and community facilities perspective, future projects and planning will need to take these demographic shifts into account.

## **Race**

Past, current and future race demographics in Long County compare to state and national trends, which project, as a share of total population, a declining white population, an unchanged black population and a growing Hispanic population. Whereas the Hispanic population will account for 8.9 per cent of total population in Georgia and 19.2 per cent nationally by 2025, in Long County, the Hispanic population will account for 16 per cent of the total population.

## **Education**

### **Education Attainment**

Education attainment in Long County has continually improved in the past twenty years but lags behind the state. In 2000, 25.7 per cent of Long County residents did not graduate from high school. The state average was 21.4 per cent.

In 2000, less than 11 per cent of Long County residents obtained a college degree or higher, while 29.5 per cent of residents statewide obtained a college degree.



Since 1980, the number of Long County residents with some college or more has more than doubled to 32.7 per cent. While Long County's college or more rate is less than the state average of 49.9 per cent, the gap is narrowing.

That Long County is catching up to the state average in educational attainment reflects the important role of state and local policy in education over the years and gains in education attainment made region-wide. State education policy, in an attempt to increase statewide test scores and improve its national rating, has increased school resources and facilitated teacher development. As a result, Long County schools have had, since 1980, unprecedented resources devoted to improving educational attainment. On the local level, there is an acknowledgment in the community that today's economy requires education and training. Even in a manufacturing and lower skill service-dominated economy, a high school diploma has become indispensable.

While Long County's economy is still primarily a lower skill service economy, the regional economy is more diverse and requires more educated graduates. Based on these local education attainment levels, the community will need to attract two different types of employment sectors. On the one hand, manufacturing and construction, will allow residents with a high school diploma or less to participate in the local economy. On the other hand, projected employment growth in public utilities, communications, and finance will provide employment opportunities for residents with college education. Current education attainment levels suggest the need to aggressively pursue these sectors.

### **Test Scores, Drop-Out Rate and Post-Secondary Education**

Achievement test scores have declined 33 per cent in Long County between 1995 and 2001. This mirrors declines in the state average.

School drop out rates in Long County have increased from 5.8 per cent to 8.6 per cent between 1995 and 2001.

### **Income**

Per capita and mean household incomes have consistently risen. Since 1980, per capita income has risen 178.9 per cent in Long County versus 222.5 per cent for the state as a whole. Current per capita income is \$12,371 higher in Georgia. A similar discrepancy is found in mean household income. Since 1990, it has risen 45 per cent in Long and 54.8 per cent in the state.

Income differentials are generally explained by the lower cost of living in Long County. The average weekly wage paid in Long County is \$368, compared to the statewide average of \$711. Furthermore, median property values and rent in Long

are less than half the state average. Given the local cost of living, it is unlikely that income will approach the state average by 2025.

## **1.2.0.0: Goals and Implementation**

The Long County Commission is committed to managing growth in a manner that will lessen the added burden to the average tax payer. The county will monitor growth carefully and plan for creation of new and expansion of existing facilities and services well in advance of their predicted demand.

Goal #1 Grow through an increase in total population.

Policy 1.1: Enhance the ability of the county services to provide for future growth of residential population within the county.

Goal #2: Improve the quality of life for all Long County residents.

Policy 2.1: Continue to increase the number and variety of services provided to residents of the county.

Goal #3: Enable new and existing residents to become active in the community.

Policy 3.1: Continue to appoint citizen action committees when needed to address specific issues pertinent to the community.

Goal #4: Continue to improve race relations.

Policy 4.1: Encourage more interaction among all races in civic and public activities.

Policy 4.2: Encourage more minority-owned businesses to locate in Long County.

Policy 4.3: Encourage more interracial participation in community festivals.

Policy 4.4: Initiate, encourage, and support social welfare services for migrant farm workers.

Goal #5: Achieve greater public involvement in education.

Policy 5.1: Promote and encourage all activities of the Long County Public School System.

Policy 5.2: Provide ample services and facilities to the Long County Public Schools.

Policy 5.3: Promote and support the community literacy campaign.

## 2.0.0.0: Economic Development

The Economic Development Element provides local governments the opportunity to inventory and assess the community's economic base, labor force characteristics, and local economic development opportunities and resources; to determine economic needs and goals; and to merge this information with information about population trends and characteristics, natural resources, community facilities and services, housing and land use so that a strategy for the economic well-being of the community can be developed.

The purpose of this element is to plan for a healthy economy by doing the following:

- Identify the economic trends in the community,
- Assess the trends to identify the community's strengths, weaknesses and resources, including regional comparisons in these areas
- Examine the appropriateness of the existing economy considering the community's population and its characteristics, housing availability, transportation network, natural resources and community facilities,
- Determine which goals and objectives would affect a growing and balanced economy, consistent with prudent management of resources and which equitably benefits all segments of the population
- Develop implementation strategies that would achieve the desired economic goals and objectives

# 2.1.0.0: Existing Conditions

## Economic Base

### Employment by Sector

In 2001, there were approximately 49 businesses located in Long County. Of these, 20 per cent are classified as retail trade establishments, 12 per cent are classified as services, and 10 per cent are classified as healthcare and social assistance.

Employment encompasses the total number of people employed by local businesses and industries, sole proprietors and the self-employed. This number includes non-residents in surrounding areas who work in Long County but excludes Long County residents commuting to jobs outside the county limits. Table E-1 examines historic sector employment trends in Long County. Overall, total employment increased by 67 per cent between 1990 and 2000. Manufacturing, one of the largest employment sectors, experienced an increase of 17.4 per cent between 1990 and 2000. The construction sector grew by 88.3 per cent between 1990 and 2000. Total employment is projected to increase by 73 per cent through 2025. Retail trade (59.4 per cent) and education, health and social services (69.8 per cent) will account for most of the employment growth.

Table E-2 highlights the relative growth of each sector. The three largest sectors, education, health and social services, retail trade and public administration, currently account for 42.8 per cent of total employment in Long County. Historically, manufacturing has been the dominant employment sector. Between 1990 and 2000, manufacturing declined from 19.7 per cent to 10.6 per cent of total employment, a drop of 9.1 per cent. By 2025, manufacturing will account for 7.9 per cent of total employment. The health and social services and state and local government sectors are projected to remain relatively flat through 2025. A sector loss in farm employment occurred between 1990 and 2000. Farm employment declined by 1.3 per cent and is projected to drop an additional 3.7 per cent through 2025.

No major employment differences become apparent when comparing Long County to the state average (Table E-3). The Georgia economy is diversified with no single dominant sector. Long County is more dependent on manufacturing than the state average. A significant discrepancy is found in wholesale trade and construction services.

Table E-1

<b>Long County: Employment by Sector</b>										
<b>Category</b>	<b>1980</b>	<b>1985</b>	<b>1990</b>	<b>1995</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>
<b>Total</b>	820	790	780	1000	1320	1610	1670	1720	1780	1830
<b>Farm</b>	160	130	110	90	80	80	80	70	70	70
<b>Agricultural Services</b>	20	20	30	30	30	40	40	40	40	50
<b>Mining</b>	30	10	10	20	10	10	10	10	10	10
<b>Construction</b>	70	80	80	90	180	230	230	240	250	250
<b>Manufacturing</b>	30	60	30	30	30	30	40	40	40	40
<b>Trans., Comm., &amp; Public Utilities</b>	60	70	20	20	30	40	40	40	40	40
<b>Wholesale Trade</b>	20	10	10	20	10	10	10	10	10	10
<b>Retail Trade</b>	110	90	60	150	120	170	190	200	210	220
<b>Finance, Insurance, &amp; Real Estate</b>	20	10	20	10	50	50	50	50	50	50
<b>Services</b>	90	80	120	170	310	410	420	430	450	460
<b>Federal Civilian Government</b>	10	10	10	10	10	10	10	10	10	10
<b>Federal Military Government</b>	20	30	30	30	30	40	40	40	40	40
<b>State &amp; Local Government</b>	180	190	250	330	430	490	510	540	560	580

Source: Woods & Poole Economics, Inc.

**Table E-2**

<b>Long County: Employment by Sector (%)</b>										
<b>Category</b>	<b>1980</b>	<b>1985</b>	<b>1990</b>	<b>1995</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>
<b>Total</b>	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
<b>Farm</b>	19.51%	16.46%	14.1%	9.00%	6.06%	4.97%	4.79%	4.07%	3.93%	3.83%
<b>Agricultural Services, Other</b>	2.44%	2.53%	3.84%	3.00%	2.27%	2.48%	2.40%	2.33%	2.25%	2.73%
<b>Mining</b>	3.66%	1.27%	1.28%	2.00%	0.76%	0.62%	0.60%	0.58%	0.56%	0.55%
<b>Construction</b>	8.54%	10.13%	10.26%	9.00%	13.64%	14.29%	13.77%	13.95%	14.04%	13.66%
<b>Manufacturing</b>	3.66%	7.59%	3.85%	3.00%	2.27%	1.86%	2.40%	2.33%	2.25%	2.19%
<b>Trans., Comm., &amp; Public Utilities</b>	7.32%	8.86%	2.56%	2.00%	2.27%	2.48%	2.40%	2.33%	2.25%	2.19%
<b>Wholesale Trade</b>	2.44%	1.27%	1.28%	2.00%	0.76%	0.62%	0.60%	0.58%	0.56%	0.55%
<b>Retail Trade</b>	13.41%	11.39%	7.69%	15.00%	9.09%	10.56%	11.38%	11.63%	11.80%	12.02%
<b>Finance, Insurance, &amp; Real Estate</b>	2.44%	1.27%	2.56%	1.00%	3.79%	3.11%	2.99%	2.91%	2.81%	2.73%
<b>Services</b>	10.98%	10.13%	15.38%	17.00%	23.48%	25.47%	25.50%	25.00%	25.28%	25.14%
<b>Federal Civilian Government</b>	1.22%	1.27%	1.28%	1.00%	0.76%	0.62%	0.60%	0.58%	0.56%	0.55%
<b>Federal Military Government</b>	2.44%	3.80%	3.85%	3.00%	2.27%	2.48%	2.40%	2.33%	2.25%	2.19%
<b>State &amp; Local Government</b>	21.95%	24.05%	32.07%	33.00%	32.58%	30.43%	30.54%	31.40%	31.46%	31.69%

**Source: Woods & Poole Economics, Inc.**

**Table E-3**

<b>GA Employment by Sector</b>										
<b>Category</b>	<b>1980</b>	<b>1985</b>	<b>1990</b>	<b>1995</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>
<b>Total</b>	2,747,310	3,224,300	3,690,610	4,229,290	4,859,970	5,235,630	5,623,650	6,029,160	6,451,320	6,890,350
<b>Farm</b>	96,559	82,370	74,286	68,780	67,356	64,877	62,438	60,240	58,297	56,584
<b>Agricultural Services, Other</b>	16,432	24,574	31,487	44,659	54,829	60,079	65,359	70,538	75,465	80,033
<b>Mining</b>	8,808	10,241	10,590	9,408	9,522	9,645	9,813	10,047	10,324	10,653
<b>Construction</b>	139,233	196,913	212,342	236,159	296,572	316,876	333,895	349,870	365,279	380,526
<b>Manufacturing</b>	528,812	565,278	572,477	603,394	613,992	632,106	649,864	665,184	677,683	687,263
<b>Trans., Comm., &amp; Public Utilities</b>	152,583	177,746	216,343	241,886	296,267	322,804	347,846	371,521	392,902	411,295
<b>Wholesale Trade</b>	174,084	214,310	228,213	242,508	276,326	300,312	322,310	344,504	367,022	389,992
<b>Retail Trade</b>	407,627	520,232	606,608	724,946	816,701	893,996	973,979	1,055,500	1,138,660	1,223,640
<b>Finance, Insurance, &amp; Real Estate</b>	199,887	225,090	244,947	269,183	345,923	369,137	392,407	416,440	440,943	465,714
<b>Services</b>	502,841	664,476	876,597	1,125,360	1,391,460	1,532,290	1,692,630	1,873,380	2,074,950	2,298,230
<b>Federal Civilian Government</b>	84,599	92,561	102,981	98,336	92,262	91,889	91,883	92,089	92,439	92,936
<b>Federal Military Government</b>	92,295	98,319	90,745	94,733	93,789	95,235	96,403	97,224	97,709	97,839
<b>State &amp; Local Government</b>	343,553	352,189	422,991	469,941	504,969	546,388	584,820	622,628	659,644	695,636

**Source: Woods & Poole Economics, Inc.**



**Table E-4**

<b>GA Employment by Sector (%)</b>										
<b>Category</b>	<b>1980</b>	<b>1985</b>	<b>1990</b>	<b>1995</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>
<b>Total</b>	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
<b>Farm</b>	3.51%	2.55%	2.01%	1.63%	1.39%	1.24%	1.11%	1.00%	0.90%	0.82%
<b>Agricultural Services, Other</b>	0.60%	0.76%	0.85%	1.06%	1.13%	1.15%	1.16%	1.17%	1.17%	1.16%
<b>Mining</b>	0.32%	0.32%	0.29%	0.22%	0.20%	0.18%	0.17%	0.17%	0.16%	0.15%
<b>Construction</b>	5.07%	6.11%	5.75%	5.58%	6.10%	6.05%	5.94%	5.80%	5.66%	5.52%
<b>Manufacturing</b>	19.25%	17.53%	15.51%	14.27%	12.63%	12.07%	11.56%	11.03%	10.50%	9.97%
<b>Trans., Comm., &amp; Public Utilities</b>	5.55%	5.51%	5.86%	5.72%	6.10%	6.17%	6.19%	6.16%	6.09%	5.97%
<b>Wholesale Trade</b>	6.34%	6.65%	6.18%	5.73%	5.69%	5.74%	5.73%	5.71%	5.69%	5.66%
<b>Retail Trade</b>	14.84%	16.13%	16.44%	17.14%	16.80%	17.08%	17.32%	17.51%	17.65%	17.76%
<b>Finance, Insurance, &amp; Real Estate</b>	7.28%	6.98%	6.64%	6.36%	7.12%	7.05%	6.98%	6.91%	6.83%	6.76%
<b>Services</b>	18.30%	20.61%	23.75%	26.61%	28.63%	29.27%	30.10%	31.07%	32.16%	33.35%
<b>Federal Civilian Government</b>	3.08%	2.87%	2.79%	2.33%	1.90%	1.76%	1.63%	1.53%	1.43%	1.35%
<b>Federal Military Government</b>	3.36%	3.05%	2.46%	2.24%	1.93%	1.82%	1.71%	1.61%	1.51%	1.42%
<b>State &amp; Local Government</b>	12.51%	10.92%	11.46%	11.11%	10.39%	10.44%	10.40%	10.33%	10.22%	10.10%

**Source: Woods & Poole Economics, Inc.**

**Sector Earnings**

Sector earnings represent total wages, salaries and other earned income paid to persons working for businesses in Long County.

Since 1980, total earnings in Long County have risen 192.75 per cent. State and local government earnings accounted for the largest share of sector earnings, with residents earning \$12.13 million or 45.47 per cent of total earnings (Table E-6). This increase represents an \$8.78 million increase over the 1980 rate and is projected to reach \$16.39 million by 2025. Services employment is second with \$4.13 million, a rate

expected to grow by 42 per cent to \$5.89 million in 2025. Though farm employment is projected to decline through 2025, sector earnings are projected to increase by 14.58 per cent over that same period. A similar trend is seen in state and local government, where earnings account for a higher percentage that the sector's share of total employment. This trend reflects traditionally higher salaries paid in these sectors and suggests that a slowdown in manufacturing or state and local government employment will result in a disproportionate decline in earnings.

Table E-6 provides percentage figures for sector earnings, allowing a comparison of the relative growth of each sector. The relative share of farm, manufacturing, and retail trade earnings has continually declined while construction and service earnings have risen steadily. The relative share of construction, retail trade and state and local government earnings is projected to remain stable.

**Table E-5**

<b>Long County: Earnings by Sector</b>										
<b>Category</b>	<b>1980</b>	<b>1985</b>	<b>1990</b>	<b>1995</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>
<b>Total (1996 \$)</b>	\$12,140,000	\$13,390,000	\$11,550,000	\$14,940,000	\$22,300,000	\$26,680,000	\$28,840,000	\$30,940,000	\$33,140,000	\$35,540,000
<b>Farm (1996 \$)</b>	\$1,400,000	\$900,000	\$910,000	\$1,150,000	\$1,440,000	\$1,250,000	1,320,000	\$1,410,000	\$1,520,000	\$1,650,000
<b>Agricultural Services, Other (1996 \$)</b>	\$90,000	\$180,000	\$210,000	\$280,000	\$390,000	\$440,000	\$490,000	\$550,000	\$600,000	\$670,000
<b>Mining (1996 \$)</b>	\$380,000	\$150,000	\$330,000	\$420,000	\$160,000	\$190,000	\$200,000	\$210,000	\$220,000	\$230,000
<b>Construction (1996 \$)</b>	\$1,800,000	\$1,670,000	\$1,350,000	\$1,150,000	\$2,870,000	\$3,370,000	\$3,540,000	\$3,700,000	\$3,870,000	\$4,050,000
<b>Manufacturing (1996 \$)</b>	\$420,000	\$1,110,000	\$730,000	\$1,060,000	\$770,000	\$1,130,000	\$1,170,000	\$1,230,000	\$1,300,000	\$1,370,000
<b>Trans., Comm., &amp; Public Utilities (1996 \$)</b>	\$1,610,000	\$2,260,000	\$400,000	\$480,000	\$1,160,000	\$1,090,000	\$1,220,000	\$1,310,000	\$1,380,000	\$1,440,000
<b>Wholesale Trade (1996 \$)</b>	\$270,000	\$240,000	\$100,000	\$280,000	\$90,000	\$90,000	\$100,000	\$100,000	\$110,000	\$120,000
<b>Retail Trade (1996 \$)</b>	\$820,000	\$970,000	\$480,000	\$1,180,000	\$940,000	\$1,260,000	\$1,420,000	\$1,540,000	\$1,660,000	\$1,760,000
<b>Finance, Insurance, &amp; Real Estate (1996 \$)</b>	\$190,000	\$30,000	\$30,000	\$230,000	\$340,000	\$640,000	\$650,000	\$690,000	\$740,000	\$800,000
<b>Services (1996 \$)</b>	\$1,220,000	\$1,150,000	\$1,070,000	\$1,540,000	\$3,320,000	\$4,140,000	\$4,530,000	\$4,940,000	\$5,390,000	\$5,890,000
<b>Federal Civilian Government (1996 \$)</b>	\$420,000	\$320,000	\$380,000	\$400,000	\$430,000	\$450,000	\$470,000	\$500,000	\$530,000	\$550,000
<b>Federal Military Government (1996 \$)</b>	\$130,000	\$360,000	\$310,000	\$370,000	\$450,000	\$500,000	\$530,000	\$560,000	\$590,000	\$630,000
<b>State &amp; Local Government (1996 \$)</b>	\$3,350,000	\$4,050,000	\$5,270,000	\$6,410,000	\$9,950,000	\$12,130,000	\$13,190,000	\$14,200,000	\$15,250,000	\$16,390,000

Source: Woods & Poole Economics, Inc.

Table E- 6

Long County: Earnings by Sector (%)										
Category	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
<b>Total (1996 \$)</b>	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
<b>Farm (1996 \$)</b>	11.88%	6.75%	7.88%	7.70%	6.46%	4.67%	4.59%	4.56%	4.58%	4.65%
<b>Agricultural Services, Other (1996 \$)</b>	.76%	1.32%	1.84%	1.84%	1.76%	1.66%	1.71%	1.76%	1.82%	1.88%
<b>Mining (1996 \$)</b>	3.09%	1.13%	2.81%	2.79%	0.72%	0.69%	0.68%	0.67%	0.65%	0.64%
<b>Construction (1996 \$)</b>	14.82%	12.46%	11.64%	7.72%	12.86%	12.64%	12.27%	11.96%	11.67%	11.40%
<b>Manufacturing (1996 \$)</b>	3.44%	8.32%	6.31%	7.09%	3.46%	4.24%	4.06%	3.97%	3.91%	3.85%
<b>Trans., Comm., &amp; Public Utilities (1996 \$)</b>	13.25%	16.88%	3.42%	3.20%	5.19%	4.09%	4.23%	4.23%	4.15%	4.04%
<b>Wholesale Trade (1996 \$)</b>	2.25%	1.77%	0.88%	1.89%	0.42%	0.34%	0.34%	0.33%	0.33%	0.32%
<b>Retail Trade (1996 \$)</b>	6.72%	7.25%	4.18%	7.92%	4.21%	4.72%	4.92%	4.99%	4.99%	4.96%
<b>Finance, Insurance, &amp; Real Estate (1996 \$)</b>	1.58%	0.21%	0.22%	1.52%	1.50%	2.41%	2.26%	2.23%	2.23%	2.24%
<b>Services (1996 \$)</b>	10.08%	8.55%	9.24%	10.31%	14.86%	15.51%	15.71%	15.97%	16.26%	16.57%
<b>Federal Civilian Government (1996 \$)</b>	3.48%	2.39%	3.25%	2.64%	1.93%	1.69%	1.64%	1.61%	1.58%	1.56%
<b>Federal Military Government (1996 \$)</b>	1.10%	2.70%	2.67%	2.45%	2.00%	1.86%	1.84%	1.82%	1.79%	1.76%
<b>State &amp; Local Government (1996 \$)</b>	27.56%	30.27%	45.66%	42.92%	44.62%	45.47%	45.74%	45.90%	46.02%	46.12%

Source: Woods & Poole Economics, Inc.

Table E-7 highlights current statewide sector earnings. Similar to sector employment rates, the Georgia economy is much more diverse than that of Long County and no sector accounts for more than a quarter of total earnings. The widest gap between the two economies is found in state and local government, where sector earnings account for 35.37 per cent more in Long County than the state average. The service sector, on the other hand, contributes a higher share of earnings statewide. Whereas the service sector accounts for 26.7 per cent of earnings in Georgia, service sector accounts for less than 15.51 per cent in Long County.

Table E-7

<b>GA Earnings by Sector (1996\$)</b>									
<b>Category</b>	<b>1980</b>	<b>1985</b>	<b>1990</b>	<b>1995</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>
<b>Total</b>	\$66,537,100,000	\$85,919,700,000	\$102,642,000,000	\$123,514,000,000	\$160,462,000,000	\$180,866,000,000	\$202,919,000,000	\$227,019,000,000	\$253,253,000,000
<b>Farm</b>	\$106,153,000	\$1,087,670,000	\$1,391,280,000	\$1,733,670,000	\$1,565,760,000	\$1,682,760,000	\$1,802,910,000	\$1,933,340,000	\$2,075,970,000
<b>Agr. Services, Other</b>	\$244,855,000	\$350,797,000	\$475,908,000	\$660,059,000	\$943,559,000	\$1,086,060,000	\$1,239,330,000	\$1,400,730,000	\$1,566,550,000
<b>Mining</b>	\$429,934,000	\$413,933,000	\$373,738,000	\$359,779,000	\$438,244,000	\$445,441,000	\$456,347,000	\$471,301,000	\$489,686,000
<b>Const.</b>	\$3,765,500,000	\$5,647,560,000	\$5,975,270,000	\$6,661,070,000	\$9,630,130,000	\$10,606,800,000	\$11,506,000,000	\$12,401,400,000	\$13,309,000,000
<b>Manuf.</b>	\$14,997,800,000	\$17,211,700,000	\$17,973,700,000	\$20,801,400,000	\$23,849,500,000	\$26,143,500,000	\$28,510,600,000	\$30,854,700,000	\$33,129,100,000
<b>Trans, Comm., &amp; Public Utilities</b>	\$6,208,770,000	\$7,604,700,000	\$8,981,390,000	\$11,643,900,000	\$15,867,700,000	\$18,059,600,000	\$20,304,900,000	\$22,610,400,000	\$24,909,000,000
<b>Wholesale Trade</b>	\$5,900,690,000	\$7,766,500,000	\$9,090,690,000	\$10,085,400,000	\$13,549,200,000	\$15,124,900,000	\$16,662,400,000	\$18,269,600,000	\$19,955,500,000
<b>Retail Trade</b>	\$6,870,370,000	\$9,141,230,000	\$9,413,850,000	\$11,216,700,000	\$14,426,000,000	\$16,215,300,000	\$18,126,500,000	\$20,144,900,000	\$22,276,700,000
<b>Finance, Insurance, &amp; Real Estate</b>	\$3,617,310,000	\$4,803,430,000	\$6,600,850,000	\$8,476,150,000	\$12,153,700,000	\$13,862,800,000	\$15,688,500,000	\$17,666,000,000	\$19,784,200,000
<b>Services</b>	\$10,401,900,000	\$14,915,700,000	\$22,532,200,000	\$30,044,900,000	\$42,959,700,000	\$50,244,000,000	\$58,890,800,000	\$69,107,300,000	\$81,084,500,000

<b>Federal Civilian Government</b>	\$3,751,390,000	\$4,391,100,000	\$4,780,640,000	\$5,147,370,000	\$5,442,790,000	\$5,621,590,000	\$5,826,300,000	\$6,051,600,000	\$6,295,200,000
<b>Federal Military Government</b>	\$2,475,230,000	\$3,160,120,000	\$2,765,140,000	\$3,080,300,000	\$3,297,820,000	\$3,501,760,000	\$3,705,550,000	\$3,907,320,000	\$4,105,500,000
<b>State &amp; Local Government</b>	\$7,767,210,000	\$9,425,300,000	\$12,287,500,000	\$13,602,900,000	\$16,338,300,000	\$18,271,300,000	\$20,198,700,000	\$22,200,700,000	\$24,272,200,000

**Source: Woods & Poole Economics, Inc.**





**Table E-8**

<b>GA Earnings by Sector (%)</b>										
<b>Category</b>	<b>1980</b>	<b>1985</b>	<b>1990</b>	<b>1995</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>
<b>Total (1996 \$)</b>	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
<b>Farm (1996 \$)</b>	0.16%	1.27%	1.36%	1.40%	0.98%	0.93%	0.89%	0.85%	0.82%	0.79%
<b>Agricultural Services, Other (1996 \$)</b>	0.37%	0.41%	0.46%	0.53%	0.59%	0.60%	0.61%	0.62%	0.62%	0.62%
<b>Mining (1996 \$)</b>	0.65%	0.48%	0.36%	0.29%	0.27%	0.25%	0.22%	0.21%	0.19%	0.18%
<b>Construction (1996 \$)</b>	5.66%	6.57%	5.82%	5.39%	6.00%	5.86%	5.67%	5.46%	5.26%	5.06%
<b>Manufacturing (1996 \$)</b>	22.54%	20.03%	17.51%	16.84%	14.86%	14.45%	14.05%	13.59%	13.08%	12.53%
<b>Trans., Comm., &amp; Public Utilities (1996 \$)</b>	9.33%	8.85%	8.75%	9.43%	9.89%	9.99%	10.01%	9.96%	9.84%	9.63%
<b>Wholesale Trade (1996 \$)</b>	8.87%	9.04%	8.86%	8.17%	8.44%	8.36%	8.21%	8.05%	7.88%	7.71%
<b>Retail Trade (1996 \$)</b>	10.33%	10.64%	9.17%	9.08%	8.99%	8.97%	8.93%	8.87%	8.80%	8.71%
<b>Finance, Insurance, &amp; Real Estate (1996 \$)</b>	5.44%	5.59%	6.43%	6.86%	7.57%	7.66%	7.73%	7.78%	7.81%	7.82%
<b>Services (1996 \$)</b>	15.63%	17.36%	21.95%	24.33%	26.77%	27.78%	29.02%	30.44%	32.02%	33.73%
<b>Federal Civilian Government (1996 \$)</b>	5.64%	5.11%	4.66%	4.17%	3.39%	3.11%	2.87%	2.67%	2.49%	2.33%
<b>Federal Military Government (1996 \$)</b>	3.72%	3.68%	2.69%	2.49%	2.06%	1.94%	1.83%	1.72%	1.62%	1.53%
<b>State &amp; Local Government (1996 \$)</b>	11.67%	10.97%	11.97%	11.01%	10.18%	10.10%	9.95%	9.78%	9.58%	9.37%

**Source: Woods & Poole Economics, Inc.**

# Average Weekly Wages Paid by Sector to Individuals

## Wages

In 2004, the average weekly wage paid in Long County was \$368. Between 2001 and 2004, average weekly wages have increased 9.5 per cent. Current average weekly wages paid by sector range from a low of \$307 in services to a high of \$624 in the Federal Government sector. Historically, these sectors have always been at the higher and lower ends of the wage scale. The highest wage growth rates between 2001 and 2004 were in manufacturing (60.27 per cent), transportation, communication & utilities (59.26 per cent), and services (49.76 per cent).

The overall 2001 to 2004 increases in Long County wages were below the state average (Table E-9) and local wages remain significantly lower than elsewhere in Georgia. The only sector comparable in actual wages is the state government sector. The largest local-statewide wage gaps are found in services (171 per cent) and Financial, Insurance & Real Estate (153 per cent).

**Table E-9**  
Average weekly wages 2001 to 2004  
Long County                      Georgia

Category	2001	2002	2003	2004	2001	2002	2003	2004
All Industries	\$336	\$371	\$356	\$368	\$676	\$687	\$704	\$711
Agr., Forestry, Fishing	175	249	317	ND	416	409	421	436
Mining	ND	ND	ND	ND	957	915	952	965
Construction	321	510	303	ND	686	693	710	724
Manufacturing	ND	ND	385	617	712	727	761	784
Transportation, Comm., Util.	243	275	303	387	667	674	690	696
Wholesale	ND	ND	ND	ND	1021	1019	1032	1040
Retail	243	259	277	ND	433	440	454	463
Financial, Insurance, Real Estate	ND	332	442	ND	1051	1081	1117	1077
Services	205	229	259	307	681	688	702	700
Federal Gov	527	585	559	624	892	969	1036	1085
State Gov	508	552	549	514	605	631	640	651
Local Gov	394	386	385	393	571	593	610	640

Source: U.S. Bureau of Labor Statistics

Table E-10

GA Average Weekly Wages											
Category	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
All Industries	\$404	\$424	\$444	\$471	\$480	\$488	\$509	\$531	\$562	\$598	\$629
Agr., Forestry, Fishing	267	276	285	297	304	312	322	336	347	373	390
Mining	561	589	605	NA	NA	698	734	741	781	832	866
Construction	NA	434	439	451	461	479	508	534	556	590	623
Manufacturing	NA	450	473	503	511	531	555	588	620	656	684
Transportation, Comm., Util.	NA	603	635	689	709	720	737	769	805	842	895
Wholesale	NA	603	632	669	695	711	729	762	809	873	932
Retail	NA	236	244	255	260	267	275	286	299	318	335
Financial, Insurance, Real Estate	NA	544	569	627	648	648	693	741	799	872	900
Services	NA	414	439	464	471	475	501	519	551	580	611
Federal Gov	NA	543	584	612	651	667	666	701	774	791	808
State Gov	NA	451	462	460	471	NA	493	517	533	561	579
Local Gov	NA	387	401	401	410	420	440	461	480	506	523

Source: U.S. Bureau of Labor Statistics

# Personal Income by Type

## Sources of Personal Income

Sources of personal income indicate how communities receive income. The Georgia Department of Community Affairs, with the assistance of Woods & Poole Economics, Inc., has developed categories of personal income, which include the following:

1. **Wage and Salary** - Total income earned as compensation for working or rendering services;
2. **Other Labor Income** - Total employer contributions to private pension or worker's compensation funds;
3. **Proprietor's Income** - Proprietor's income measured as total profits earned from partnerships and sole proprietorships;
4. **Dividends-Investment-Rent-and Interest Payments, and Interest Income** - Total income from investments and rental property; and
5. **Transfer Payments** - Total income from payments by government under different programs, such as Social Security, unemployment insurance, food stamps, and veteran's benefits.

Between 1990 and 2000, overall personal income in Long County rose by \$46.37 million or 61 per cent. This is above the state average increase of 55.2 per cent. Associated with these figures is a Residence Adjustment category, which measures the net amount of Long County residents' personal income earned outside the county. When the number is positive, as in Long County (Table E-11), the amount of income earned outside the county by Long County residents is greater than the amount of income earned in the county by nonresidents. Long County's residence adjustment has declined from 59.61 per cent in 1990 to 0.08 per cent in 2000. The State residence adjustment has remained steady since 1990 and that trend is projected to continue through 2025. Long County residents' increasing level of personal income earned outside the county highlights a weak local economy.

In 2005, Resident Adjustment category payments account for the largest source of personal income at \$65.61 million or 46.67 per cent, followed by transfer payments at \$28.51 million (20.28 per cent), and dividends, interest and rent at \$18.62 million (13.24 per cent). On the lower end of the scale, social insurance contributions and other labor income account for \$1.16 million (0.83 per cent) and \$3.03 million (2.16 per cent) respectively.

The most dramatic difference between Long County and the state average is in transfer payments. Long County residents are two times more dependent on transfer payments than the state as a whole, reflecting the county's aging population and higher poverty rate, which stands at 19.5 per cent versus the state average of 13 per cent.

On average, all sources of personal income are projected to rise, with some sources outpacing others. Between 2000 and 2025, overall personal income will increase by 59.35 per cent, significantly lower than the state average of 78.5 per cent. At 121.66 per cent and 42.28 per cent respectively, transfer payments and wages & salaries (with Resident Adjustment category included) will account for the largest increase in Long County sources of income through 2025.

**Table E-11**

<b>Long County: Personal Income by Type (in millions)</b>										
<b>Category</b>	<b>1980</b>	<b>1985</b>	<b>1990</b>	<b>1995</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>
<b>Total (1996 \$)</b>	\$48.02	\$62.10	\$75.87	\$98.76	\$122.24	\$140.57	\$152.78	\$165.47	\$179.32	\$194.79
<b>Wages &amp; Salaries (1996 \$)</b>	\$8.08	\$8.13	\$7.44	\$9.34	\$14.12	\$17.62	\$19.15	\$20.64	\$22.22	\$23.93
<b>Other Labor Income (1996 \$)</b>	\$1.01	\$1.46	\$1.54	\$1.99	\$2.79	\$3.03	\$3.25	\$3.45	\$3.66	\$3.90
<b>Proprietors Income (1996 \$)</b>	\$3.04	\$3.81	\$2.58	\$3.61	\$5.39	\$6.02	\$6.44	\$6.84	\$7.26	\$7.71
<b>Dividends, Interest, &amp; Rent (1996 \$)</b>	\$5.31	\$8.03	\$9.03	\$12.90	\$16.40	\$18.62	\$20.34	\$22.24	\$24.36	\$26.73
<b>Transfer Payments to Persons (1996 \$)</b>	\$7.57	\$7.89	\$9.58	\$15.49	\$21.42	\$28.51	\$32.42	\$36.83	\$41.83	\$47.48
<b>Less: Social Ins. Contributions (1996 \$)</b>	\$0.45	\$0.58	\$0.49	\$0.73	\$0.90	\$1.16	\$1.31	\$1.46	\$1.61	\$1.77
<b>Residence Adjustment (1996 \$)</b>	\$22.55	\$32.21	\$45.22	\$54.70	\$61.22	\$65.61	\$69.88	\$74.00	\$78.38	\$83.26

Source: Woods & Poole Economics, Inc.

**Table E-12**

<b>Long County: Income by Type (%)</b>										
<b>Category</b>	<b>1980</b>	<b>1985</b>	<b>1990</b>	<b>1995</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>
<b>Total (1996 \$)</b>	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
<b>Wages &amp; Salaries (1996 \$)</b>	16.84%	13.08%	9.80%	9.46%	11.55%	12.54%	12.53%	12.48%	12.39%	12.29%
<b>Other Labor Income (1996 \$)</b>	2.11%	2.35%	2.02%	2.01%	2.29%	2.16%	2.12%	2.09%	2.04%	2.00%
<b>Proprietors Income (1996 \$)</b>	6.33%	6.14%	3.40%	3.66%	4.41%	4.29%	4.22%	4.13%	4.05%	3.96%
<b>Dividends, Interest, &amp; Rent (1996 \$)</b>	11.07%	12.93%	11.90%	13.06%	13.42%	13.24%	13.31%	13.44%	13.59%	13.72%
<b>Transfer Payments to Persons (1996 \$)</b>	15.77%	12.70%	12.62%	15.68%	17.52%	20.28%	21.22%	22.26%	23.32%	24.38%
<b>Less: Social Ins. Contributions (1996 \$)</b>	0.93%	0.94%	0.65%	0.74%	0.74%	0.83%	0.86%	0.88%	0.90%	0.91%
<b>Residence Adjustment (1996 \$)</b>	46.96%	51.86%	59.61%	55.39%	50.08%	46.67%	45.74%	44.72%	43.71%	42.74%

Source: Woods & Poole Economics, Inc.

**Table E-13**

<b>Georgia: GA Sources of Personal Income by Type (In millions)</b>										
<b>Category</b>	<b>1980</b>	<b>1985</b>	<b>1990</b>	<b>1995</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>
<b>Total (1996 \$)</b>	\$84,202.00	\$110,382.00	\$134,782.00	\$163,230.00	\$209,309.00	\$236,962.00	\$266,921.00	\$299,617.00	\$335,164.00	\$373,728.00
<b>Wages &amp; Salaries (1996 \$)</b>	\$53,972.90	\$68,598.80	\$81,355.60	\$96,422.80	\$128,049.00	\$144,760.00	\$162,812.00	\$182,588.00	\$204,172.00	\$227,684.00
<b>Other Labor Income (1996 \$)</b>	\$7,079.35	\$9,626.20	\$11,702.30	\$14,092.00	\$14,308.00	\$15,909.50	\$17,605.10	\$19,429.50	\$21,384.60	\$23,476.20
<b>Proprietors Income (1996 \$)</b>	\$5,484.85	\$7,694.69	\$9,584.28	\$12,998.90	\$18,105.40	\$20,196.60	\$22,501.70	\$25,001.50	\$27,696.80	\$30,597.40
<b>Dividends, Interest, &amp; Rent (1996 \$)</b>	\$10,987.00	\$17,428.30	\$23,366.90	\$26,625.00	\$35,169.00	\$39,713.00	\$44,582.20	\$49,772.60	\$55,274.60	\$61,073.90
<b>Transfer Payments to Persons (1996 \$)</b>	\$9,867.38	\$11,841.30	\$14,749.80	\$20,606.70	\$23,300.90	\$26,662.00	\$30,514.50	\$34,921.90	\$39,972.80	\$45,770.20
<b>Less: Social Ins. Contributions (1996 \$)</b>	\$2,978.19	\$4,527.88	\$5,839.73	\$7,270.25	\$9,397.99	\$11,070.60	\$12,973.80	\$15,086.60	\$17,406.50	\$19,929.40
<b>Residence Adjustment (1996 \$)</b>	(\$2.11)	(\$2.79)	(\$1.37)	(\$2.45)	(\$2.25)	\$7.91	\$1,878.00	\$2,989.75	\$4,070.24	\$5,055.28

Source: Woods & Poole Economics, Inc.

**Table E-14**

<b>Georgia: GA Sources of Personal Income by Type %</b>										
<b>Category</b>	<b>1980</b>	<b>1985</b>	<b>1990</b>	<b>1995</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>
<b>Total (1996 \$)</b>	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
<b>Wages &amp; Salaries (1996 \$)</b>	59.86%	57.43%	60.36%	59.07%	61.18%	61.09%	61.00%	60.94%	60.92%	60.92%



<b>Other Labor Income (1996 \$)</b>	7.85%	8.06%	8.68%	8.63%	6.84%	6.71%	6.60%	6.48%	6.38%	6.2
<b>Proprietors Income (1996 \$)</b>	6.08%	6.44%	7.11%	7.96%	8.65%	8.52%	8.43%	8.34%	8.26%	8.1
<b>Dividends, Interest, &amp; Rent (1996 \$)</b>	12.19%	14.59%	17.34%	16.31%	16.80%	16.76%	16.70%	16.61%	16.49%	16.
<b>Transfer Payments to Persons (1996 \$)</b>	10.94%	9.91%	10.94%	12.62%	11.13%	11.25%	11.43%	11.66%	11.93%	12.
<b>Less: Social Ins. Contributions (1996 \$)</b>	3.30%	3.79%	4.33%	4.45%	4.49%	4.67%	4.86%	5.04%	5.19%	5.3
<b>Residence Adjustment (1996 \$)</b>	-0.23%	-0.23%	-0.10%	-0.15%	-0.11%	0.33%	0.70%	1.00%	1.21%	1.3

## Major Community-Level Economic Activities

The Long County area has seen an increase in economic activity since 1970. The county's transportation infrastructure and proximity to large metro areas provides economic development opportunities.

The county has been proactive in the areas of planning and providing the necessary infrastructure to attract industry, such as the development of the Long County/Ludowici Industrial Park. This park contains 50 acres of land and is located on Georgia State Highway 84. The county has completed constructing water, sewer and utility infrastructure to the Park. Funds were provided by the OneGeorgia grant opportunity. Land clearing and road construction tasks remain to be completed. The Development Authority of Long County and Chamber of Commerce are the primary vehicles to attract and provide available location opportunities for industrial development, and are currently in talks with an industrial entity. The Chamber of Commerce is actively involved in promoting tourism, business and industrial development, and improving the quality of life for Long County residents.

### Services

Service employment in Long County increased steadily from 1990 to 2000. In 1990 service employment accounted for 239 jobs, or 10 per cent of total employment. By 2000, the number of service jobs had increased 155 per cent to 610.

The five largest employers in Long County include the following employers:

- Creamers Contracting
- Dairy queen
- DeLoach Building Components Inc.
- GHM Rock & sand, Inc.
- Huddle House

The ten largest employers in the Long County area which includes the counties of Liberty, Tattnall, Wayne, Long and McIntosh employing Long County residents includes the following:

- Lear Siegler Services, Inc. (Liberty County)
- Liberty Regional Medical Center (Liberty County)
- SNF Holding Company (Liberty County)
- Wal-Mart Associates Inc. (Liberty County)
- Georgia Department of Corrections (Tattnall County)

- Rotary Corporation (Tattnall County)
- Justice Employee Data Service (Wayne County)
- Rayonier Inc. (Wayne County)
- Wal-Mart Associates Inc. (Wayne County)
- Wayne Memorial Hospital (Wayne County)

### **Major Development Trends and Unique Economic Opportunities**

Understanding that industry can stimulate the local economy, Long County is in process of pursuing various strategies aimed at promoting industrial development. These efforts include establishing an industrial park and working with the Chamber of Commerce to promote Long County's unique qualities.

Following are types of several of the most promising types of development opportunities for Long County.

- **Retirement Communities** - Research indicates that most retirees are concerned more with climate and security than with community amenities. The market for retirement living is growing in numbers and expanding geographically, as some "sunbelt" areas have become urbanized and overcrowded. Long County offers some distinct location and quality-of-life advantages for this market.
- **Commercial Nursery/Greenhouse Operation** - Another growth industry with potential for a rural location is "farming" various types of landscaping materials that are in high demand. As high rates of commercial and residential development continue throughout coastal Georgia, a demand for such materials is expected to expand exponentially.
- **Eco-Tourism** - One of the most promising opportunities for rural areas generally is tourism focusing on unique landscapes, wildlife, or natural settings. Growing numbers of tourists are seeking such experiences as bird watching, hiking interpretive nature trails, and fishing, as well as canoeing and kayaking, in pristine rivers and streams. Research indicates that these markets are most effectively captured by combining several types of activities or destinations. With adequate preparation, combinations of "packaged" tours serving the eco-tourism markets could bring significant economic benefits to Long County.
- **Historic Tourism** - Complimentary to eco-tourism is promotion of the area's historic character. "Old South Farm Days," an annual local event promoted throughout the state, is a good example of the potential offered by this market. Various historic sites and buildings in the area provide a largely untapped resource for further developing Long County's tourism market.
- **Telecommunications** - Recent studies reveal that rural areas served by telephone facilities with optic fiber technology are in a prime position to develop telecommunication "back office" operations, for which there is a rapidly growing market. A study completed for the Liberty County/Hinesville area found that this

type of business was particularly appropriate due to both labor market and state-of-the-art phone lines and service available through Coastal Utilities.

- **Residential Community Potential** - In addition to the retirement market, Long County offers location and life-style advantages as a "bedroom community" for workers employed in neighboring counties.

- **Selected Light Industry** - While some industries would be environmentally incompatible with Long County's rural quality of life, and until others are more likely to locate in urban areas, there are certain small-scale and light-manufacturing operations that may be well suited to the area.

## Description of Labor Force Data

### LABOR FORCE ANALYSIS

This section examines Long County's labor force characteristics, including occupation, levels of participation, unemployment and commuting patterns.

### Employment by Occupation

Service occupations and sales account for the highest share of occupational groupings in Long County (31.61 per cent) and increased substantially between 1990 and 2000. These occupational groupings account for less than 23.21 per cent statewide and 23.26 per cent nationwide occupations. By contrast, professional and technical occupations, which account for 18.6% statewide and 20.20% nationwide occupations, account for 5.03 per cent in Long County. These occupation trends highlight the more labor-intensive nature of the local economy in contrast to the state's more knowledge-based orientation.

# Employment by Occupation

Table E-15

<b>Long County: Employment by Occupation</b>		
<b>Category</b>	<b>1990</b>	<b>2000</b>
<b>TOTAL All Occupations</b>	2306	3854
<b>Executive, Administrative and Managerial (not Farm)</b>	268	549
<b>Professional and Technical Specialty</b>	163	194
<b>Technicians &amp; Related Support</b>	74	58
<b>Sales</b>	233	608
<b>Clerical and Administrative Support</b>	252	449
<b>Private Household Services</b>	5	NA
<b>Protective Services</b>	105	179
<b>Service Occupations (not Protective &amp; Household)</b>	239	610
<b>Farming, Fishing and Forestry</b>	122	108
<b>Precision Production, Craft, and Repair</b>	357	465
<b>Machine Operators, Assemblers &amp; Inspectors</b>	192	199
<b>Transportation &amp; Material Moving</b>	185	215
<b>Handlers, Equipment Cleaners, helpers &amp; Laborers</b>	111	220

Source: U.S. Bureau of the Census

Table E-16

<b>Long County: Employment by Occupation (%)</b>		
<b>Category</b>	<b>1990</b>	<b>2000</b>
<b>TOTAL All Occupations</b>	100.00%	100.00%
<b>Executive, Administrative and Managerial (not Farm)</b>	11.62%	14.24%
<b>Professional and Technical Specialty</b>	7.07%	5.03%
<b>Technicians &amp; Related Support</b>	3.21%	1.50%
<b>Sales</b>	10.10%	15.78%
<b>Clerical and Administrative Support</b>	10.93%	11.65%
<b>Private Household Services</b>	0.22%	0.00%
<b>Protective Services</b>	4.55%	4.64%
<b>Service Occupations (not Protective &amp; Household)</b>	10.36%	15.83%
<b>Farming, Fishing and Forestry</b>	5.29%	2.80%
<b>Precision Production, Craft, and Repair</b>	15.48%	12.07%
<b>Machine Operators, Assemblers &amp; Inspectors</b>	8.33%	5.16%
<b>Transportation &amp; Material Moving</b>	8.02%	5.58%
<b>Handlers, Equipment Cleaners, helpers &amp; Laborers</b>	4.81%	5.71%

Source: U.S. Bureau of the Census

Table E-17

<b>Georgia: GA Employment by Occupation</b>		
<b>Category</b>	<b>1990</b>	<b>2000</b>
<b>TOTAL All Occupations</b>	3092057	3839756
<b>Executive, Administrative and Managerial (not Farm)</b>	378984	538647
<b>Professional and Technical Specialty</b>	383012	717312
<b>Technicians &amp; Related Support</b>	110766	NA
<b>Sales</b>	379746	446876
<b>Clerical and Administrative Support</b>	494823	581364
<b>Private Household Services</b>	15882	NA
<b>Protective Services</b>	52596	NA
<b>Service Occupations (not Protective &amp; Household)</b>	302084	444077
<b>Farming, Fishing and Forestry</b>	68111	24489
<b>Precision Production, Craft, and Repair</b>	366819	346326
<b>Machine Operators, Assemblers &amp; Inspectors</b>	262930	415849
<b>Transportation &amp; Material Moving</b>	142189	254652
<b>Handlers, Equipment Cleaners, helpers &amp; Laborers</b>	134115	NA

Source: U.S. Bureau of the Census

Table E-18

<b>Georgia: GA Employment by Occupation (%)</b>		
<b>Category</b>	<b>1990</b>	<b>2000</b>
<b>TOTAL All Occupations</b>	100.00%	100.00%
<b>Executive, Administrative and Managerial (not Farm)</b>	12.26%	14.03%
<b>Professional and Technical Specialty</b>	12.39%	18.68%
<b>Technicians &amp; Related Support</b>	3.58%	NA
<b>Sales</b>	12.28%	11.64%
<b>Clerical and Administrative Support</b>	16.00%	15.14%
<b>Private Household Services</b>	0.51%	NA
<b>Protective Services</b>	1.70%	NA
<b>Service Occupations (not Protective &amp; Household)</b>	9.77%	11.57%
<b>Farming, Fishing and Forestry</b>	2.20%	0.64%
<b>Precision Production, Craft, and Repair</b>	11.86%	9.02%
<b>Machine Operators, Assemblers &amp; Inspectors</b>	8.50%	10.83%
<b>Transportation &amp; Material Moving</b>	4.60%	6.63%
<b>Handlers, Equipment Cleaners, helpers &amp; Laborers</b>	4.34%	NA

Source: U.S. Bureau of the Census



Table E-19

<b>All of United States: US Employment by Occupation</b>		
<b>Category</b>	<b>1990</b>	<b>2000</b>
<b>TOTAL All Occupations</b>	115452905	129721512
<b>Executive, Administrative and Managerial (not Farm)</b>	14227916	17448038
<b>Professional and Technical Specialty</b>	16287187	26198693
<b>Technicians &amp; Related Support</b>	4251007	NA
<b>Sales</b>	13606870	14592699
<b>Clerical and Administrative Support</b>	18769526	20028691
<b>Private Household Services</b>	520183	NA
<b>Protective Services</b>	1981723	NA
<b>Service Occupations (not Protective &amp; Household)</b>	12746927	15575101
<b>Farming, Fishing and Forestry</b>	2835950	951810
<b>Precision Production, Craft, and Repair</b>	13077829	11008625
<b>Machine Operators, Assemblers &amp; Inspectors</b>	7886595	12256138
<b>Transportation &amp; Material Moving</b>	4715847	7959871
<b>Handlers, Equipment Cleaners, helpers &amp; Laborers</b>	4545345	NA

Source: U.S. Bureau of the Census

Table E- 20

<b>All of United States: US Employment by Occupation (%)</b>		
<b>Category</b>	<b>1990</b>	<b>2000</b>
<b>TOTAL All Occupations</b>	100.00%	100.00%
<b>Executive, Administrative and Managerial (not Farm)</b>	12.32%	13.45%
<b>Professional and Technical Specialty</b>	14.11%	20.20%
<b>Technicians &amp; Related Support</b>	3.68%	NA
<b>Sales</b>	11.79%	11.25%
<b>Clerical and Administrative Support</b>	16.26%	15.44%
<b>Private Household Services</b>	0.45%	NA
<b>Protective Services</b>	1.72%	NA
<b>Service Occupations (not Protective &amp; Household)</b>	11.04%	12.01%
<b>Farming, Fishing and Forestry</b>	2.46%	0.73%
<b>Precision Production, Craft, and Repair</b>	11.33%	8.49%
<b>Machine Operators, Assemblers &amp; Inspectors</b>	6.83%	9.45%
<b>Transportation &amp; Material Moving</b>	4.08%	6.14%
<b>Handlers, Equipment Cleaners, helpers &amp; Laborers</b>	<b>3.94%</b>	<b>NA</b>

Source: U.S. Bureau of the Census

# **Employment Status**

## **Labor Force Participation and Employment Status**

Companies locating within Long County have an ample workforce to choose from. With an average commute time of approximately 30 minutes, people are willing to travel to a good job. The civilian workforce of the Long County area is 48,187 persons. An estimated additional 2,291 persons from the non-traditional labor force (students, post secondary, military dependents, military retirees, and civilian retirees) are available for employment.

Table E-21 identifies labor force participation rates for Long County. In 2000, total labor force participation in Long County was 67.3 per cent. Between 1990 and 2000, the total number of residents in the labor force increased by 66.97 per cent in Long County. On average, the county's various labor force participation rates are comparable to that of the state and better than national averages.

Table E-21

<b>Long County: Labor Force Participation</b>		
<b>Category</b>	<b>1990</b>	<b>2000</b>
<b>TOTAL Males and Females</b>	4353	7265
<b>In Labor Force</b>	2928	4889
<b>Civilian Labor Force</b>	2562	4224
<b>Civilian Employed</b>	2306	3854
<b>Civilian Unemployed</b>	256	370
<b>In Armed Forces</b>	366	665
<b>Not in Labor Force</b>	1607	2376
<b>TOTAL Males</b>	2267	3655
<b>Male In Labor Force</b>	1724	2869
<b>Male Civilian Labor Force</b>	1390	2250
<b>Male Civilian Employed</b>	1282	2124
<b>Male Civilian Unemployed</b>	108	126
<b>Male In Armed Forces</b>	334	619
<b>Male Not in Labor Force</b>	543	786
<b>TOTAL Females</b>	2268	3610
<b>Female In Labor Force</b>	1204	2020
<b>Female Civilian Labor Force</b>	1172	1974
<b>Female Civilian Employed</b>	1024	1730
<b>Female Civilian Unemployed</b>	148	244
<b>Female In Armed Forces</b>	32	46
<b>Female Not in Labor Force</b>	1064	1590

Source: U.S. Bureau of the Census

**Table E- 22**

<b>Long County: Labor Force Participation (%)</b>		
<b>Category</b>	<b>1990</b>	<b>2000</b>
<b>TOTAL Males and Females</b>	100.00%	100.00%
<b>In Labor Force</b>	67.26%	67.30%
<b>Civilian Labor Force</b>	58.86%	58.14%
<b>Civilian Employed</b>	52.97%	53.05%
<b>Civilian Unemployed</b>	5.88%	5.09%
<b>In Armed Forces</b>	8.41%	9.15%
<b>Not in Labor Force</b>	36.92%	32.70%
<b>TOTAL Males</b>	100.00%	100.00%
<b>Male In Labor Force</b>	76.05%	78.50%
<b>Male Civilian Labor Force</b>	61.31%	61.56%
<b>Male Civilian Employed</b>	56.55%	58.11%
<b>Male Civilian Unemployed</b>	4.76%	3.45%
<b>Male In Armed Forces</b>	14.73%	16.94%
<b>Male Not in Labor Force</b>	23.95%	21.50%
<b>TOTAL Females</b>	100.00%	100.00%
<b>Female In Labor Force</b>	53.09%	55.96%
<b>Female Civilian Labor Force</b>	51.68%	54.68%
<b>Female Civilian Employed</b>	45.15%	47.92%
<b>Female Civilian Unemployed</b>	6.53%	6.76%
<b>Female In Armed Forces</b>	1.41%	1.27%
<b>Female Not in Labor Force</b>	46.91%	44.04%

Source: U.S. Bureau of the Census

**Table E-23**

<b>Georgia: GA Labor Force Participation</b>		
<b>Category</b>	<b>1990</b>	<b>2000</b>
<b>TOTAL Males and Females</b>	4939774	6250687
<b>In Labor Force</b>	3353372	4129666
<b>Civilian Labor Force</b>	3280314	4062808
<b>Civilian Employed</b>	3092374	3839756
<b>Civilian Unemployed</b>	187940	223052
<b>In Armed Forces</b>	73058	66858
<b>Not in Labor Force</b>	1586402	2121021
<b>TOTAL Males</b>	2357580	3032442
<b>Male In Labor Force</b>	1807053	2217015
<b>Male Civilian Labor Force</b>	1741609	2159175
<b>Male Civilian Employed</b>	1652016	2051523
<b>Male Civilian Unemployed</b>	89593	107652
<b>Male In Armed Forces</b>	65444	57840
<b>Male Not in Labor Force</b>	550527	815427
<b>TOTAL Females</b>	2582194	3218245
<b>Female In Labor Force</b>	1546319	1912651
<b>Female Civilian Labor Force</b>	1538705	1903633
<b>Female Civilian Employed</b>	1440358	1788233
<b>Female Civilian Unemployed</b>	98347	115400
<b>Female In Armed Forces</b>	7614	9018
<b>Female Not in Labor Force</b>	1035875	1305594

Source: U.S. Bureau of the Census

Table E-24

<b>Georgia: GA Labor Force Participation (%)</b>		
<b>Category</b>	<b>1990</b>	<b>2000</b>
<b>TOTAL Males and Females</b>	100.00%	100.00%
<b>In Labor Force</b>	67.89%	66.07%
<b>Civilian Labor Force</b>	66.41%	65.00%
<b>Civilian Employed</b>	62.60%	61.43%
<b>Civilian Unemployed</b>	3.80%	3.57%
<b>In Armed Forces</b>	1.48%	1.07%
<b>Not in Labor Force</b>	32.11%	33.93%
<b>TOTAL Males</b>	100.00%	100.00%
<b>Male In Labor Force</b>	76.65%	73.11%
<b>Male Civilian Labor Force</b>	73.87%	71.20%
<b>Male Civilian Employed</b>	70.07%	67.65%
<b>Male Civilian Unemployed</b>	3.80%	3.55%
<b>Male In Armed Forces</b>	2.78%	1.91%
<b>Male Not in Labor Force</b>	23.35%	26.89%
<b>TOTAL Females</b>	100.00%	100.00%
<b>Female In Labor Force</b>	59.88%	59.43%
<b>Female Civilian Labor Force</b>	59.59%	59.15%
<b>Female Civilian Employed</b>	55.78%	55.57%
<b>Female Civilian Unemployed</b>	3.81%	3.59%
<b>Female In Armed Forces</b>	0.29%	0.28%
<b>Female Not in Labor Force</b>	40.12%	40.57%

Source: U.S. Bureau of the Census

**Table E-25**

<b>All of United States: US Labor Force Participation</b>		
<b>Category</b>	<b>1990</b>	<b>2000</b>
<b>TOTAL Males and Females</b>	191293337	217168077
<b>In Labor Force</b>	124882409	138820935
<b>Civilian Labor Force</b>	123176636	137668798
<b>Civilian Employed</b>	115431436	129721512
<b>Civilian Unemployed</b>	7745200	7947286
<b>In Armed Forces</b>	1705773	1152137
<b>Not in Labor Force</b>	66410928	78347142
<b>TOTAL Males</b>	91866829	104982282
<b>Male In Labor Force</b>	68417853	74273203
<b>Male Civilian Labor Force</b>	66897041	73285305
<b>Male Civilian Employed</b>	62639048	69091443
<b>Male Civilian Unemployed</b>	4257993	4193862
<b>Male In Armed Forces</b>	1520812	987898
<b>Male Not in Labor Force</b>	23448976	30709079
<b>TOTAL Females</b>	99426508	112185795
<b>Female In Labor Force</b>	56464556	64547732
<b>Female Civilian Labor Force</b>	56279595	64383493
<b>Female Civilian Employed</b>	52792388	60630069
<b>Female Civilian Unemployed</b>	3487207	3753424
<b>Female In Armed Forces</b>	184961	164239
<b>Female Not in Labor Force</b>	42961952	47638063

Source: U.S. Bureau of the Census



**Table E-26**

<b>All of United States: US Labor Force Participation (%)</b>		
<b>Category</b>	<b>1990</b>	<b>2000</b>
<b>TOTAL Males and Females</b>	100.00%	100.00%
<b>In Labor Force</b>	65.28%	63.92%
<b>Civilian Labor Force</b>	64.39%	63.39%
<b>Civilian Employed</b>	60.34%	59.73%
<b>Civilian Unemployed</b>	4.05%	3.66%
<b>In Armed Forces</b>	0.89%	0.53%
<b>Not in Labor Force</b>	34.72%	36.08%
<b>TOTAL Males</b>	100.00%	100.00%
<b>Male In Labor Force</b>	74.48%	70.75%
<b>Male Civilian Labor Force</b>	72.82%	69.81%
<b>Male Civilian Employed</b>	68.18%	65.81%
<b>Male Civilian Unemployed</b>	4.63%	3.99%
<b>Male In Armed Forces</b>	1.66%	0.94%
<b>Male Not in Labor Force</b>	25.52%	29.25%
<b>TOTAL Females</b>	100.00%	100.00%
<b>Female In Labor Force</b>	56.79%	57.54%
<b>Female Civilian Labor Force</b>	56.60%	57.39%
<b>Female Civilian Employed</b>	53.10%	54.04%
<b>Female Civilian Unemployed</b>	3.51%	3.35%
<b>Female In Armed Forces</b>	0.19%	0.15%
<b>Female Not in Labor Force</b>	43.21%	42.46%

Source: U.S. Bureau of the Census

# Unemployment rates

## Unemployment

Table E-27 highlights unemployment rates in Long County, neighboring counties, the state and the nation. Unemployment rates in Long County remain stable when compared to neighboring counties of Liberty, Wayne and Tattnall. Rates have declined steadily, mirroring the state and national trends.

**Table E-27**

<b>Unemployment Statistics</b>											
<b>Category</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>
<b>Long County</b>	3.9%	5.2%	4.2%	3.5%	3.7%	3.3%	2.8%	2.8%	2.4%	3.3%	3.1%
<b>Liberty County</b>	8.6%	7.6%	7.3%	7.1%	6.0%	5.7%	5.1%	5.9%	5.4%	6.3%	6.1%
<b>Tattnall County</b>	4.9%	5.1%	4.7%	5.3%	5.6%	7.7%	5.3%	5.1%	4.5%	4.7%	6.7%
<b>Georgia</b>	5.8%	5.2%	4.9%	4.6%	4.5%	4.2%	4.0%	3.7%	3.7%	4.8%	4.9%
<b>U.S.</b>	6.9%	6.1%	5.6%	5.4%	4.9%	4.5%	4.2%	4.0%	4.8%	5.8%	6.2%

Source: Georgia Department of Labor

Table E-28

<b>Georgia: Labor Statistics</b>											
<b>Category</b>	<b>1990</b>	<b>1991</b>	<b>1992</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>
<b>Labor Force</b>	3,300,380	3,263,876	3,353,566	3,467,191	3,577,505	3,617,165	3,738,850	3,904,474	4,014,526	4,078,263	4,173,274
<b>Employed</b>	3,118,253	3,099,103	3,119,071	3,265,259	3,391,782	3,440,859	3,566,542	3,727,295	3,845,702	3,916,080	4,018,876
<b>Unemployed</b>	182,127	164,772	234,495	201,932	185,722	176,306	172,308	177,179	168,824	162,183	154,398
<b>Unemployment Rate</b>	5.5%	5.0%	7.0%	5.8%	5.2%	4.9%	4.6%	4.5%	4.2%	4.0%	3.7%

Source: Georgia Department of Labor

Table E-29

<b>United States: Labor Statistics</b>												
<b>Category</b>	<b>1990</b>	<b>1991</b>	<b>1992</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>
<b>Labor Force (thousands)</b>	125,840	126,346	128,105	129,200	196,814	132,304	133,943	136,297	137,673	139,368	140,863	141,815
<b>Employed (thousands)</b>	118,793	117,718	118,492	120,259	123,060	124,900	126,708	129,558	131,463	133,488	135,208	135,073
<b>Unemployed (thousands)</b>	7,047	8,628	9,613	8,940	7,996	7,404	7,236	6,739	6,210	5,880	5,655	6,742
<b>Unemployment Rate</b>	5.6%	6.8%	7.5%	6.9%	6.1%	5.6%	5.4%	4.9%	4.5%	4.2%	4.0%	4.8%

Source: U.S. Bureau of Labor Statistics



# Commuting Patterns

## Commuting to Work

Tables E-31 and E-32 provide commute-to-work data for Long County. In 2000, 14.2 per cent of Long County residents worked in the county, a decline from 18.6 per cent in 1990. The number of Long County residents working in neighboring counties has increased an average five percentage point from 1990 rates. Close to 30% of Long County jobs are held by non-residents.

**Table E-31**

<b>Long County: Labor Force by Place of Work</b>		
<b>Category</b>	<b>1990</b>	<b>2000</b>
<b>Worked in County of Residence</b>	485	608
<b>Worked outside county of Residence</b>	2125	3801

Source: 2000 U.S. Census Bureau

**Table E-32**

<b>Long County: Labor Force by Place of Work - %</b>		
<b>Category</b>	<b>1990</b>	<b>2000</b>
<b>Worked in County of Residence</b>	18.58%	13.78%
<b>Worked outside county of Residence</b>	81.42%	86.22%

Source: 2000 U.S. Census Bureau

**Table E-33**

<b>Long County Residents Place of Work</b>		
<b>County Where Employed</b>	<b>1990</b>	<b>2000</b>
Long County	485	608
Liberty County	1356	2149
Tattnall County	308	424
Chatham County	136	356
Wayne County	211	350
Evans County	12	81
Glynn County	10	79
Bryan County	6	150
Other	86	212

Source: 2000 U.S. Census Bureau

**Table E-34**

<b>Long County Residents Place of Work % of Total</b>		
<b>County Where Employed</b>	<b>1990</b>	<b>2000</b>
Long County	18.6%	13.8%
Liberty County	52.0%	48.7%
Tattnall County	11.8%	9.6%
Chatham County	5.2%	8.1%
Wayne County	8.1%	7.9%
Evans County	0.5%	1.8%
Glynn County	0.4%	1.8%
Bryan County	0.2%	3.4%
Other	3.2%	4.8%

Source: 2000 U.S. Census Bureau

# **Description of Local Development Resources**

## **Economic Development Agencies**

### **Local Economic Development Resources**

Effective economic development programs are a group effort, involving not only local government and staff but also the cooperation of and resources available from other potential partners.

- **Long County Development Authority and Chamber of Commerce**

The Development Authority of Long County and Chamber of Commerce are the primary vehicles to attract and provide available location opportunities for industrial development. The Development Authority is authorized to issue bonds on behalf of the county. The Chamber of Commerce is actively involved in promoting tourism, business and industrial development, and improving the quality of life for Long County residents. The Chamber markets the county in several statewide publications and participates in regional development efforts. To encourage business development in the County, the Chamber works closely with Georgia Power, the Georgia Electric Membership Corporation, the Georgia Department of Industry, Trade & Tourism, and the Coastal Georgia Regional Development Center.

- **Better Hometown Committee**

The Better Hometown Program (Georgia's small-town Main Street Program) and the Classic Main Street Program are self-help community development programs designed to improve a downtown's quality of life. Each designated city receives technical assistance and resources, which assist the local community in their efforts to build a stronger local economy through revitalization of the downtown area.

- **Education and Training Opportunities**

Long County has access to Vocational and Technical training programs in Liberty, Tattnall and Wayne Counties. Three programs are available in Liberty County including Armstrong-Atlantic State University, Brewton-Parker College, and Savannah Technical College. Two programs are available in Tattnall County including Brewton-Parker College and Southeastern Technical College. Altamaha Technical College is located In Wayne County. These programs provide training in business technologies, health

technology programs that include Certified Nursing Assisting, Practical Nursing, Emergency Medical Technician and Paramedic Training, CIS Technologies, Industrial Technologies, and Personal Service Technologies which include programs in Child Development associate, Cosmetology, and Criminal Justice specialties.

Long County has an attractive labor force. The Long Area Technical Programs graduated 736 students for the 2002-2003 program years. Long County residents have access to several institutions that provide advanced vocational and academic diplomas to serve the needs of incoming industries and businesses.

- **Georgia Power Company, Economic Development Division**

Georgia Power is the oldest economic developer in Georgia and includes an Economic Development Division whose primary role is to attract businesses to the state. Georgia Power's primary local contact for economic development issues is generally with the Chamber of Commerce. Georgia Power's main emphasis is heavy marketing of Georgia in general and responding to client's site needs by maintaining a current site inventory database. Georgia Power will provide communities with technical support to make changes necessary to attract business. The utility provides guidance on downtown revitalization, solid waste disposal systems and various funding sources available to help meet the cost of such improvements. Georgia Power's Community Development Department also serves as a clearinghouse for communities to identify matching grants and other programs to plant trees, add fire hydrants or upgrade water and sewer infrastructure.

- **Georgia Department of Industry, Trade and Tourism**

The Georgia Department of Industry, Trade and Tourism (GDITT) is a state-funded agency mandated to serve as an economic development agent for the state's local jurisdictions. The GDITT's primary purpose is to assist potential businesses considering locating in Georgia by identifying an optimal location for their operational needs. GDITT also assists the movie industry in locating appropriate movie locations throughout the state. The identification of international markets for the export of Georgia goods and services is another duty of the GDITT. In the event that a potential business is interested in the Long County area, GDITT policy is to work with both the Chamber of Commerce and the Development Authority. GDITT has a working relationship with utility companies, rail operators, banks, universities, and other agencies with resources to facilitate economic development. GDITT maintains a substantial computer-based inventory of commercial and industrial sites throughout Georgia.



## Resources—Programs and Tools

- **Georgia Business Expansion Support Act**

In 1994, the State passed legislation for tax credits against state income taxes to encourage economic development in Georgia. Some of the programs are targeted to specific industry groups (industry, tourism, and research & development) while others apply to all employers. Below is a summary of various available programs.

- 🕒 *Job Tax Credit.* Applies to business or headquarters of a business engaged in manufacturing, warehousing and distribution, processing, tourism, and research and development industries. Does not include retail businesses.
- 🕒 *Investment Tax Credit.* Allows a corporation, which has operated an existing manufacturing facility in the state for the previous three years, to obtain a credit against income tax liability.
- 🕒 *Retraining Tax Credit.* Any employer in Long County that provides retraining for employees is eligible for a tax credit equal to 25% of the costs of retraining per full-time student up to \$500.
- 🕒 *Child Care Credit.* Any employer in Long County that provides or sponsors childcare for employees is eligible for a tax credit of up to 50% of the direct cost of operation to the employer. The credit cannot exceed more than 50% of the taxpayer's total state income tax liability for that taxable year.
- 🕒 *Manufacturing Machinery Sales Tax Exemption.* Provides for exemption from sales and use tax for manufacturing equipment
- 🕒 *Primary Material Handling Sales Tax Exemption.* Provides for exemption from sales and use tax on purchases of primary material handling equipment which is used directly for the handling and movement of tangible personal property in a new or expanding warehouse or distribution facility when such new facility or expansion is worth \$10 million or more.
- 🕒 *Electricity Exemption.* Electricity purchased for the direct use in manufacturing a product is exempt from sales taxes when the total cost of the electricity accounts for over 50% or more of all the materials used in making the product. It allows full exemption on the sales tax and is available for new and existing firms.

- **Financing Mechanisms**

*Community Improvement Districts:* The Georgia Constitution provides for a special tax district called Community Improvement Districts (CID). This type of district can be created only upon the petition of property owners, and is managed by a board that includes representatives of the property owners and the County. Under a CID, only

nonresidential property is subject to the special tax and the funds must be used only for certain public facilities, such as roads and water and sewer utilities. Funds may be used for both capital and operating expenditures, and the special nature of the Act allows the basis of taxation to be the development density or impact of a property as well as its assessed value. The Act also allows debt financing without referendum since a majority of the property owners (who must own at least 75% of the properties by value) must request the CID designation. CIDs enjoy a lower interest rate due to their quasi-governmental status and their debts do not affect a city's debt limit.

*Enterprise Community:* Under an Urban Enterprise Zone, specific areas are delineated where deteriorating physical or market conditions have resulted in little or no investment in property improvements or development. Within an Urban Enterprise Zone, if a property owner renovates or develops a site, the City's property taxes can be frozen at the pre-improvement level for a specified time period, then rise in annual steps to full value taxation at the end of the period. This approach is useful in encouraging investment that would otherwise not occur, and in eventually increasing the tax base where taxes would otherwise continue to decline through depreciation.

*Tax Increment Financing:* TIF allows property taxes to rise as sites are developed or improved, but directs all or some of the increase over and above the pre-improvement tax level to public facilities that have been built to support the area's revitalization. In effect, government assumes the risk through provision of public improvements up front and then pays itself back through higher tax collection increment while assuring that the pre-improvement tax collections continue to go into the general fund. This approach can be very useful in a carefully controlled revitalization effort for a deteriorating area, where future renovations and development can be reasonably anticipated but are dependent on a general improvement to the area.

*Development Impact Fees:* Fair and reasonable development impact fees can be a useful tool in encouraging economic development when the development community recognizes that adequate public facilities are important in attracting buyers and tenants to their developments. This maintains the long-range health of the community and the continued ability for development to be profitable.

## **2.2.0.0: Assessment of Current and Future Needs**

# **Assessment of Economic Base Data**

## **Employment, Earnings and Wages**

### **Current and Historic Employment**

Total employment in Long County increased by 69.2 per cent in the past decade. The local economy is driven by government and services, which account for over 55 per cent of total employment. Since 1990, the farming sector declined from 14.1 per cent of total employment to 6.06 per cent, while the service sector increased from 15.4 per cent to 23.5 per cent. The decline in the relative importance of farming and corresponding increase in services mirrors a statewide trend underway since 1990. Over 28.6 per cent of the Georgia population is employed in the service sector, up from 23.7 per cent in 1990, and less than 13 per cent of the statewide economy is manufacturing-based.

Employment growth since 1990 includes construction (125 per cent), services (158 per cent), TCP (50 per cent), and FIRE (150 per cent). However, not all sector growth is equally important. Despite high percentage growth rates, TCP and FIRE combined to account for a little over 6 per cent of total employment.

Statewide, total employment increased by over 31.6 per cent since 1990. All sectors recorded growth with the exception of farm (-9.3 per cent), mining (-10.1 per cent) and federal government (-10.4 per cent) employment. The fastest growth rates were in retail trade (34.6 per cent), FIRE (41.2 per cent) and services (58.7 per cent). Together, these sectors combined for 70.6 per cent of the state's 1,169,360 new jobs since 1990. Statewide sector employment figures clearly highlight the shift to a more knowledge base economy.

To understand why some sectors of the Long County economy are growing while others are declining, we need to examine broader trends in the local, regional, and state economy. Long County is dependent upon the economic base of other counties within its vicinity, having about two-thirds of its working population commuting to jobs outside the county. The rural history of the County is reflected in its economy, and much of the land area is devoted to commercial forest.

The decline of the manufacturing sector in Long County is subject to broader dynamics and mirrors the decline of manufacturing in the region. The single largest industry in the County's history was a manufacturer of roofing tile, made from clay deposits in the area, but this business closed during World War II and never reopened. Although manufacturing flourished in the region, over the past twenty years there has been a decline in the proportion of total employment in manufacturing. While there are more manufacturing jobs than there were twenty years ago, manufacturing as a sector has not grown as fast as the remaining economy. Future manufacturing is expected to be

oriented towards assembly, fabrication, and light industry, not basic productive functions. One reason for this is the projected rising cost of water related to the rapidly diminishing amounts available from the Floridan aquifer. Overseas outsourcing, plant consolidation, and competition from other states aggressively pursuing manufacturing explains the trend. Similarly, the Long County farm sector has declined in proportion to statewide figures. The cyclical nature of the sector and unwillingness of younger residents to farm has resulted in lower interest in the employment sector.

## **Earnings**

Sector earnings across all sectors have increased since 1990. In 2000, services earnings accounted for 14.7 per cent of total earnings, 8.55 per cent below its share of total employment. A dramatic difference is seen in Transportation, Communication and Utilities where the sector accounts for 2.2 per cent of total employment but 5.2 per cent of total earnings. Another difference is seen in the public sector, state and local government employment, where the sector accounts for 44.6 per cent of total earnings but 30.4 per cent of total employment.

Current statewide averages, by contrast, show earnings that are more in line with employment rates. Public sector, state and local government, for example, accounted for 10.2 per cent of earnings and 10.4 per cent of total employment. Similarly, services accounted for 26.7% of earnings and 28.6% of total employment.

The earnings-employment imbalance occurring in Long County suggests that the employment gain continues to be in the lower-paying service jobs. Given that the service sector is projected to grow faster than other sectors, total employment growth rates do not reflect an increase in overall economic health.

## **Wages**

In 2001, the average weekly wage paid in Long County was \$336, lower than the state average of \$676. Since 1990, wages in Long County have risen at a faster pace at 9.5 per cent than the statewide average (5.2 per cent). Within sectors, wages are rising at different paces within the Long County and state economies. In Long, manufacturing wages have increased by 60.3 per cent since 2003 while statewide the increase was less than 57.6 per cent. In retail trade, Long County wages rose 61% while statewide wages declined. In services, Long County wages increased 49.8 per cent while the statewide wages increased a more modest 2.7 per cent. In addition, statewide wages in TCU increased by 4.3 per cent while in Long County those wages increased 59.0 per cent. The largest local-statewide wage gaps are found in construction and FIRE, where statewide wages are significantly above Long County averages.

Assuming that projected wage earnings mirror per capita and average household income projections, wages will continue to remain significantly below the state average.

The lower cost of living in Long County is always a factor. Current median property values and rents are less in Long County than the state average. Since 1990, housing median property values have slightly outpaced wage increases.

Various types of training are required for higher paying positions. State government employment, associated almost exclusively with the Long County school system, requires college education. All teaching and most administrative staff require an appropriate degree prior to commencing employment and continuing education to meet state licensing requirements. Certain government jobs, as well as some manufacturing positions, require vocational or technical school training, available from technical colleges in neighboring Liberty, Tattnall and Wayne Counties.

### **Personal Income**

Approximately 20 per cent of personal income in Long County is transfer payments, a rate higher than the state average. Since 1990, transfer payments have outpaced all other sources of personal income. In 2000, wages accounted for 61.6 per cent of all income, comparable to the state average of 61.1 per cent. This dependence on transfer payments may reflect that the poverty level for Long County households is 4.6 per cent above the state average.

A relatively high rate of transfer payments means that many residents are on fixed-incomes and affected disproportionately by increases in housing. Transfer payments are typically indexed to inflation. As such, Long County residents on transfer payments have been able to afford rents, which declined since 1990, but it is doubtful that transfer payments have kept pace with home values that have increased by over 42.3 per cent in the past decade alone.

Dependence on transfer payment will increase by 4.1 per cent through 2025 and close to one quarter of Long County residents will be dependent on transfer payments. Furthermore, household size is projected to increase while the county's total population will remain stable, indicating that demand for new units will increase. The next section will examine housing more closely but unless housing unit increases keep pace with these demographic shifts, residents dependent on transfer payments will be more vulnerable should the demand for housing increase.

The residence adjustment factor has declined from 59.61 per cent in 1990 to 46.67 per cent in 2000, indicating that a higher relative share of Long County residents work in the county. During that same time, commuting patterns show a slight increase in Long County residents commuting to work in neighboring jurisdictions. There is no clear reason why these trends have gone in opposite directions.

## **Major Economic Activities**

The manufacturing sector will continue to preoccupy local elected officials because of its importance in stabilizing the tax base and earnings. As noted in previous analysis, despite its decline relative to other employment sectors, the sector's share of earnings has and will continue to outpace others.

Dependency on a single industry increases the potential of boom-bust cycles, which can harm Long County's relatively small economic base. The Long economy is slowly diversifying and converging with the state economy. In order to fully stabilize the economic base, the county will need to encourage promote other employment sectors to ensure a variety of job types.

Long County recognizes the need to diversify the local economy but also understands the need to match employment opportunities with the skill level of the population. Over 76 per cent of Long County residents have completed high school and county residents attend Georgia public technical colleges at a rate slightly higher than the state average. Future economic development policy will need to continue to recruit and expand the local economy's manufacturing base while nurturing sectors that are higher wage and higher skilled.

Manufacturing benefits two distinct groups of workers: low-skilled workers (manual labor) and high skilled technology workers, whose ranks within the sector continue to rise statewide. This highlights the important role manufacturing can play in the local economy. It can at once provide relatively high wage employment opportunities for low skilled residents that are otherwise unemployable or employable only in the low wage service sector, while simultaneously providing opportunities for higher skilled and paid technology graduates. For this reason, Long County should continue to expand its manufacturing base. The development of the Long County Industrial Park within Long County will support the local manufacturing sector and should be encouraged.

Diversifying the economic base will require focusing on sectors that are growing and the ability to match required skills with the local population. TCP and FIRE are projected to double in employment growth through 2025. There are primarily two reasons why these sectors should be encouraged to grow. First are the disproportionately high wages and sector earnings they provide the local community. TCP, for example, accounts for less than 2 per cent of total employment but over 5.2 per cent of earnings. Second, the skill level of the population matches the sector. As noted, Long County high school graduates attend Georgia public and technical colleges at a rate nearly 8 per cent higher than the state average. The supply of graduates is therefore available for these jobs. Long County should nourish these sectors by working with existing businesses to expand to the base and promoting Long County as a viable location for TCP and FIRE.

The Long County economy is not isolated from its surroundings but part of a larger regional economy. Commuting patterns indicate that close to 85 per cent of county residents work in the surrounding counties, slightly more than in 1990. The metro

Chatham economies are much more diverse than the Long County economy. The diversity of employment opportunities provides Long County residents the opportunity to work near their place of residence and possible supplier opportunities through the manufacturing sector in surrounding counties.

Regional cooperation and support with neighboring counties should be encouraged, given that Long County is incapable of funding projects of major size alone.

### **Special and Unique Opportunities**

Throughout Georgia, tourism is the second most important industry and a viable economic development strategy for many rural communities. Long County is in the process of pursuing various strategies aimed at promoting tourism and stimulating to the local economy. These efforts include working with other communities in participating in the Georgia Scenic Byways program. The purpose of this program is to capitalize on unique historical and scenic qualities that offer Long County regional, state and national exposure. Participation in such programs should continue and more opportunities should be sought.

Aggressive marketing campaigns have succeeded in small communities throughout the state. Long County is well positioned to capitalize on tourism. In addition to the Altamaha River Corridor, numerous historical and recreation qualities provide good tourism opportunities.

The Long County area offers unique opportunities for industry and business expansion. In Long County the recently constructed 192 Bed Correctional Facility utilized State and Federal Sources for infrastructure improvements. In Chatham County, new opportunities for employment include the possible reopening of Georgia Pacific, the Cross Dock Warehouse, CNP Georgia Technology, Common Wealth Distributors, an Office/Warehouse Storage Front System, and Fuji Vegetable Oil. In neighboring McIntosh County, the new opportunities may include an industry relocation of a production facility requiring 240,000 sq. ft. on 40 acres and potentially employing 300 to 400 people.

# **LABOR FORCE ASSESSMENT**

## **Employment by Occupation**

Employment occupation in Long County highlights variations with the state and national economy. The state and national economies are similar in their distribution of occupations and diverse. Occupational groupings in Long County demonstrate the dominant role of sales and services in the local economy. Over 31.6 per cent of county occupations are in sales and services, a percentage higher than the state and national average. Occupational groups associated with the a knowledge-based economy such executive, administration, professional and technical (EAPT), make up over a third of state and national employment but less than 20 per cent in Long County. Statewide, EAPT occupations increased 8 per cent since 1990 while nationally these same occupations increased 7 per cent. The Long County economy is slowly converging with the state and national economies. Between 1990 and 2000, the number of Long County jobs in EAPT increased by 72.4 per cent. Should these occupations keep growing at this pace locally, Long County and the municipalities should approximate state and national occupation percentages by 2025.

There are two education attainment statistics that are important in determining whether occupation requirements can be met: overall education attainment and higher education rates. The overall education attainment in Long County has continually improved in the past two decades. In 1980, 67.0 per cent of residents did not have a high school diploma. By 2000, this rate dropped to 23.6 per cent. Current higher education attainments rates appear sufficient to accommodate the increase in higher skilled occupation groups. Over 41 per cent of Long County high school graduates attend Georgia public and technical colleges. Historically, this supply was far greater than the demand for high skilled occupations.. Should higher skilled occupations continue to increase at historic paces, the supply of skilled employees will be sufficient to meet the needs to higher skilled occupations.

## **Employment Status**

Labor force participation in Long County is above the state average. In 2000, labor force participation in the county was 67.3 per cent. By contrast, state and national labor force participation rates are 66.1 per cent and 63.9 per cent respectively. Since 1990, the total number of residents in the labor force increased by 62.4 per cent in Long County. State and national rates declined by less than 2 per cent in that same period. On average, the county's various labor force participation indicators are comparable to the state and national averages.



## **Unemployment Rates**

Unemployment rates in Long County have been consistently lower than neighboring counties and the state and national averages. Less than 3.8 per cent of county residents are unemployed, compared to 6.3 per cent in Liberty County, 5.3 per cent in Wayne County, 4.4 per cent statewide, and 5.5 per cent nationwide. The unemployment rate has improved by historic standards.

Trends in Long County unemployment reveal similar patterns in neighboring jurisdictions, state and national unemployment rates. This highlights the regional nature of the economy. Plant closings in one county affect employment patterns in another.

## **Commuting Patterns**

A significant 85.8 per cent of county residents commute to neighboring counties to work. The weak local economy has already been noted. There are simply not enough jobs for residents in the county. Furthermore, non-residents hold over 30 per cent of Long County jobs, indicating a skills mismatch.

Commuting pattern data from neighboring jurisdictions highlights how integrated the regional economy is. Over 7.9 per cent of Long County residents work in Wayne County while close to 10 per cent of Long County jobs are held by Wayne County residents. Just under 7.1 per cent of Liberty County residents are employed in Long County. These commuting patterns demonstrate the importance of planning regionally for economic development.

# **ECONOMIC DEVELOPMENT RESOURCES**

## **Economic Development Agencies**

The Long County Development Authority and Chamber of Commerce promote the county and municipalities for economic development purposes. Coordination with Georgia Power, Georgia Department of Industry, Trade & Tourism, and the Coastal Georgia Regional Development Center ensures that multiple agencies are assisting in those efforts. Existing support programs and tools are sufficient for the county's continued economic development. However, the county may need to pursue marketing and development efforts more aggressively. In particular, the county should supplement existing agencies assistance with its own programs. The regional agencies are responsible for multiple jurisdictions. As such, they are incapable of meeting all of Long County's development needs.

Long County residents have unprecedented access to education, job training and workforce development opportunities. In a rapidly changing economy where the opening or closing of a single plant can drastically change the community's economic base, local

officials will need to monitor these programs more closely and coordinate extensively with area schools and technical colleges, as well as appropriate workforce development authorities.

In economic development planning, an important question is how much growth is desired. Not all residents agree on the definition of growth or even whether growth is a good idea. For some, Long County should strive to become a major industrial trade center. For others, keeping the small town charm is why they live in Long County and development should be limited. However, most agree that the Long economy is under performing and needs to expand. Those who argue in favor of keeping Long County a small rural community acknowledge that the continued exodus of population and jobs will only hurt the county and themselves in the long run.

Long County's projected employment growth rate of 38.6 per cent through 2025 is slightly below the state average of 41.7 per cent. It is important to recognize that Woods & Poole population projections are tied to projected employment. If the county manages to outperform in the employment indicator, a corresponding increase in population will appear in future projections. The county and municipalities will need to grow at the state average rate in order to meet economic developments goals. The types of businesses and industries to be encouraged will be primarily in manufacturing, TCP and FIRE as they conform to community's development goals and are appropriate for the skill level of the population.

## **Economic Development Programs and Tools**

Economic Development programs and tools are used to recruit industries, strengthen businesses and stimulate the economy among others. Incentives provided to industrial recruits through the Georgia Business Expansion Act provide good incentives for development but these incentives are offered statewide. As such, Long County enjoys no competitive advantage. Long County is already at a disadvantage as other, wealthier jurisdictions already have the sites, water and sewer infrastructure needed to attract prospects in place. The various One Georgia programs provide funding for site development and infrastructure, and are vital resources needed by the county to remain competitive in recruiting industry. The county will benefit from infrastructure improvements and proximity to its primary population base.

Programs and tools for economic development revolve around incentives offered to recruit industry. Tax abatement has become an important policy in rural economic development statewide. The local government forgoes either full or part of taxes for the benefit of having jobs in the community, which in turn supports related businesses and industries. This is an important tool that needs to be used. In short, a combination of economic development tools and programs, along with local tax incentives and state funding for infrastructure will provide incentives to draw industry to Long County and the municipalities.

# **Educational and Training Opportunities**

Education and training opportunities appear throughout the assessment (i.e. major economic activities, employment by occupation, etc.) as the assessment of those sections requires inclusion of educational and training opportunities as part of the analysis.

## **2.3.0.0: Goals & Implementation**

### **Economic Development**

Long County's economic program is supported by elected officials, the Chamber of Commerce, the Development Authority, and individuals involved in business development. Therefore, to implement Long County's Economic Development Program will require the following actions:

Goal 1: Provide a climate conducive to business and industrial development.

Policy 1.1: Enhance Long County's visibility as a place for business to locate.

Policy 1.2: Facilitate a relationship between federal, state, and local governments with business and industry to promote economic development.

Policy 1.3: Complete and promote the Long County/Ludowici Industrial Park.

Policy 1.4: Encourage future development in areas with adequate services and infrastructure.

Policy 1.5: Encourage economic growth of existing populated and developed areas.

Goal 2: Attract new business and retain existing ones.

Policy 2.1: Enhance and promote the growth and expansion of existing business and industry.

Policy 2.2: Continue to offer financial programs, tax incentives and credits, and technical assistance to new and existing businesses and industry.

Goal 3: Diversify the local economy.

- Policy 3.1: Encourage collaboration between employers, employees, and existing educational facilities to establish an educated, quality, and sustaining workforce.
- Policy 3.2: Collaborate on a multi-jurisdictional level to promote tourism throughout the region.
- Policy 3.3: Review and update strategies for achieving targeted development types.
- Policy 3.4: Identify potential sites for historic and environmental-based tourism.
- Policy 3.5: Use authority granted under the Georgia Enterprise Zone Employment Act to create jobs and economic activity in distressed neighborhoods.

Goal 4: Create employment opportunities for residents.

- Policy 4.1: Nurture sectors that provide high earnings and wages.
- Policy 4.2: Encourage higher labor participation rates.
- Policy 4.3: Develop and maintain criteria for targeting types of economic development activity.
- Policy 4.4: Support and advertise job training, business assistance and education programs available through the University of Georgia Small Business Center, Georgia Tech Economic Development Institute and the Coastal Georgia Regional Development Center.
- Policy 4.5: Work closely with surrounding area technical schools to assist local residents with job training and employment placement.

Goal 5: Promote Long County as a tourism attraction.

- Policy 5.1: Continue to actively promote and support Wiregrass Trail Scenic Byway tourism activities.
- Policy 5.2: Apply for state and federal grants to support tourism projects.

Goal 6: Coordinate economic development with other elements in this plan.

Policy 6.1: Annually review Capital Improvement Program for economic development needs and revise as necessary.

Policy 6.2: Periodically investigate the need for and the feasibility of establishing a community revolving loan fund.

## Long County Economic Development Long: Report of Accomplishments

Economic Development		
Activity	Status	Explanation
Develop and maintain criteria for targeting types of economic development activity.	Underway	
Review and update strategies for achieving targeted development types.	Underway	
Maintain and use site design standards for commercial and industrial areas.	Underway	
Identify potential sites for historic and environmental based tourism.	Underway	
Actively promote sites for tourism activities, including acquisition and/or preparation.	Underway	
Seek funding to develop and implement plan (including objectives and specific strategies and actions) for downtown improvement.	Not Accomplished	Lack of funding.
Annually review Capital Improvements Program (CIP) for economic development needs and revise as needed.	Completed	
Implement revised Capital Improvements Program (CIP).	Completed	
Periodically investigate the need for and the feasibility of establishing a community revolving loan fund.	Underway	

Consider use of the Coastal Area Development District Authority.			
--	--	--	--

### Short Term Work Program

<b>Economic Development</b>				
<b>Activity</b>	<b>Years</b>	<b>Responsible Party</b>	<b>Cost Estimate</b>	<b>Funding Source</b>
Enhance Long County's visibility as a place for business to locate.	2005, 2006, 2007, 2008, 2009	County	N/A	ISTEA and Local Development Funds
Facilitate a relationship between federal, state, and local governments with business and industry to promote economic development.	2005, 2006, 2007, 2008, 2009	County, Chamber of Commerce	None	None
Complete and promote the Long County/Ludowici Industrial Park.	2005, 2006, 2007, 2008, 2009	County	\$200,000	CDGB
Encourage future development in areas with adequate services and infrastructure.	2005, 2006, 2007, 2008, 2009	County	None	None
Encourage economic growth of existing populated and developed areas.	2005, 2006, 2007, 2008, 2009	County	None	None
Continue to offer financial programs, tax incentives and credits, and technical assistance to new and existing businesses and industry.	2005, 2006, 2007, 2008, 2009	County	None	None
Encourage collaboration between employers, employees, and existing educational facilities to establish an educated, quality, and sustaining workforce.	2005, 2006, 2007, 2008, 2009	County, Board of Education	None	None
Collaborate on a multi-jurisdictional level to promote tourism throughout the region.	2005, 2006, 2007, 2008, 2009	County, Chamber, CGRDC	None	None
Review and update strategies for achieving targeted development types.	2005, 2006, 2007, 2008, 2009	County in cooperation with CGRDC	None	None
Identify potential sites for historic and environmental-based tourism.	2005, 2006, 2007, 2008,	County, Chamber of	None	None

	2009	Commerce		
Use authority granted under the Georgia Enterprise Zone Employment Act to create jobs and economic activity in distressed neighborhoods.	2005, 2006, 2007, 2008, 2009	County	None	None
Nurture sectors that provide high earnings and wages.	2005, 2006, 2007, 2008, 2009	County	None	None
Encourage higher labor participation rates.	2005, 2006, 2007, 2008, 2009	County	None	None
Develop and maintain criteria for targeting types of economic development activity.	2005, 2006, 2007, 2008, 2009	County	None	None
Support and advertise job training, business assistance and education programs available through the University of Georgia Small Business Center, Georgia Tech Economic Development Institute and the Coastal Georgia Regional Development Center.	2005, 2006, 2007, 2008, 2009	County with cooperation from CGRDC	None	None
Work closely with surrounding area technical schools to assist local residents with job training and employment placement.	2005, 2006, 2007, 2008, 2009	County, Board of Education	None	None
Continue to actively promote and support Wiregrass Trail Scenic Byway tourism activities.	2005, 2006, 2007, 2008, 2009	County, Chamber of Commerce	\$10,000	ISTEA
Apply for state and federal grants to support tourism projects.	2005, 2006, 2007, 2008, 2009	County	None	ISTEA, Local Development Funds
Annually review Capital Improvement Program for economic development needs and revise as necessary.	2005, 2006, 2007, 2008, 2009	County	None	None
Periodically investigate the need for and the feasibility of establishing a community revolving loan fund.	2005, 2006, 2007, 2008, 2009	County	None	None





## **3.0.0.0: Housing**

Long County recognizes that housing is the cornerstone of a healthy economy and community development. The county and cities will promote the provision of adequate and affordable housing for all residents and support the preservation of historic homes and neighborhoods through sound management and regulatory practices.

### **Introduction**

The housing element is an important part of the overall comprehensive plan as housing accounts for a significant share of land use in Long County, and is vital to economic development efforts.

The purpose of the housing section is to inventory and assess the existing housing stock and to formulate a set of goals, objectives and policies to ensure adequate housing for future populations. The private sector has and will continue to play the primary role in providing housing. However, Long County can facilitate the process through its statutory authority and regulatory power.

The Governor's Office has formulated a set of statewide planning goals that include Quality Community Goals to coordinate local government planning through the state under each of the comprehensive plan elements. One of the goals directly relates to housing: "To ensure that residents of the state have access to adequate and affordable housing." In accordance with the overall goal, the state has developed a Quality Community Objective to help direct local governments in formulating local goals, policies and objectives. The statewide objective is: "Quality housing and a range of housing size, cost, and density should be provided in each community, to make it possible for all who work in the community to also live in the community."

Long County will work within the framework of the state initiative to support goals, objectives, and policies governing the future development of housing that meets the needs identified in the inventory and assessment components of this plan section.

## 3.1.0.0: Inventory

### Housing Supply

Tables H-1 and H-2 identify the existing local housing stock and include historical data for comparison with state averages. Since 1980, the total number of housing units in Long County increased 144.2 per cent, more than double the state average of 63 per cent. Approximately 37 per cent of the current housing stock is stick built single-family units, with mobile homes or trailers accounting for 60.9 per cent. The percentage of single-family units has declined significantly in the past two decades. In 1980, single-family units accounted for 67.2 per cent of the total housing stock, 30 per cent more than in 2000. The number of multi-family units decreased from 5.0 per cent to 1.9 per cent in that same period.

The percentage of single-family units statewide has declined 8.7 per cent since 1980. Multi-family unit levels in Long County have historically been low compared to the state average as demand for multi-family units has always been low. These structures depend on public water and sewer connections, and only a portion of the county, the majority in Ludowici, is served by public water and sewer service.

The number of mobile home units in Long County has increased steadily in the past two decades, from 27.8 per cent of total housing units in 1980 to 60.0 per cent in 2000. By contrast, the number of mobile home units statewide has increased by less than 5 per cent in that same period. Manufactured housing is in high demand in Long County to accommodate the personnel and their families from Fort Stewart. This trend is typical for communities that depend upon a military installation for basic economic activity. Temporary housing is needed for soldiers and their dependents that may only remain in a community for a short while. In the event of a base closure, these homes can be moved to another county where there may be a greater demand for housing. Development of mobile home subdivisions and trailer parks enable a community to overcome economic losses more easily than if larger amounts of permanent housing structures were to remain.

## Inventory Types of Housing in Long County

Table H-1					
Housing Characteristics					
Units				1980-2000 Change	
	1980	1990	2000	Change	%
<b>Long County</b>					
Single Family Housing	1,165	1,115	1,574	409	35.1%
Multi Family Housing	86	37	81	-5	5.81%
Manufactured Housing	482	1,486	2,577	2,095	434.6%
Total	1,733	2,638	4,232	2499	144.2%
<b>Georgia</b>					
Single Family Housing	1,525,070	1,712,259	2,201,467	676,397	44.4%
Multi Family Housing	334,622	598,271	681,019	346,397	103.5%
Manufactured Housing	152,948	327,888	394,938	241,990	158.2%
	2,012,640	2,638,418	3,281,737	1,269,097	63.1%

**Source: U.S. Bureau of Census, 1980, 1990, and 2000.**

<b>Table H-2</b>			
<b>Housing Characteristics Percentage</b>			
<b>Units</b>			
	<b>1980</b>	<b>1990</b>	<b>2000</b>
<b>Long County</b>			
Single Family Housing	67.2%	42.3%	37.2%
Multi Family Housing	5.0%	1.4%	1.9%
Manufactured Housing	27.8%	56.3%	60.9%
Total	100.0%	100.0%	100.0%
<b>Georgia</b>			
Single Family Housing	75.8%	64.9%	67.1%
Multi Family Housing	16.6%	22.7%	20.8%
Manufactured Housing	7.6%	12.4%	12.1%
Total	100.0%	100.0%	100.0%

**Source: U.S. Bureau of Census, 1980, 1990, and 2000.**

Table H-3 provides housing needs projections through 2025.

**Table H-3**

<b>Long County: Types of Housing</b>										
<b>Category</b>	<b>1980</b>	<b>1985</b>	<b>1990</b>	<b>1995</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>
<b>TOTAL Housing Units</b>	1,733	2,186	2,638	3,435	4,232	4,857	5,482	6,106	6,731	7,356
<b>Single Units (detached)</b>	1,165	1,140	1,115	1,345	1,574	1,676	1,779	1,881	1,983	2,085
<b>Single Units (attached)</b>	10	13	15	17	19	21	24	26	28	30
<b>Double Units</b>	16	10	3	12	21	22	24	25	26	27
<b>3 to 9 Units</b>	33	26	19	22	25	23	21	19	17	15
<b>10 to 19 Units</b>	6	3	0	0	0	0	0	0	0	0
<b>20 to 49 Units</b>	6	3	0	2	4	4	3	3	2	2
<b>50 or more Units</b>	15	8	0	6	12	11	11	10	9	8
<b>Mobile Home or Trailer</b>	482	975	1,467	2,013	2,559	3,078	3,598	4,117	4,636	5,155
<b>All Other</b>	0	10	19	19	18	23	27	32	36	41

Original Source: U.S. Bureau of the Census (SF3)

# Inventory of Age and Condition of Housing Stock

## Age and Condition of Housing Supply

Table H-4 provides data on the age of the housing stock within Long County. Overall, the housing stock in Long County is comparable to the coastal region and state averages. The coastal counties of the Coastal Georgia Regional Development Center include Bryan, Bulloch, Camden, Chatham, Effingham, Glynn, Liberty, Long, McIntosh, and Screven counties. Approximately 7.1 per cent of the coastal region homes and 5.9 per cent of Georgia homes were built prior to 1939, compared to 4.9 per cent in Long County.

Over 71 per cent of Long County's housing supply was constructed after 1980. The largest period of housing construction occurred from 1995 to 1998 when over 25 per cent of housing units were built.

**Table H-4**  
**Housing Stock by Age, 1980-2000**

Year	Long Total	County %	Coastal Total	Region %	Georgia Total	%
1939 or earlier	217	14.6%	14,239	7.1%	172,014	5.7%
1940 to 1959	225	13.4%	31,230	15.5%	384,397	12.7%
1960 to 1969	231	11.9%	21,911	10.9%	376,827	12.5%
1970 to 1979	663	20.2%	33,813	16.8%	558,943	18.5%
1980 to 1989	1144	16.3%	42,674	21.1%	669,953	22.8%
1990 to 1994	247	8.9%	23,855	11.8%	348,006	11.5%
1995 to 1998	285	10.3%	27,399	13.5%	387,634	12.8%
1999 to 2000	123	4.4%	6654	3.3%	108,607	3.6%
Total	2,767	100.0%	201,775	100.0%	3,006,369	100.0%

**Source: U.S.**

## Bureau of Census

The percentage of homes lacking plumbing facilities and percentage of homes lacking full kitchen facilities are often used as indicators of substandard housing. Overall, housing conditions throughout Long County are adequate and comparable to state levels (Tables H-4 and H-5). This represents a significant improvement, particularly for the county, which managed to cut the number of housing units without complete plumbing facilities from 9.3 per cent 1980 to 1.2 per cent in 2000.

<b>Table H-5</b>					
<b>Percentage of Homes Lacking Complete Plumbing Facilities</b>					
	<b>1980</b>	<b>1990</b>	<b>2000</b>	<b>1980-2000 Change</b>	
				<b>Change</b>	<b>%</b>
<b>Georgia</b>	1.80%	1.10%	0.90%	-0.90%	-50.0%
<b>Coastal Region</b>	3.10%	0.70%	1.30%	-1.80%	-58.1%
<b>Long County</b>	9.3%	1.10%	1.20%	-8.10%	-87.1%

Source: U.S. Bureau of Census, 1980, 1990, and 2000.

<b>Table H-6</b>					
<b>Percentage of Homes Lacking Complete Kitchen Facilities</b>					
	<b>1980</b>	<b>1990</b>	<b>2000</b>	<b>1980-2000 Change</b>	
				<b>Change</b>	<b>%</b>
<b>Georgia</b>	3.5%	0.9%	1.00%	-2.50%	-71.4%
<b>Coastal Region</b>	2.9%	0.80%	1.30%	-1.60%	-55.2%
<b>Long County</b>	5.1%	1.00%	1.50%	-3.60%	-70.6%

Source: U.S. Bureau of Census, 1980, 1990, and 2000.

## Occupancy and Tenure

Housing occupancy and tenure characteristics are important variables in determining the adequacy of the existing housing stock. Owner-occupied housing in Long County is comparable and slightly lower in 2000 than coastal region and state averages (Table H-6), reflecting higher rates of rental property due to the proximity of the military base. The percentage of owner-occupied housing units has remained relatively stable in Long County.

The owner to renter ratio mirrors the above-mentioned trends and highlights increased home ownership throughout most jurisdictions in the county. In the county, the ratio has decreased from 2.04:1 to 1.96:1 in the past decade, indicating that for every renter-occupied unit, there are 1.96 owner-occupied units. The trend of owner to renter ratios has mirrored the region and the state.

Vacant homes and apartment units are necessary to provide a choice of location and price for housing consumers. A healthy vacancy rate is approximately 5 per cent and fluctuates according to the housing market. Too few vacant units drive up prices and limit housing choices, while too many reduces the demand for new units. Vacancy rates throughout Long County are above both the coastal region and state average (Table H-6). In 2000, the vacancy rate in Long County was 15.5 per cent. In the past decade, vacancy rates declined in the county, and regional and state averages dropped slightly in that same period.

The owner vacancy rate throughout Long County is slightly above 2 per cent, in line with regional and state averages. Renter vacancy rates are significantly above regional and state averages. Since a 5 per cent vacancy is often cited as necessary for a healthy rental market, this suggests that no more rental units are needed in the county.

Seasonal and recreational homes comprise 18.2 per cent of all housing in the state of Georgia. In Long County, approximately 1.3 per cent of housing is in the “seasonal and recreational” category. Seasonal units are not a significant portion of the housing supply Long County.

<b>Table H-7</b>					
<b>Long County Housing Characteristics</b>					
<b>Units</b>	<b>1980</b>	<b>1990</b>	<b>2000</b>	<b>1980-2000 Change</b>	
				<b>Change</b>	<b>%</b>
<b>Occupied Units</b>	1,734	2,638	4,232	2,498	144.05%
<b>Vacancy Rate</b>	11.4%	16.8%	15.5%	4.1	35.96%
<b>Owner Occupied %</b>	60.6%	55.9%	66.2%	5.6	9.24%
<b>Owner Vacancy</b>			2.7%		
<b>Renter-Occupied %</b>	28.0%	27.4%	33.8%	5.8	20.71%
<b>Renter Vacancy Rates</b>			17.4%		
<b>Owner-Renter Ratio</b>	2.16:1	2.04:1	1.96:1	-0.2	9.26%

**Source: U.S. Bureau of Census, 1980, 1990, and 2000.**



**Table H-8  
Georgia Housing Characteristics**

Units	1980	1990	2000	1980-2000 Change	
				Change	%
Occupied Units	1,871,700	2,366,600	3,006,400	1,134,700	60.62%
Vacancy Rate	7.0%	10.3%	8.4%	1.4	20.00%
Owner Occupied %	60.4%	58.2%	67.5%	7.1	11.75%
Owner Vacancy			2.2%		
Renter-Occupied %	32.0%	31.5%	32.5%	0.5	1.56%
Renter Vacancy Rates			8.4%		
Owner-Renter Ratio	1.85:1	1.85:1	2.0:1	0.15	8.18%

Source: U.S. Bureau of Census, 1980, 1990, and 2000.

**Table H-9  
Coastal Region Housing Characteristics**

Units	1980	1990	2000	1980-2000 Change	
				Change	%
Occupied Units	131,236	168,518	200,920	69,684	53.10%
Vacancy Rate	9.8%	11.7%	11.4%	1.6	16.32%
Owner Occupied %	56.2%	54.0%	62.8%	6.6	11.74%
Owner Vacancy			2.4%		
Renter-Occupied %	33.9%	34.4%	37.2%	3.3	9.73%
Renter Vacancy Rates			11.1%		
Owner-Renter Ratio	1.66:1	1.57:1	2.69:1	1.03	62.05%

Source: U.S. Bureau of Census, 1980, 1990, and 2000.

## Cost of Housing

The cost of housing in Long County has increased steadily since 1990 but remains significantly below regional and state median values (Table H-9). The median property value of a Long County home in 2000 was \$71,100. By contrast, the median value of a home in the coastal region is \$93,767 and \$100,600 statewide. Between 1990 and 2000, the median value of a home in Long County increased by 80.5 per cent. Median property values in the region and state average have increased by 41.1 per cent since 1990.

Median monthly rent throughout Long County averages just over \$500, below the region and state averages. This is primarily due to the lack of high-end apartment units for rent in the county and the high number of manufactured housing units.

<b>Table H-10</b>				
<b>Housing Characteristics</b>				
	<b>1990-2000 Change</b>			
	<b>1990 Owner Median Value</b>	<b>1990 Median Rent</b>	<b>2000 Owner Median Value</b>	<b>2000 Median Rent</b>
<b>Georgia</b>	71,278	365	100,600	505
<b>Coastal Region</b>	N/D	N/D	93,767	500
<b>Long County</b>	39,400	362	71,100	456

**Source: U.S. Bureau of Census, 1990, and 2000.**

## **3.2.0.0: Assessment**

### **Housing Stock**

In the past two decades, the total number of housing units in Long County has increased more than 144 per cent. The housing growth rate was more than double the state average of 63 per cent. The statewide population increased along with new housing growth. During that same period, the local population increased by 129.2 per cent. Compounding population increases is a decreasing household size (-3.0 per cent since 1980) and a 32.8 per cent increase in the number of new households across Long County.

Approximately 37 per cent of the current housing supply is stick built single-family units, with mobile homes or trailers accounting for 60.9 per cent. Since 1980, there has been a shift in the county's housing types. Single family units, the dominant form of housing units in the 1980s, have continually declined both in absolute numbers and in their percentage of the total housing supply. In 1980, 67.2 per cent of the housing stock in Long County was single-family units. By 2000, the rate dropped to less than 38 per cent.

Overall, the total number of single-family units increased by 409 units, and the number of multi-family units decreased throughout Long County. The growth of these housing types has not kept pace with increases in mobile home units. The growth of mobile home units has been explosive. Since 1980, over 2095 new units were added to county's total housing supply and currently account for more than 60 per cent of the housing stock.

A number of causes explain these housing trends. First, the increase in manufactured homes mirrors population increases during the past two decades. Second, the increase in mobile home units is directly related to housing affordability. While the median value of a home in Long County is \$71,100, mobile homes values rarely exceed \$33,000. Countywide income levels highlight the increasing popularity of mobile housing. Per capita and average household incomes are significantly below the state average. Finally, over 21 per cent of Long County households earn less than \$10,000 per year. In short, mobile home units are partly a response to housing affordability issues.

Related to population and income indicators are local government ordinances and regulations. In the past decade neighboring jurisdictions, including Liberty County have adopted strict mobile home ordinances that led many mobile home owners to locate in Long County. Because the county has not adopted land use regulations limiting the size, age, type and location of mobile homes, and income levels are not projected to increase substantially over the next twenty years, the number of mobile home units is projected to increase through 2025.

For the local community, there are primarily two issues related to mobile home ownership. First, mobile homes do not provide sufficient revenue to offset the cost of infrastructure provided. Second, it is widely accepted that stick-built units encourage community stability because it limits mobility and increases a homeowner's financial stake in the community.

Overall, there range of local housing types is sufficiently diversified. There is no longer a dominant housing type like as in the 1980s when single-family units accounted for in excess of 67 per cent of the housing supply. The level of multi-family housing, through mostly affordable and public housing units, provides more diversity in housing choices.

The existing supply of housing units in Long County meets the community's current needs. Both the number of households and the number of total units has increased at a higher rate than the population. Between 1980 and 2000, the total number of households in Long County grew 132.8 per cent while housing units increased by over 144 per cent.

The predominance of homes as manufactured housing meets the community need to supply affordable housing to Fort Stewart military reservation personnel and families while safeguarding the community's economy in the event of base closure.

## **Income and Housing Adequacy**

Increases in housing costs must generally correlate with increases in income to ensure that affordable housing options are available to the entire population. The cost of living in Long County is significantly lower than the state average because of the rural nature of the county and the absence of large-scale development. The wages and earnings of residents as a whole have continually risen since the 1980s. While local wages are low compared to the state average, the cost of purchasing a home or renting in Long County is well below the state average.

Concern with housing affordability lies with low-income groups. More than 17 per cent of Long County residents fall below the poverty line. The number of households earning less than \$29,999/year in household income represents more than 48 per cent of the total households. Low incomes are offset only by the lower cost of living.

The community's non-resident workforce's housing needs is more complicated to quantify because of the assumption that they wish to reside in Long County. The idea behind the statewide objective of "to make it possible for all who work in the community to also live in the community" relates primarily to communities in which the non-resident workforce commutes to areas where the cost of housing is unaffordable, not to rural jurisdictions where housing cost differentials are minimal from one county to the other. Over 30 per cent of the county's

nonresident population commutes from counties adjacent to Long County. The majority of the nonresident population commutes from Liberty County where the median value of a home is 50 per cent higher and more services are provided. Per capita incomes are \$1,368 higher in Long County while average household incomes are \$5,760 more in Liberty County. Both owner and renter vacancy rates in Liberty County are lower than in Long County (2.5 per cent vs 2.7 per cent and 12.2 per cent vs. 17.4 per cent respectively).

## **Housing Conditions**

In general, the housing stock in Long County is comparable to the regional and state averages. Less than 5.9 per cent of Georgia homes were built prior to 1939, as compared to 4.9 per cent in Long County.

Over 71 per cent of Long County's housing supply was constructed after to 1980, relatively higher than the 49.7 per cent for the region and 50.1 per cent for the state. The largest period of housing construction in Long County occurred during 1995 to 1998 when more than 25 per cent of the housing units were built.

Overall, the condition of the housing stock is adequate throughout the county and very comparable to regional and state levels. Over seventy percent of Long County's housing units have been built in the past twenty-five years. The lack of complete plumbing facilities in the county has declined from 9.3 per cent in 1980 to 1.2 per cent in 2000, and is comparable to regional (1.3 per cent) and statewide (0.9 per cent) averages. Housing conditions have improved drastically since 1980, primarily because of the phasing out of older units and increased care by homeowners.

### **Assessment of Occupied Units**

Homeownership trends vary throughout the region. In the coastal region, homeownership has increased gradually since 1980, from 56.2 per cent to 62.8 per cent in 2000. This mirrors a statewide trend towards increased homeownership. Statewide, homeownership increased from 60.4 per cent to 67.5 per cent in the last past two decades. In Long County, the home ownership rate has also increased by more than 9 per cent since 1980.

Homeownership trends are reflected in the owner-to-renter ratio. In the region, there are 2.69 owners for every renter, up from 1.66 since 1980. Statewide, the ratio is has increased from 1.85 to 2.00 in the past two decades. By contrast, the ratio in Long County has decreased since 1980.

Vacancy rates throughout Long County are above both the regional and state average. In 2000, the vacancy rate in Long County was 15.5 per cent, slightly

below the 16.8 per cent rate in 1990. The vacancy rate in the region is 11.4 per cent and 8.4 per cent statewide.

The owner vacancy rate in Long County is below 3 per cent, slightly above regional and state averages. Renter vacancy rates are 17.4 per cent. The renter vacancy rate is high compared to the region (11.1 per cent) and state (8.4 per cent) averages. Since 5 per cent is a desired rate for rental unit availability, this suggests that no more units will be needed in light of projected increases in new households through 2025.

## **Seasonal Units**

There are very few seasonal units in Long County.

## **Housing Costs**

The median property value in Long County is \$71,100. Median property values countywide are significantly below the regional average of \$93,767 and state average of \$100,600. Since 1980, the median value of a home in Long County increased by 80.5 per cent. By contrast, median property values in the region and statewide have increased by 40 per cent in that same period.

Median monthly rents in Long County are \$456, slightly below median rents found in the region (\$500) and statewide (\$505). In the past decade, median rents increased 25 per cent. The supply of affordable housing for the resident and nonresident commuting populations is readily available. Property values and rents are affordable to even the lowest paid workers, and vacancy rates ensure an adequate supply.

## **Future Demand**

The forecast of future housing demand is based primarily on the projected population and economic trends established in previous sections of this chapter and the plan. Currently, the majority of the county's housing inventory is manufactured housing units with a relatively small percentage of multi-family, and a small increase in percentage of single-family units.

Owner vacancy rates in Long County are comparable to regional and state averages and may highlight a future housing shortage. Total population is expected to increase by 49.2 per cent through 2025, and the total number of households is projected to increase by 22.6 per cent through 2025. Furthermore, the fastest growing demographic during the planning period is the 55+ age groups (+100 per cent). The number of younger age groups, particularly those of child-raising age, will continue to increase. This will result in an increase in

average household size through 2025. Given these demographic shifts, and assuming the owner-renter ratio remains constant over the planning period, the result will be a net shortage of available owner units and a rental vacancy rate that must keep pace with demographics.

Employment base remains a significant consideration in planning for housing. The workforce is projected to increase by 38.6 per cent through 2025, with most of the employment growth in services. Without an adequate supply of housing units, Long County will fail to house the projected workforce and will struggle to attract new commercial and industrial employers. Currently, close to 30 per cent of Long County jobs are held by non-residents. Most commuters are from adjacent counties with an average commute of 30 miles. These workers tend to work in highly specialized public administration occupations. The county needs to view these workers as potential homeowners and support housing policies that will encourage commuters to reside in the county.

Median incomes will continue to rise in Long County. This rise is particularly evident in household income, which will reach \$38,839 by 2025. Current incomes are adequate to afford median-priced homes within the county. While projections for household income distribution are unavailable, two trends suggest overall income increases in middle-income groups. First, median incomes are rising at relatively high rates. Second, sector earnings indicate that one of the fastest growing employment sectors in the local economy will also be the highest paid.

The Georgia Department of Community Affairs Housing Finance Division compiles data on home sale trends. Based on a sample of 31 units, DCA found the average sale price of an existing structure in Long County to be \$68,562 in 2002. This average sales price is \$108,306 below the state average of \$176,868 and, based on variable income indicators discussed in the previous section, makes housing affordable to most workers in Long County. However, this price range may be difficult for a significant portion of the low-wage retail trade and services workforce and residents dependent on transfer payments to afford housing. Units in the \$50,000-\$70,000 range will be needed to provide affordable housing to these population groups.

There are two significant special needs populations identified in Long County. First, the number of residents 65+ years of age will increase by 80 per cent to 1195 residents and account for over 8 per cent of the population through 2025. Currently, Long County has one nursing home/long-term care facility to meet the special needs of Long County's elderly population. This facility contains 66 beds. An assisted living complex has an additional 34 apartments. Additional beds will be needed through the planning period to keep pace with the projected growth in the elderly population.

Long County contains a public housing supply of 40 units. Given the county's high poverty rate and income distribution slanted towards lower income groups,

the supply of public housing units may not be sufficient to keep pace with the demand. While incomes are projected to rise through 2025, the county will need to plan for additional public housing units.



## **3.3.0.0: Goals & Implementation**

### **Housing**

Long County is committed to ensuring that safe, secure, and affordable housing is available to residents. To that end, the following actions must be taken:

Goal 1: Provide housing choice, in a variety of price ranges, for both homeowners and renters.

Policy 1.1: Encourage a wide range of housing types to support persons with special needs and to accommodate varying age groups, household sizes and work force needs throughout the community.

Policy 1.2: Ensure adequate supply of special needs and affordable housing for seniors and low and moderate-income households.

Policy 1.3: Ensure that all housing meets minimum federal housing standards.

Policy 1.4: Encourage the renovation of substandard or vacant units for use as affordable housing units for low-to-moderate income households.

Policy 1.5: Seek state and federal funding assistance for housing rehabilitation and special needs housing assistance.

Policy 1.6: Encourage an equitable distribution of public housing units.

Policy 1.7: Periodically review the need for a county-wide building department and code enforcement board.

Policy 1.8: Encourage and support facilities for the homeless.

Goal 2: Encourage new housing development to locate in proximity to existing or planned infrastructure and near important community attractions.

Policy 2.1: Encourage housing development to locate in areas convenient to shopping, recreation facilities, schools and other community activities.

Policy 2.2: Encourage infill-housing development, where

appropriate, in suitable areas supported by necessary infrastructure.

Policy 2.3: Encourage mixed-use development within downtown districts.

Policy 2.4: Periodically review the need for adoption and administration of zoning regulations.

### Long County Housing Long: Report of Accomplishments

Housing		
Activity	Status	Explanation
Continue to review the creation of a countywide building department and code enforcement board.	Completed	
Consider administration of Building Code or other construction management process on all new construction and mobile home placement and relocation.	Completed	
Consider adoption and administration of Subdivision Regulations.	Completed	
Consider adoption and administration of Zoning Regulations.	Not Accomplished	Evaluation indicated lack of adequate resources. Issue will be periodically re-evaluated as will appropriate alternatives.
Consider adoption and administration of Condemnation Ordinance.	Postponed	Evaluation indicated lack of adequate resources. Issue will be periodically re-evaluated as will appropriate alternatives.

### Short Term Work Program

Housing				
Activity	Years	Responsible	Cost	Funding

		<b>Party</b>	<b>Estimate</b>	<b>Source</b>
Encourage and support facilities for the homeless.	2005, 2006, 2007, 2008, 2009	County	Unknown	Local, community support
Periodically review the need for adoption and administration of zoning regulations.	2005, 2006, 2007, 2008, 2009	County	None	Permit fees

## **4.0.0.0: Natural and Cultural Resources**

### **Introduction**

The natural and cultural resources element of the comprehensive plan provides local governments the opportunity to inventory their natural, environmentally sensitive, historic, archeological and cultural resources; to assess current and future needs to manage these resources; and to develop goals, policies and strategies for their appropriate use, preservation and protection.

## **4.1.0.0: Inventory**

### **Natural Features**

Long County is located in the upper interior coastal region of Georgia, which encompasses part of the South Atlantic Coastal Plain's "barrier island sequence," descriptive of its 2300 miles of tidal shoreline. Low lands, tidal marshes, remote coastal barrier islands, oak and pine "flatwoods," and land elevations of less than 150 feet above sea level typify the region.

### **Climate**

The climate of the region is typical of the temperate/subtropical location at 32 degrees / north latitude: Summer temperatures of 90 degrees F. for the six months from May through September; measurable rainfall usually occurring 110 days and averaging 45 inches per year; and 30 or fewer days of freezing temperatures per year.

### **Geology and Land Use**

Long County encompasses approximately 257,363 acres (403 square miles) (13 per cent) of the region's 3775 square miles. The surface geology of the region and the county is characterized by widely separated sand ridges and domes well suited for either agriculture or urban uses, interspersed by extensive wetlands.

The majority of the region's surface area is devoted to non-urban land uses: Approximately 91 per cent is in forestry or government reservations and 2 percent is developed for human communities.

Vegetation is typical of southern coastal plains: Approximately 85 percent of the land area is forested, less than 0.5 percent is farmed, and the remaining 19.5 percent is marsh or grassy vegetation. Needleleaf trees predominate over broadleaf forested areas.

Long County's hydrology is evidenced by numerous creeks and swamps, which influence the floodplains and drainage patterns of the subregion. Parts of the Altamaha River and Beards Creek form the Southern and Western boundaries of the county; the South Newport River forms the southern boundary in the eastern part. McIntosh County forms the eastern edge of Long County.

Ludowici -the county seat and only city in Long County -is located on a shallow aquifer recharge area, on the eastern margin of the western one-third of Long County. Most of that city is constructed on a 3-mile wide prehistoric sandy marine terrace, whose 12-mile axis extends southwest to northeast at elevations of 70 to 100 feet + M.S.L.

Although most of the urbanized area is developed, much of it has retained extensive natural vegetation and street tree canopies.

### **Part 5 -Environmental Planning Criteria**

The Georgia Department of Natural Resources (DNR) has published "environmental planning criteria" as required by Part 5 of the 1989 Georgia Planning Act. The criteria supplement the "Minimum Planning and Procedural Standards" issued by the Georgia Department of Community Affairs and closely relate to government comprehensive plans. Although they strongly emphasize evaluation of plans of adjoining jurisdictions, part 5 standards materially are regional criteria because they relate to "watersheds," "aquifer ground recharge areas" and "wetlands."

### **Laws, Administrative Rules and Programs for Local Land Use Management**

Long County's natural resources are visible and essential parts of its character and attractiveness, but are also its most vulnerable features. The favorable soils, vast forests and natural areas in the county visible today could gradually disappear in the name of development "progress," which is why it is important to assure a balance of environmental conservation and preservation, concurrent with proposals for new land uses, annexation and economic development.

An interlocking network of protective regulatory measures exists that assure significant environmental protection measures. River corridor protection, soil erosion and sedimentation regulations, federal wetlands controls, state environmental protection criteria, and local land use zoning and subdivision regulations reinforce the protective network. Numerous devices are available for local land use management. A partial list includes the following devices:

**Georgia Mountains and River Corridors Protection Act:** Addresses protection on selected rivers as part of local comprehensive planning requirements; reinforces river management controls up to 100 horizontal feet of the river bank, including compatible land uses of forestry production, agriculture, residential, and water/wastewater treatment. Where required, the plan addresses the impact of adverse development on the river; associated flora and fauna; public health, safety and welfare; and the preservation of archeological, historical, and sensitive natural resources.

**Department of Natural Resources (DNR) Wetlands Protection Criteria:** includes mapping of wetlands and coordination with Section 404 of the 1977 Clean Water Act (Federal) which requires permits for activities in wetlands involving fill material, especially enforceable in areas with a permitting requirement for construction (and with a permitting authority, such as a Building Inspection Office or Management Authority). Other features include identifying significant wetlands and restrictive land use measures.

**DNR Criteria for Protection of Groundwater Recharge Areas:** These criteria involve the identification of all groundwater recharge areas in local jurisdictions and the regulation of waste disposal sites, hazardous materials facilities, water holding basins, wastewater irrigation systems, and septic tanks.

**Georgia Department of Human Resources Rules and Regulations for On-Site Sewage Management Systems:** Prohibits septic tanks in a floodplain, and specifies the size of residential lots based on the permeability of the soil and percolation rates for that soil type.

**1989 Georgia Comprehensive Planning Act:** In addition to establishing minimum standards per local comprehensive plans, this law permits the identification and nomination of Regionally Important Resources (RIR's), for consideration in local comprehensive plans. Local governments may designate special protective measures for RIR's, and are also required to submit to their Regional Development Centers (RDC's) any proposed land development actions which may affect a designated RIR. This is also a review process for Developments of Regional Impacts (DRI).

**National Park Service:** Offers potential for protection through National Park Service management system designation of other programs.

**Local Land Management Regulations:** For Local governments (cities and counties) local land use zoning ordinances, special management districts in land development codes, and standard city/county codes permit protection of public and private lands.

#### **Other Land Use Management Regulations**

- 401 Water Quality Certification Program
- Dam Safety Act (1978)
- Waterwell Standards Act (1985)
- Environmental Policy Act (1991)
- Georgia Safe Drinking Water Act (1977)
- Groundwater Use Act (1979)
- Georgia Asbestos Safety Act (1986)
- Shore Protection Act (1992)
- River Corridor Protection Act (1991)
- Shellfish Laws (1991)
- Water Quality Control Act (1992)
- Tidewaters Protection Act (1992)
- Scrap Tire Amendment (1992)
- Oil or Hazardous Material Spills or Releases (1988)
- Timber Tax Amendment (1991)
- Georgia Surface Mining Act (1992)
- Right of Passage Amendment (1992)
- Underground Storage Tanks Regulations (1988)

- Superfund Amendment (1992)
- Comprehensive Solid Waste Management Act (1992)
- Federal Emergency Management Act (1987)
- Clean Water Act (1993)

## INVENTORY

### Water Resources

As in other jurisdictions throughout the state, water is a fragile resource. Long County residents recognize the importance of protecting and ensuring clean and safe drinking water. Maintaining high standards for water quality results in public health benefits that are advantageous to all Georgians. Land-disturbing activities associated with development can increase erosion and sedimentation, and storm water runoff and industrial uses that involve hazardous waste pose a potential risk of contamination to nearby public drinking water supplies. Given the significance of water resources, it is important to ensure that best management practices are in place to guide future development.

As part of the requirements of the Georgia Department of Community Affairs' Minimum Planning Standards, communities must comply with minimum land and water resource standards established by the Georgia Department of Natural Resources (DNR). Commonly referred to as "Part 5 Minimum Environmental Standards", these statewide standards were developed by DNR pursuant to Code Section 12-2-8 and address three basic concerns:

- Ø Aquifer Recharge Areas
- Ø Water Supply Watersheds
- Ø Wetlands

To comply with Part 5 Standards for each category of resources, communities must:

- Ø Identify and inventory any occurrences of these resources within their jurisdiction.
- Ø Determine whether appropriate protective regulations that are at least as stringent as those imposed by DNR are in place.
- Ø Determine whether additional regulations are needed to meet or exceed the minimum DNR standards.



## Public Water Supply Sources

Long County does not operate a public water system. Most Long County residents rely on private wells for their water supply. Many of the mobile home parks rely on private water systems maintained by the park owners.

The City of Ludowici operates a public water supply for 1440 city residents. The City draws water from two permitted wells from the Floridan and Miocene aquifers. The current permitted yearly withdrawal rate is 741,000 gallons per day.

**Table N-1  
Community Water Systems**

<u>Water System Name</u>	<u>Principal County Served</u>	<u>Population Served</u>	<u>Primary Water Source Type</u>	<u>System Status</u>	<u>Water System ID</u>
<a href="#">AARON MOBILE HOME PARK</a>	LONG	57	Ground water	Active	GA1830006
<a href="#">BEAVER HILL MOBILE HOME PARK</a>	LONG	78	Ground water	Active	GA1830039
<a href="#">BENTON BAY MOBILE HOME PARK</a>	LONG	8	Ground water	Active	GA1830040
<a href="#">CARTER MOBILE HOME PARK</a>	LONG	44	Ground water	Active	GA1830026
<a href="#">CEDAR BROOK MOBILE HOME PARK</a>	LONG	55	Ground water	Active	GA1830001
<a href="#">CG TFI MOBILE HOME PARK</a>	LONG	65	Ground water	Active	GA1830035
<a href="#">COUNTRY MANOR MOBILE HOME PK</a>	LONG	312	Ground water	Active	GA1830017
<a href="#">COUNTRY MEADOWS MOBILE HOME PK</a>	LONG	57	Ground water	Active	GA1830025
<a href="#">HUCKLEBERRY MOBILE HOME PARK</a>	LONG	33	Ground water	Active	GA1830044
<a href="#">J&amp;M RENTALS</a>	LONG	60	Ground water	Active	GA1830021
<a href="#">LAND OF LAKES</a>	LONG	47	Ground	Active	GA1830041

<a href="#">MHP</a>			water		
<a href="#">LUDOWICI</a>	LONG	1440	Ground water	Active	GA1830000
<a href="#">MAGNOLIA PARK WATER SYSTEM</a>	LONG	62	Ground water	Active	GA1830034
<a href="#">MCDONALD VILLAGE</a>	LONG	50	Ground water	Active	GA1830031
<a href="#">MIDDLETON MOBILE VILLAGE</a>	LONG	60	Ground water	Active	GA1830010
<a href="#">NETTLES BRANCH SUBDIVISION</a>	LONG	70	Ground water	Active	GA1830043
<a href="#">OAK MEADOWS MOBILE HOME PARK</a>	LONG	75	Ground water	Active	GA1830024
<a href="#">OAK RIDGE MOBILE HOME PARK</a>	LONG	114	Ground water	Active	GA1830028
<a href="#">OAKDALE MOBILE HOME PARK</a>	LONG	268	Ground water	Active	GA1830007
<a href="#">PENNY ACRES TRAILER PARK</a>	LONG	63	Ground water	Active	GA1830027
<a href="#">PERSIMMON ESTATES SUBDIVISION</a>	LONG	42	Ground water	Active	GA1830037
<a href="#">PINE CREST MOBILE HOME PARK</a>	LONG	86	Ground water	Active	GA1830032
<a href="#">SANDHILL SUBDIVISION</a>	LONG	62	Ground water	Active	GA1830033
<a href="#">SANDY RIDGE SUBDIVISION</a>	LONG	49	Ground water	Active	GA1830042
<a href="#">SPRING CREEK MOBILE HOME PARK</a>	LONG	65	Ground water	Active	GA1830008
<a href="#">STEWART PINES TRAILER PARK</a>	LONG	47	Ground water	Active	GA1830029
<a href="#">TAYLORS CREEK MHP</a>	LONG	50	Ground water	Active	GA1830020
<a href="#">TWIN OAKS MOBILE HOME PARK</a>	LONG	99	Ground water	Active	GA1830002

Source: Georgia Environmental Protection Division

## **Water Supply Watersheds**

A water-supply watershed, as defined by DNR, is "the area of land upstream of a government-owned public drinking water intake". Since there are no water supply watersheds in Long County, these requirements do not apply.

## **Aquifers and Groundwater Recharge Areas**

**Groundwater Recharge Areas** are absorptive land surfaces that allow rainfall to filter toward underlying aquifers. Precipitation is the ultimate source of Georgia's fresh ground water. Recharge is the process by which precipitation infiltrates soil and rock to add to the volume of water stored in pores and other openings within them. Aquifers are soils or rocks that will yield water to wells. While recharge takes place throughout practically all of Georgia's land area, the rate or amount of recharge reaching underground aquifers varies from place to place depending on geologic conditions. Major ground water resources may develop where permeable aquifers underlie or are connected to extensive areas favorable for recharge. Their permeability and suitability for water recharge also makes them vulnerable to pollution from human activities.

Significant recharge areas for the "Miocene/Pliocene-Recent unconfined [shallow] aquifer," the uppermost strata of the ground probably not more than 75 feet below the surface, are found in a three-mile wide band that extends northward from part of unincorporated Long County. The approximate locations of the potential recharge areas are shown on the map below.

The presence of this "high susceptibility" recharge area triggers DNR "Criteria for Protection of Groundwater Recharge Areas," in the affected jurisdictions. Those rules require strict groundwater protection and provide standards for development of new sanitary landfills, disposal of hazardous wastes, new above ground chemical or petroleum storage tanks, new agricultural waste impoundment facilities, septic tanks/drain field systems for residential subdivisions and mobile home parks, and similar land uses.

**Deep underground aquifers** are water-bearing reservoirs located below a watershed recharge area, plus a distribution zone usually extending many miles beyond the watershed's seepage area. The Floridan aquifer underlying the coastal Georgia region, from which most of the region's cities extract their domestic and industrial water supplies, is an example. None of the deep water sources used by the coastal population originates in the coastal region; it comes from central and northeastern Georgia watersheds (although some domestic supply wells in rural areas do tap the pollution-susceptible, shallow aquifer).

Aquifers are susceptible to pollution from surface sources, through unplugged-wells, chemical disposal systems and similar intrusions. The real danger from surface pollution is that once polluted, an aquifer may never recover its original water quality. Inventory and assessment requirements for deep aquifer recharge areas are not applicable to the

county plan, since none are known to occur in unincorporated Long County or its municipality. However, possible surface communication to deep aquifers must be monitored.

## **Wetlands**

Wetlands serve as important fish and wildlife habitat and breeding ground, and are an integral factor in food chain production. Numerous plant and animal species have adapted to the special conditions of freshwater wetlands and cannot survive elsewhere.

Federal law defines freshwater wetlands as those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas. Under natural conditions, wetlands help to maintain and enhance water quality by filtering out sediments and other non-point source pollutants from adjacent land uses.

Five categories of wetlands are identified in DNRs Rules for Environmental Planning Criteria as requiring protection through ordinances: open water, non-forested emergent wetlands, scrub/shrub wetlands, forested wetlands, and altered wetlands.

Land uses in wetland areas should be limited to low impact uses, including timber production and harvesting, wildlife and fishery management, and recreation. These land uses as well as others are covered in more detail under Section 404 of the federal Clean Water Act. Section 404 prohibits the discharge of dredging or fill material into the water bodies or wetlands of the United States unless a permit is granted. The United States Army Corps of Engineers (USACE) administers this program and determines if a section 404 permit should be issued by analyzing the project's impact on wetlands.

Swamps, bogs, drainage ways and perennial streams comprise the classic recognizable wetlands. There are many other identified types of wetlands. (Some ecologically important wetlands may even be dry during much of the year.) Wetlands may include, but are not necessarily limited to: Lakes, ponds, other open water, streams, rivers, creeks, intermittent streams, wet meadows, pine flatwoods, springs and sinkholes. In the southeast United States, major wetlands types include the following types:

- Bogs -recognizable by a layer of floating root masses or peat and highly acidic water
- Bottomland hardwoods -deciduous forested floodplains
- Emergent wetlands -freshwater or saltwater areas populated by nonwoody plants
- Mangrove swamps -tidal or perennially flooded coastal saltwater shrub or forest
- Marshes -flowing salty or freshwater, inland or coastal, nonwoody vegetation
- Swamps -flowing or standing freshwater, shrub and forested
- Pocosins -broadleaved evergreen shrub bogs seasonally wet
- Vernal Pools -shallow water covered during winter and spring, dry summer and fall

Wetlands are flooded or saturated by surface or groundwater often enough and long enough to grow vegetation adapted for life in water-saturated soil. Periodic or permanent wetness is the second fundamental distinction of wetlands from uplands. Acidic or hydric soil chemistry is the third principal feature.

Wetlands are valuable community ecological and economic resources as they provide the following benefits:

- Habitat for interdependent species of animals and plants
- Hydrologic balance in the total natural environmental system
- Added economic benefits from forestry activities, where permitted

Extensive wetlands, and attendant use-prohibitive rules, represent the major constraint for highway construction, urban development, agricultural and forestry land uses in the county. Current estimates indicate approximately 42 per cent of Long County's 257,363 acres (514 square miles) may be defined "jurisdictional wetlands" regulated by Section 404 of the Federal Water Pollution Control Act of 1972, Clean Water Act of 1977 amendments and related regulations. (The regulated wetlands include all fresh water marsh and swamp areas adjacent to local stream drainage ways, plus inland swamps and bogs.) Most of the county's wetlands occur in the eastern sector of the county. Other "jurisdictional wetlands" occur throughout the county at elevations of +20 to +80 M.S.L., demonstrating that a wetland is not necessarily a "lowland."

### **Protected Mountains**

The requirement to inventory and assess unique mountainous areas requiring protection from intense development is not applicable to Long County.

### **Protected River Corridors**

The requirement to inventory and assess unique river corridors that warrant special management practices is applicable to unincorporated Long County, but not to its municipality. The initial rules would regulate development in a 100-foot band along Altamaha River, which would have minor effects on the county's unbuildable floodways, and would have few impacts on the upland bluffs already developed. The River Corridor areas in Long County were thoroughly inventoried in the Regional River Corridor Protection Plan prepared by CGRDC.

### **Coastal Resources**

The requirement to inventory the ecological systems and sensitivities of identified coastal resources such as beaches, coastal marshes and estuaries, is applicable to unincorporated Long County. As much as 15 per cent of the total surface area of the county may comprise coastal marshes and estuaries. However, the geography is quite different than most coastal areas: The upland bluffs terminate at marshland margins.

Approximately 50 per cent of all the upland bluffs on marshes and rivers are already developed to low-density residential uses; the remainder being in large public and private landholdings and land conservation trusts. The bluffs are in no jeopardy of high intensity development.

All coastal marshes are protected from development by extensive, interlocking state and federal regulations.

## **Flood Plains**

Flooding is the temporary covering of soil with water from overflowing streams and by run-off from adjacent slopes. Flooding is characterized by frequency and time of year elements. Floodplains serve three major purposes: natural water storage and conveyance, water quality maintenance, and groundwater recharge. These three purposes are greatly inhibited when floodplains are misused or abused through improper and unsuitable land development. For example, if floodplains are filled in order to construct a building, then valuable water storage areas and recharge areas are lost. This causes unnecessary flooding in previously dry areas. Therefore, floodplain development is usually discouraged with exception of recreational facilities. Long County participates in the National Flood Insurance Program. Flood insurance rate maps are available for areas that participate in the Flood Program.

There are several natural physical characteristics of the land in the county which act as constraints to urban development. These factors are the characteristics of some of the soils, the topographically determined seasonal potential for flooding, and the perennially wet condition of numerous swamps and extensive lowlands adjacent to the community.

Predicted floodways, and various flood conditions and velocities, are shown on enlarged scale Flood Insurance Rating Maps (FIRM) published by the Federal Emergency Management Agency (FEMA). Although the Natural Resources map is reduced scale, it shows numerous natural drainage ways and extensive poorly drained soils throughout the county, which correlates well with the following FIRM map information:

- Storm drainage ways and floodplains vary in width, but generally have low flow rates, with bays and swamps common in outlying areas.
- Flooding during periods of excessive seasonal rainfall may be caused by, or aggravated by, buildings or other restrictions in or adjacent to floodways, and the general flatness of the terrain adjacent constructed storm drainage ways.
- Areas within the county which are subject to 100-year, or base, floods are coincident with extensive wetlands in predominately undeveloped areas and do not appear to represent general or special hazards to persons or property.
- Compliance with standard federal flood management regulations will neutralize many of the hazards resulting from the presence of floodways in the county.

## Soil Types

Soils are produced from the interaction of parent material, climate, plant and animal life, chemicals, water and physical abrasion over geologic millennia. They may have developed *in situ*, from parent materials located fairly close to their current position, or have been carried many miles from their origins by ice or marine currents.

## Soil Surveys

Knowledge of general soil and landscape characteristics is essential for determining the capability of and range of uses for any land area. Fortunately, extensive information regarding Long County's soil types, slope characteristics, general suitability of land for specified kinds of urban or agricultural uses, drainage capabilities and engineering characteristics is readily available in the "Soil Survey of Long and Liberty Counties, Georgia" (USDA 1980). The Natural Resource Conservation Service, U.S. Department of Agriculture publishes the 129-page report, which includes 79 photomaps showing superimposed soil class boundaries at a scale of 1 inch to 1320 feet.

The SCS soil survey identifies three major soil groups subdivided into 32 "series," and further subdivided into 36 soils "types." The three major soil groups in Long County are as follows:

- Well-drained soils not subject to flooding
- Poorly-drained soils not subject to flooding
- Poorly-drained soils subject to flooding

Each of the soils occurring in the Long County area have their own specific "profile," such as seasonal high water table, flooding hazard or other significant features described in detail in the soil survey. The soil survey's engineering interpretations and land usability tables are useful to planners, developers, builders, zoning officials, realtors and others identifying land for farm or non-farm uses.

In the survey, soil scientists have rated each soil for urban or agricultural use. The ratings range from "slight" and "moderate" to "severe". A rating of "slight" means limitations are so minor that they are easily accommodated by project planning and design. "Moderate" means soil properties are reasonably favorable for the rated use. Use limitations can be moderated by planning, design or careful maintenance. A rating of "severe" means the soil has one or more properties unfavorable for the rated use. Use limitations for soils rated "severe" are difficult and costly to moderate or eliminate, and may require soil reclamation, special design, or special maintenance. For some soil limitations rated severe, such measures may not even be feasible.

## General Soil Map Units

For soil mapping purposes, SCS soil scientists aggregated the 36 known soil types in the three major soils groups into 11 "general soil map units;" generalized descriptions follow:

### Well-Drained Soils Not Subject To Flooding

**Eschaw-Foxworth-Centenary:** Found as nearly level gently sloping, moderately well-drained soils that are sandy throughout. This map unit occurs mainly in south-central Long County and in adjacent Liberty County from Hinesville to the Long County line; along the coast; and on St. Catherine's Island. It comprises the mile-wide sandy ridge on which most of Hinesville, Allenhurst and Walthourville are developed; the domes at Seabrook and Colonels Island; and six-mile ridge on St. Catherine's Island. These soils are located on broad sandy ridges ranging from 20 to 70+ feet above sea level, with most slopes ranging to 5 percent. Natural vegetation on these soils are loblolly pine, longleaf pine, live oak and turkey oak. The low available water capacity makes most of this map unit moderately suited to pine woodland and as farmland. The soils in this unit are limited for urban use because of seasonal wetness. Recreation development is limited because the soils are too sandy.

**Stilson-Pelham-Fuquay:** Found as nearly level gently sloping, poorly drained, moderately well-drained and well-drained sandy soils, averaging three feet in depth. This map unit occurs mainly in western Long County on broad smooth areas, in depressions and drainage ways, and on ridgetops, usually more than 70 feet above sea level, with gradients ranging from 0 to 4 percent. Natural vegetation is loblolly pine, wax myrtle, gallberry and saw palmetto. Soil wetness makes most of this map unit moderately suited to pine woodland and as farmland, but limits its use for urban and recreational development.

### Poorly-Drained Soils Not subject to Flooding

**Mandarin-Rutlege:** Exists in only one location in Long County, west and abutting Walthurville / Allenhurst/ Hinesville/ Fort Stewart ridge. Slightly over one mile wide, elevations range from 70 to 90+ feet above sea level, with gradients ranging from 0 to 5 percent. Natural vegetation is loblolly pine, wax myrtle, gallberry and saw palmetto on uplands, with blackgum, cypress, sweetgum, pond pine and water oak on lower areas. Except on higher ridges, soil wetness makes most of this map unit only moderately suited to pine woodland, and limits its use for farmland, urban and recreational development.

**Mascotte-Pelham-Leefield:** Found as nearly level gently sloping, poorly drained sandy soils, averaging three feet in depth, this map unit represents 20 percent of the county's soils. It occurs mainly in western Long County -on broad smooth areas, in depressions and drainage ways, and on ridgetops; usually more than 70 feet above sea level, with gradients ranging from 0 to 4 percent.



Most of this unit is in pine plantations, with some cleared areas used for pasture or cultivation. Natural vegetation consists of slash pine and longleaf pine, with an understory of wax myrtle, gallberry and saw palmetto. Soil wetness makes most of this map unit moderately suited to pine woodland and as farmland, but limits its use for urban and recreational development.

**Ocilla-Riceboro-Pooler:** Comprising more than 20 percent of the county, this map unit is characterized by nearly level gently sloping, poorly drained, moderately well-drained and well-drained sandy soils. It occurs mainly in central Long County -on broad smooth areas and in depressions and drainage ways, usually 2 to 20 feet above sea level, with gradients less than one percent.

Most of this unit is in pine plantations, with some cleared areas used for pasture or cultivation. Natural vegetation consists of slash pine and longleaf pine, with an understory of wax myrtle, gallberry and saw palmetto. Soil wetness makes most of this map unit moderately suited to pine woodland and as farmland, but limits its use for urban and recreational development.

**Bladen-Pooler-Riceboro:** This map unit comprises approximately 20 percent of the county and is characterized by nearly level gently sloping, poorly drained, moderately well-drained and well-drained sandy soils. These soils occur mainly in central Long County -west of the CSX railroad -on broad smooth areas and in depressions and drainage ways, usually 2 to 20 feet above sea level. Gradients average less than one percent.

Pine plantations vegetate most of this unit, with some cleared areas used for pasture or cultivation. Natural vegetation consists of loblolly pine, sweetgum, and water oak with an understory of wax myrtle and wiregrass. Soil wetness makes most of this map unit moderately suited to pine woodland, but limits its use for farmland, urban and recreational development.

### **Poorly-Drained Soils Subject to Flooding**

**Ellabelle-Johnston-Bibb:** Poorly drained soils in depressions, bays and drainage ways characterize this soil mapping unit, which is located exclusively in western Long County, in the floodways of Canoochee Creek and Taylor's Creek on Fort Stewart, and Mill Creek and Horse Creek, between Hinesville and Gum Branch. Terrell's Millpond (Way's Millpond) is comprised entirely of the soils in this map unit. Natural vegetation consists of cypress, blackgum, sweetgum and pond pine, with an understory of wax myrtle and gallberry. Elevations range from 60 to 80 + mean sea level. Soils in this unit are well-suited for pine woodland, but unsuitable for farmland and urban uses because of ponding and flooding. Gradients average less than one percent.

**Johnson-Bibb-Osier:** This soil mapping unit consists of poorly drained soils located in the flood plain along the Canoochee River. Natural vegetation is cypress, blackgum,

water oak and tupelo. Elevations range from 50 to 60+ mean sea level. Soils in this unit are well-suited for pine woodland but not for agriculture or other uses.

### **Topography and Steep Slopes**

The topography (ground elevation) of Long County is varied. Elevations across the county range from Mean Sea Level (MSL) to 95 feet+ M.S.L. at the Long County Courthouse.

### **Steep Slopes**

Identification of steep natural slopes present in the community and a determination regarding suitability of the slopes for development is a state requirement for this Plan.

Neither unincorporated Long County nor Ludowici have any steep slope problems.

### **Prime Agricultural and Forest Land**

"Prime agricultural and forest land" are areas valuable for agricultural or forestry production that may require special land use classification, protective measures or other considerations. Most of the "prime agricultural land" identified in Long County by the U.S. Soil Conservation Service (SCS) occurs in extreme western and extreme eastern parts of the county.

Northwest of Ludowici, numerous mixed rural-urban land uses occur, where pastures and/or cropland exist adjacent of residential and other non-farm land uses.

Extensive wetlands -swamps, bogs, drainage ways and perennial streams -represent the major constraint for agricultural (and other) land uses in the county. Ironically, the best agricultural soils also support non-farm development best. The characteristics of prime agricultural land -good drainage, high relative elevation and good textural soil quality -are attributes that make those areas the most suitable for non-agricultural development and the most vulnerable to change.

"Prime forest land" is a matter of definition. Vast expanses of forest exist throughout Long County and its municipalities. The abundant woodlands result from the seasonally warm, humid climate and perennially high surface or near-surface water supplies. On the well-drained ridgeland soils, better commercial tree species include slash pine, loblolly pine, longleaf pine, red oak, and hickory. In depressions, drainage ways, bays, and swamps, common commercial species include cypress, blackgum, sweetgum, water oak, willow oak, sycamore, ash, and tupelo-gum.

Land owned or leased by pulpwood processors, private tree plots and harvests from public lands for sale to the paper mills in the region form the basis for major direct and indirect industrial employment activities.

Ludowici has many tree-lined streets and the county has extensive commercial timber growing areas, but no known forests of "specimen grade" trees or other unusual forested areas. Therefore, this issue required no further action unless such features are identified.

## **Plant and Animal Habits**

Plant and animal habitats are areas that support rare or endangered plants and/or animals. Identified plant and animal habitats of rare or endangered species in the community being planned, or which may be impacted by activities in the community being planned, require special consideration. Beyond the common public concern for protecting such habitats, federal and state laws may impose significant criminal penalties and civil liabilities for non-protective actions.

Secondary criminal and civil sanctions may also result from non-protective actions deemed to violate any coastal zone management, marshland protection, river corridor protection, soil erosion control, water pollution control or other federal, state, county or municipal regulations governing lands on which affected plant or animal habitats are located.

## **DNR "Freshwater Wetlands and Heritage Inventory Program"**

The Georgia DNR "Freshwater Wetlands and Heritage Inventory Program" has developed an inventory of the natural diversity of Georgia based on documented occurrences of plants, animals, and biological communities. Species that are especially rare, unique, or threatened are ranked on the basis of biological and geographical rarity.

The database comes from a variety of sources, including museum records, literature, and reports from individuals and therefore does not always represent the result of an on-site survey. The information provided by this program represents the data currently existing in DNR files, updated periodically. Although it is not a definitive statement of all the rare species and communities of Long County, the following list shows some of the species identified.

"US" indicates species with federal status (Protected, Candidate or Partial Status).

Species that are federally protected in Georgia are also state protected.

"GA" indicates Georgia protected species.

## **Animals**

· *Acantharchus pomotis* Mud Sunfish

US · *Acipenser brevirostrum* Shortnose Sturgeon

GA · *Aimophila aestivalis* Bachman's Sparrow

- *Alasmidonta arcula* Altamaha Arcmussel
- US · *Ambystoma cingulatum* Flatwoods Salamander
- GA · *Clemmys guttata* Spotted Turtle
- *Crotalus adamanteus* Eastern Diamondback Rattlesnake
- *Cyprinella callisema* Ocmulgee Shiner
- *Cyprinella leedsii* Bannerfin Shiner
- US · *Drymarchon couperi* Eastern Indigo Snake
- GA · *Elanoides forficatus* Swallow-tailed Kite
- *Elliptio dariensis* Georgia Elephantear
- US · *Elliptio spinosa* Altamaha Spiny mussel
- US · *Eumeces egregius* Mole Skink
- *Falco sparverius paulus* Southeastern American Kestrel
- *Farancia erythrogramma* Rainbow Snake
- *Fundulus chrysotus* Golden Topminnow
- US · *Gopherus polyphemus* Gopher Tortoise
- US · *Haliaeetus leucocephalus* Bald Eagle
- *Hybognathus regius* Eastern Silvery Minnow
- *Lampropeltis triangulum triangulum* Eastern Milk Snake
- *Micrurus fulvius fulvius* Eastern Coral Snake
- US · *Mycteria americana* Wood Stork
- GA · *Notophthalmus perstriatus* Striped Newt
- *Nycticorax nycticorax* Black-crowned Night-heron
- *Ophisaurus attenuatus* Slender Glass Lizard
- *Ophisaurus compressus* Island Glass Lizard
- *Ophisaurus mimicus* Mimic Glass Lizard
- US · *Picoides borealis* Red-cockaded Woodpecker
- *Pituophis melanoleucus mugitus* Florida Pine Snake
- *Pseudobranchius striatus* Dwarf Siren
- *Pyganodon gibbosa* Inflated Floater
- *Rana capito* Gopher Frog
- *Rana virgatipes* Carpenter Frog
- *Sciurus niger shermani* Sherman's Fox Squirrel

· *Seminatrix pygaea* Black Swamp Snake

US · *Vermivora bachmanii* Bachman's Warbler

## Plants

GA · *Balduina atropurpurea* Purple Honeycomb Head

· *Calopogon multiflorus* Many-flowered Grass-pink

GA · *Carex dasycarpa* Velvet Sedge

· *Dalea feayi* Feay Pink-tassels

GA · *Elliottia racemosa* Georgia Plume

GA · *Epidendrum conopseum* Green-fly Orchid

GA · *Fothergilla gardenii* Dwarf Witch-alder

· *Ilex amelanchier* Serviceberry Holly

· *Ipomoea macrorhiza* Large-stem Morning-glory

· *Liatris pauciflora* Few-flower Gay-feather

GA · *Litsea aestivalis* Pondspice

· *Lobelia boykinii* Boykin Lobelia

GA · *Matelea pubiflora* Trailing Milkvine

· *Peltandra sagittifolia* Arrow Arum

GA · *Penstemon dissectus* Grit Beardtongue

· *Plantago sparsiflora* Pineland Plantain

· *Platanthera nivea* Snowy Orchid

· *Pteroglossaspis ecristata* Wild Coco

· *Quercus austrina* Bluff White Oak

GA · *Sarracenia flava* Yellow Flytrap

GA · *Sarracenia minor* Hooded Pitcherplant

· *Sideroxylon sp. 1* Ohoopee Bumelia

· *Sporobolus pinetorum* Pineland Dropseed

Although Long County has no known plant and animal communities of rare or endangered species, it does not mean none exist. One species that has generated

concern is the red-cockaded woodpecker (family Picidae), which lives in old growth pines.

Continual care must be exercised to assure other future identified occurrences are adequately included in the community's comprehensive plan.

## **Parks and Recreation Areas**

Federal, state and regional parks, recreation areas and conservation areas (e.g., wildlife management areas, nature preserves, national forests, etc.) are the required subject of this section. Major federal, state and regional parks and recreation areas significantly, contribute to the "quality of life" in any community. Those types of facilities and land areas must be identified and evaluated in this Plan. [Local parks and recreation areas are identified in the Community Facilities and Services Element.]

## **Scenic Views and Sites**

Significant visual landmarks and vistas that may warrant special land use classification consideration are the required subject of this section.

The county has numerous pleasant vistas and sites, but none which warrant special land use classification.

# **Cultural Resources**

## **Residential Resources**

The Context: Long County's History

Long County is a unique coastal Georgia county whose history has been affected by geography and international politics. Its history mirrors the nation's: Indian and Colonial settlements, the American Revolution, the War Between The States, and all the military conflicts of the twentieth century. Archaeological evidence indicates Native Americans lived along the coast in 2500 B.C. Their seminomadic lifestyle was supported by abundant supplies of animals, birds and seafood -especially shellfish. Mounds of oyster shells eventually provided the aggregate for settler's "tabby" houses constructed of timber covered with a mixture of sand, lime and oyster shells.

History records the Spanish explorer Menendez de Aviles, settled St. Catherine's Island in 1565, while founding St. Augustine, Florida and Port Royal, South Carolina. Spanish, English, French and privateer forces alternately ruled the area for most of the following

two centuries, until 1733 when British General James Oglethorpe founded the Province of Georgia on the site of the city of Savannah. Oglethorpe affirmed British governance of the coast through exploration, road and fortification building, and battles against the Spanish.

Long County was founded on August 14, 1920 out of land previously belonging to Liberty and McIntosh counties. Consequently, the character of Long County is quite different than the coast.

The architecture of Long County has several discernible characteristics. Most of the houses are simple in design and ornamentation because of the rural nature of lack of wealth in the county. The Plantation Plain style is predominant including either the two-story structure with a central hall or a one-story version of the same plan. There are also many one story houses without a central hall. Outstanding examples of the Plantation plain style are the Hughes-Howard House, the Horne-Smith House and the Folsom-Coxon House. One-story examples include the Baxter House, and Sullivan-Howard House, and the Judge Price House.

A good indication of the simplicity of the building style in Long County is the very plain manner in which the churches were designed. The Rye Patch Baptist Church and the Jones Creek Baptist Church stand in marked contrast to the churches of Liberty County. The Walthourville Presbyterian Church, which is one of the three offshoots of the Midway congregation, is a notable exception.

Probably the single most important factor in giving Long County distinction is the almost universal use of the red tile roofs on the buildings. The Ludowici Celadon Company operated a tile factory in Ludowici from 1905-1914. Almost every house built during that time was covered with the red Ludowici tile.

The tile company had another quite noticeable effect in the town. Mr. Ludowici put up \$1000 to help build a new school if the town would take his name; the town agreed. Thus, Ludowici was named for a German tile manufacturer and is not an Indian name as some people have alleged.

The Cultural resources of Long County that have been surveyed include the following:

1. Walthourville Presbyterian Church Old Walthourville south of Allenhurst
2. Dr. Raymond V. Harris House, Quality Hill, S. of Allenhurst
3. William Bacon House Old

- |  |   |
|--|---|
| Walthourville south of Allenhurst  | 82, 5 mi. N.E. of Concord Cemetery  |
| 4. Norman House, Old<br>Walthourville, S. of Allenhurst                              | 15. Foster-Everett House, Dirt Road<br>behind Elm Baptist Church                |
| 5. Howard-Popell House, W. of<br>Middleton Church, S.E. Long<br>County               | 16. Tom Lee House, 1 mi. NE. of Elm<br>Baptist Church at Crossroads             |
| 6. Eason-Middleton House east of<br>Middleton Church southeast Long<br>County        | 17. Rosa Perry House, 4 mi. east of<br>Rye Patch Church                         |
| 7. Middleton-Harrison House, Ga.<br>998-1/2 mi. S.E. of Ludowici                     | 18. Hodges-Hinely House, 2-3/4 mi.<br>E. of Rye Patch Church                    |
| 8. Chapman-Smiley on 99 1/4 mi<br>S.E. of Ludowici                                   | 19. Rye Patch Baptist Church, Rye<br>Patch, 4 mi. south of Ga. 196              |
| 9. Boggs-Knight House Road to<br>Concord Cemetery 3 mi. S.E. of<br>Ludowici          | 20. Truman Garrison Cabin, 1 mi. N.<br>of Rye Patch Church                      |
| 10. C.A. Brewer House, S. of Concord<br>Cemetery                                     | 21. W. J. Garrison Cabin, Dirt Road<br>1 mi. from Rye Patch Church              |
| 11. Henry P. Brewer House, S. of<br>Cemetery   | 22. Macedonia Baptist Church off<br>Ga. 196, 2 mi. W. of Liberty County<br>Line |
| 12. Ellerbee House, Dirt road from<br>Ludowici to Concord Cemetery                   | 23. Pinholster-Smiley Cabin, Ga. 196,<br>2 mi. W. of Liberty County Line        |
| 13. Gaskins House, 1/3 mi. N. W. of<br>Concord Cemetery                              | 24. Hires-Blocker House, Ga. 261, 2<br>mi. south of Ga 196                      |
| 14. McGowan-Murray House, U.S.   | 25. Nobles Rental House, Ga. 261, 2<br>mi. N. of U.S. 301                       |
| 27. Howard-Strickland House, off<br>U .S. 301, 1 mi. S.E. of Tattnall<br>County Line | 26. Nobles House, Beards Creek, off<br>U.S. 301                                 |
| 28. C.W. Howard, Sr., House, U.S.  | 301, 2-1/2 mi. S. of Tattnall County<br>Line                                    |



- |  |   |
|--|---|
| 29. Mrs. Lawton Howard House, U.S. 301, 2-1/2 mi. S. of Tattnall County Line | 42. Stevens House, U.S. 301, 3-1/2 mi. N. of Ludowici                           |
| 30. Howard-Todd House, U.S. 301, 3 mi. S. of Tattnall County Line            | 43. Chapman House, U.S. 301, 3-1/2 mi. N. of Ludowici                           |
| 31. Baxter House, U.S. 301, 10 mi. N. W .of Ludowici                         | 44. Price-Chapman House, U.S. 301, 2 mi. N. of Ludowici                         |
| 32. Hampton Baxter Cabin, U.S. 301, 10 mi. N.W. of Ludowici                  | 45. Folsom Williams-Coxon Worth House, U.S. 301, 1 mi. N. of Ludowici           |
| 33. Sullivan-Howard House, off U.S. 301 at St. Thomas Church                 | 46. Johnson-Hughes House, U.S. 301, 1 mi. N. of Ludowici                        |
| 34. Parker House, Dirt Road, S. of Donald                                    | 47. Gordon House, N. end of 4th Street  |
| 35. Home House at Firetower, 6 mi. N. of Ludowici                            | 48. Mrs. Modie Thrasher House, Way - Street                                     |
| 36. Smith House at Firetower, 6 mi N. of Ludowici                            | 49. W.F. Chapman House, Oak Street between 3 <sup>rd</sup> and McDonald Streets |
| 37. M.F.FutchHouse, U.S.301,7-1/2 mi. N. of Ludowici                         | 50. Johnston-Chapman House State St. between Third and Main Streets             |
| 38. Jimmy Parker House, U.S. 301 7 mi. N. of Ludowici                        | 51. Baggs-Long House, Long and Main Streets                                     |
| 39. Hughes House, Dirt Road, 5 mi. N. of Ludowici                            | 52. Baggs-Smith House, Railroad St. Between Pine and Main Sts.                  |
| 40. Hughes-Howard House, Dirt Road, 5 mi. N. of Ludowici                     | 53. Mrs. R.B. SmileyHouse, Railroad Street Between Pine and Main Streets        |
| 41. Jones Creek Baptist Church U.S 301, 5 mi. N. of Ludowici                 | 54. Neill McQueen House McQueen St., west of Gazebo                             |
| 55. Gazebo, McQueen St., west of Main St.                                    | Main St. at Railroad  |
| 56. Ludowici Railroad Depot east of  | 57. Citizen's Bank, McQueen Street, between McDonald and Main Sts               |

58. Liberty Banking Company  
McQueen Street between  
McDonald and Main Streets
59. Rimes Brothers Store McQueen  
Street between McDonald and  
Main Streets
60. Mrs. R.L. Dawson House, Celadon  
and McDonald Streets
61. Branch-Shaw Building, Main St.,  
between McQueen and Celadon Sts.
62. McQueen-Bullard House, Main  
and Celadon Streets
63. Winn-Shaw House, McQueen  
Street across from the Gazebo
64. Rimes-Smith House, McQueen St.
65. Houston House, McQueen and  
Gill Streets
66. Daniels-Gordon House, Celadon  
and Gill Streets
67. Rimes House, Celadon and Gill  
Streets
68. Ludowici Celadon Clubhouse,  
Plywood and Factory Streets
69. Brick Office Buildings S.W. end of  
Plywood Street
70. House on Factory Hill  
Street
84. M.C. Smith House, S. Macon St.  
between Church and Academy  
Streets
85. First Baptist Parsonage, Macon
71. Baggs-Howard House, Church  
and Main Streets
72. Mrs. Annie Shaw House, Church  
and McDonald Streets
73. Horne-Stafford House Church  
and Main Streets
74. Judge Price House, Academy and  
Main Streets
75. Chapman-Bazemore House  
Railroad Street between  
McDonald and Macon Streets
76. Johnston-Mitcham House, Way  
Street near Macon Street
77. Masonic Hall, Macon Street  
between State and Railroad Sts.
78. Mrs. Buford Mobley House Way  
and Macon Streets
79. Johnston-Love House, Macon and  
Railroad Streets
80. Gordon-McCollough House,  
Macon and Railroad Streets
81. Warnee-Godfrey house, Macon  
and Railroad Streets
82. Long-Gordon House Railroad St.  
between McDonald and Macon  
Sts.
83. Chapman-McCullough House S.  
Railroad Street, east of McDonald  
Street, between Church and  
Academy Streets
86. Long county Community Center  
Macon St. between Church and

## Academy Streets

87. Cohen-Davis House Macon Street between Church and Academy Streets
88. Raiford- Warren House, Macon Street, south of Academy St.
89. Board and Batten Cabin with Tile Roof, Dirt Road between McDonald and Macon Streets
90. Board and Batten Cabin, Dirt Road between McDonald and Macon Streets
91. Andrews-Smith House Dirt Road between McDonald and Macon Streets
92. Devine-Lewis House Dirt Road between McDonald and Macon Streets
93. Jerry Stapleton House south extension of Macon Street
94. Samson-Wallker House, off Ga.99 between city limits and Franklin Street
95. Freeman Fraser Rental House, Franklin Street
96. Freeman Fraser House, Dirt Road S. of Masonic Hall
97. Miles Derry House, E. Franklin Street
98. Canty-Baggs House Dirt Road off Peach Street
99. Canty-Mallard House Peach Street
100. Canty-Perry House Dirt Road off Peach Street
101. Doston-Wallker House, N. end of Peach Street
102. Thurmon-JohnsonHouse, Donald
103. Holland-Swindle House, Donald
104. Donald Baptist Church, Donald
105. Tommy Bacon House, Donald
106. Long County Courthouse McDonald Street between Boundary and Academy Streets, Ludowici- (on National Register)
107. Hall House off U.S. 301, 1 mi. N. of Ludowici
108. House, RFD 595 on Rt 196
109. House in Donald #1, 1/4 mi. N. of Donald Grocery
110. House in Donald #2, across from Donald Grocery

- 111. House in Donald #3, 1/4 mi. N. of Donald Grocery
- 112. House in Donald #4, across from Flourney Enterprises
- 113. Tobacco Barn, W. of Box 37 on Rt. 3 off Rt. 196
- 114. Log Tobacco Barn intersection of Ga. 261 and 196
- 115. Outbuildings across Ga. 196 from RFD 595
- 116. Log Cabin, Ga. 196, 2 mi. east of Liberty County line
- 117. House on Ga. 301/25, 1 mi. S.E. of Tattnall County line
- 118. "The Quarters", 6 mi. N.W. of Ludowici on Rt. 301/25

Long County  
National Register of Historic Places

Resource Name: Long County Courthouse  
Reference No: 80001107  
Address: GA 99  
City/County: Ludowici, Long Co. GA

Registration Status: Listed in the National Register (09/18/80)

Resource Name: Ludowici Well Pavillon  
Other Names: Old Well  
Reference No: 84001153  
Address: McQueen St.  
City/County: Ludowici, Long Co. GA

Registration Status: Listed in the National Register (09/07/84)

Resource Name: Walthourville Presbyterian Church  
Reference No: 87001357  
Address: Allenhurst Antioch Rd.  
City/County: Walthourville, Long Co. GA

Registration Status: Listed in the National Register (08/06/87)  
Other Action(s): Date Received (07/06/87)

Long County Georgia Historical Markers include:

### **Fort Barrington State Historical Marker**

Located on Ga. 57 approx. several yards from the McIntosh County line and 3.7 miles north of Townsend, Ga.

Approximately ten miles west of here on the banks of the Altamaha River stood Fort Barrington, a stronghold whose origin dates back to earliest Colonial times. It was built as a defense against the Spaniards and Indians and was called Fort Barrington in honor of a friend and kinsman of General James Edward Oglethorpe, lieutenant Colonel Josiah Barrington. This gentleman, a scion of the English nobility, was a large landowner in Georgia, whose home was just east of Barrington Ferry on San Savilla Bluff. Fort Barrington, which was twelve miles northwest of the town of Darien was renamed Fort Howe during the Revolution as it fell into the hands of the British.

The fort long ago ceased to exist, but the old military road which formerly ran between Savannah and Fort Barrington is still known as the Old Barrington Road. Barrington Ferry, important ferry since colonial Days, was in use until the early years of the Twentieth Century.

095-2 GEORGIA HISTORICAL COMMISSION 1954

[Note: This marker is located in Long County, 12-15 feet from the McIntosh County line. Apparently, the Georgia Historical Commission thought it was in McIntosh County and incorrectly used a marker number for McIntosh County.]

### **Historic Roads and Indian Trails State Historical Marker**

Located on U.S. 301, 1.3 miles north of Ludowici, Ga.

At this point, two historic roads, the Darien to Milledgeville and the King Road, merged to form what is now Highway 301. The Darien to Milledgeville Road, established before 1816, later became a part of the Darien to Macon Stage Road. The King Road, built in the 1820s, was a higher route leading from the Great Southern Road at the Coast into the Interior.

Here, also, the roads crossed two old Indian trails, the Doctortown Path linking Savannah with the Doctortown crossing on the Altamaha River, and the trail from Savannah to Beard's Bluff on that stream.

091-5 GEORGIA HISTORICAL COMMISSION 1958

### **Jones Creek Baptist Church State Historical Marker**

Located on U.S. 301, 5 miles northwest of Ludowici, Ga.

Jones Creek Baptist Church was constituted April 22, 1810, at the Jones Creek Meeting House near this site.

Original members of this church, all former members of Beards Creek Baptist Church were: Charles Flowers, James Clark, Levi Morgan, John Hall, John Bohannon, Martha Flower, Abigail Clark, Sarah Morgan, Fannie Lowery, Mary Howe, Mary Chapman, Lydia Bohannon.

The Rev. Moses Westberry was the first pastor of the church, and served in that capacity for 35 years.

Land for the present site of the church edifice was given by William Walthour in 1817.

Jones Creek Baptist Church was first a member of the Piedmont Baptist Association, but is now with the New Sunbury Baptist Association, of which it was one of the organizing members in 1866.

091-3 GEORGIA HISTORICAL COMMISSION 1957

### **Long County State Historical Marker**

Located at the Long County Courthouse, Ludowici, Ga.

This County, created by Act of the Legislature August 14, 1920, is named for Dr. Crawford W. Long who first used ether as an anaesthetic in a surgical operation, at Jefferson, Ga., March 30, 1842. Born in Danielsville Nov. 1, 1815, Dr. Long was a graduate of Franklin College (now U. of Ga.). Among the first County

Officers were: Sheriff W.R. Wilkinson,

Clerk of Superior Court C.W. Dawson,

Ordinary T.J. Harrington,

Tax Receiver J. McL. Cameron,

Tax Collector T.H. Smiley,

Treasurer R.D. Easterling,

Coroner L.M. Branch and Surveyor M.C. Sarrason.

091-1 GEORGIA HISTORICAL COMMISSION 1954

### **Commercial Resources**

Commercial resources available in Long County include communication, financial facilities, and public accommodations. Communication services include one local newspaper delivered once weekly. The daily newspapers delivered include the Atlanta Journal-Constitution, Savannah Morning News, and Florida Times Union. Cable Television service is available.

Financial facilities include two branch banks with \$321 million in assets.

Public accommodations include 7 restaurants, 1 motel (24 rooms), and 2 meeting facilities (largest seats 120).

### **Industrial Resources**

Industrial support services include fabricating, machining, electric motor repair at Jesup (11 miles); tool & die shop at Baxley (42 miles); and finishing, forming at Brunswick (45 miles).

### **Institutional Resources**

Institutional resources available in Long County include medical complexes, assisted living facilities, school districts, the Fort Stewart Military Reservation, and many churches.

Medical complex resources include standard services provided by Long County Health Department, one local medical doctor, one nursing home (66 beds), one mental health center, one assisted living complex (34 apartments) with one

hospital (130 beds), 44 MD's, eight dentists, one orthodontist, two optometrists, two chiropractors, one retirement home, and three nursing homes (224 beds) available in Jesup (11 miles). Also available in Hinesville (15 miles) is one hospital (50 beds), one nursing home (169 beds), 29 MD's, eight dentists, and Fort Stewart Hospital.

The school system includes public and one private school as follows:

**COMMUNITY SCHOOLS:**

2 county public schools with 118 teachers, 1,967 students, and 86 high school graduates in 2002. 1 private school with 285 students in 2003.

**HIGHER EDUCATION:**

Tech. College: Altamaha at Jesup (15 miles) with 2,012 students.

Tech. College: Savannah at Savannah (53 miles) with 3,600 students.

2-yr: Waycross College at Waycross (45 miles) with 900 students.

4-yr: Armstrong Atlantic State University at Savannah (53 miles) with 6,026 students.

4-yr: Georgia Southern University at Statesboro (56 miles) with 15,075 students.

4-yr: Savannah State University at Savannah (53 miles) with 2,560 students.

Worship resources within 25 miles are many including 106 Baptist congregations, four Catholic churches, one Lutheran church, 15 Methodist churches, six Presbyterian, four Church of Latter Day Saints congregations, and 11 Pentecostal denominations.

The northeastern tip of Long County is occupied by part of the sprawling U.S. Army installation, Fort Stewart, which also occupies significant portions of the neighboring counties.

**Transportation Resources**

Transportation resources include motor freight, rail freight, water, and air transportation corridors as follows:

**MOTOR FREIGHT CARRIERS:**

18 inter/intrastate.

**RAIL:**

CSX piggyback at Savannah (54 miles).

CSX rail at Ludowici (local).

Norfolk Southern piggyback at Savannah (54 miles).

**WATER:**

Navigable River: Altamaha (9 foot channel depth) with public barge dock at Brunswick (45 miles).

Seaport: Brunswick (45 miles) with maintained channel depth of 32 feet.

Seaport: Savannah (54 miles) with maintained channel depth of 42 feet.

**AIR:**

Commercial: Brunswick (45 miles), service by ASA.

Commercial: Jacksonville, FL (121 miles), service by ASA, AirTran, American, American Eagle, Comar, Continental, Continental Express, Delta, Northwest, Southwest, United Express, US Airways, US Airways Express.

Commercial: Savannah (54 miles), service by ASA, AirTran, COExpress, Delta, Pinnacle, United Express, US Airways, US Airways Express.

Public: Jesup (11 miles), with a 5,000 feet bituminous runway, aircraft tiedown, airframe & power plant repair, hangar, lighted runway, NDB, 24-hour attendant.

Public: Walthourville (9 miles), with a 3,700 feet bituminous runway, aircraft tiedown, lighted runway, NDB, VASI, Unicom system. Wright Army Airfield at Ft. Stewart with 2 runways (5500 ft and 7000 ft) will be open by spring 2005 for both military and private use.

### **Rural Resources**

Long County's rural features offer recreational opportunities for residents in the form of two fishing camps, one wildlife refuge, and access to the Altamaha River for swimming, boating, canoeing, kayaking, camping, hiking, hunting, fishing opportunities.

Scenic attractions include the Old Well Pavilion and Historic Jones Creek Baptist Church.

In addition, the Long County Wildlife Festival is an annual event held in October.



## **4.2.0.0: Assessment**

### **Public Water Supply Sources**

Population, housing and economic development growth is projected to increase throughout the planning period. The county will need to ensure that water needs of increased housing developments are met.

### **Water Supply Watersheds**

There are no known water supply watersheds in Long County.

### **Aquifers and Recharge Areas**

As the quantity of available water is already an issue throughout Georgia, preserving and protecting the current water supply should be at the forefront of Long County's future plans. Groundwater recharge areas may occur at shallow depths and resupply equally shallow wells within their influence. Groundwater recharge areas are much more susceptible to surface pollution than are deep aquifers. The resulting immediate public health hazards are also potentially more serious.

According to the DNR map entitled "Most Significant Ground Water Recharge Areas of Georgia" (1989; scale 1:500,000 or 1 inch:7.89 miles), a "high susceptibility areas" (DRASTIC rating of >181) is located in western Long County. Significant recharge areas for the "Miocene/Pliocene-Recent unconfined [shallow] aquifer," the uppermost strata of the ground probably not more than 75 feet below the surface, are found in a three-mile wide band that extends northward from part of unincorporated Long County"

The presence of this "high susceptibility" recharge area triggers DNR "Criteria for Protection of Groundwater Recharge Areas," in affected jurisdictions. The rules require strict groundwater protection and provide standards for development of new sanitary landfills, disposal of hazardous wastes, new aboveground chemical or petroleum storage tanks, new agricultural waste impoundment facilities, septic tanks/drain field systems for residential subdivisions and mobile home parks, and similar land uses.

Development in these areas should be limited to very low impact activities in which little to no area is covered with impervious surfaces such as roads, parking lots and building sites. The sub-surface integrity of these areas should also be maintained by avoiding development that may contaminate water supplies, such as landfills.

Because population, housing and economic development growth is projected to increase, the county will need to ensure that future development is limited in groundwater recharge areas.

Possible surface communication to deep aquifers must also be addressed. Locating, identifying and plugging abandoned wells or other potential surface pollution sources by private owners or local authorities must be aggressively enforced, to protect aquifers from pollution and/or excessive water withdrawals.

Aquifer and groundwater recharge area protection devices include Impermeable liners in new wastewater treatment basins, prohibition of storm water infiltration basins, "slow rate" land application of wastewater spray irrigation and larger required minimum lot sizes to accommodate new septic tank sewage disposal systems.

Wellhead pollution protection, prohibition of land disposal of hazardous wastes and, strict regulation of hazardous waste storage tanks are other devices for protection of aquifers and groundwater recharge areas from surface pollution. Local government will be expected to adopt adequate protection from surface pollution when more information on the subject is developed by regulatory agencies.

## **Wetlands**

Approximately 42 per cent of the developed and undeveloped urban areas, and 100 per cent of the drainage ways in Long County, may be classifiable as "jurisdictional wetlands" regulated by Section 404 of the Federal Water Pollution Control Act of 1972 and Clean Water Act of 1977 amendments. (The regulated wetlands include all fresh water marsh and swamp areas adjacent to local stream drainage ways, plus inland swamps and bogs.) Wetlands criss-cross the incorporated area, occurring most commonly along drainage ways and in extensive bottomlands and swamps.

A U.S. Army Corps of Engineers permit must be obtained prior to any construction, impoundment, dredging, or land filling activities on land classified as jurisdictional wetlands. Federal wetland development regulations contain severe criminal penalties for violation and significant civil liability may also arise from misinterpretation of on-site soils interpretations and/or off-site soils data used for permitting and construction.

Wetlands -both publicly and privately owned -possess inherent multiple ecological and economic values for the community. Wetlands protection is a major community concern.

Local wetlands regulations are available for adoption. The CGRDC developed the new, optional restrictions which local governments in the coastal region may adopt to supplement federal and state regulations. The new wetland regulations are "modular" in structure. Local governments may add more "modules," or sections, to the "core" provisions to increase their level of control.

At a minimum, adoption of a local Wetland Protection Ordinance will ensure correlation between local and federal permitting. The model ordinance requires that a local building permit applicant show evidence of a 404 permit or a jurisdictional determination before a local permit is issued. This will prevent costly (possibly for the county) mistakes where a developer or builder is given local approval to build in a wetland. However, Long County does not require permits for any building activity. This will have to be addressed before wetland permitting can be coordinated.

### **Protected Mountains**

The requirement to inventory and assess unique mountainous areas requiring protection from intense development is not applicable to Long County.

### **Protected River Corridors**

The requirement to inventory and assess unique river corridors that warrant special management practices is applicable to Long County, but the county has no known areas in jeopardy from development. All corridor areas are along the Altamaha River. The statute that is informally known as the Mountain and River Corridor Protection Act (O.C.G.A. 12-2-8) authorizes the Department of Natural Resources to develop minimum standards for the protection of river corridors (and mountains, watersheds, and wetlands) that can be adopted by local governments. The Act is administered by the Environmental Protection Division. All rivers in Georgia with an average annual flow of 400 cubic feet per second are covered by the Act, except those within the jurisdiction of the Coastal Marshlands Protection Act. Some of the major provisions of the Act include: requirements for a 100-foot vegetative buffer on both sides of rivers; consistency with the Georgia Erosion and Sedimentation Act; and local governments must identify river corridors in land-use plans developed under their respective comprehensive planning acts.

Regional Development Centers are instrumental in helping local governments enact the provisions of this Act. The Coastal Georgia Regional Development Center prepared a Regional River Corridor Protection Plan for counties within their jurisdiction. The Plan describes the ten local governments and the associated rivers that are affected by the River Corridor Protection Act, and puts forward a regional plan for the protection of river corridors. Regional plans are preferable to having local governments prepare individual plans. The plan provides for construction of road crossings, acceptable uses of river corridors, maintenance of a vegetative buffer along the river for a minimum of 100 feet from the river's edge (residential structures are allowed within the buffer zone), timber production standards, wildlife and fisheries management, recreation, and other uses. Eight coastal counties and two coastal cities (Richmond Hill and Woodbine) are affected.

Adoption of language addressing the River Corridor Protection Act is required in local comprehensive plans. Long County has formally adopted the Regional River Corridor Protection Plan and will continue to support regional efforts for River Corridor protection.

## **Coastal Resources**

Approximately 50 per cent of all the upland bluffs in the county are already developed to low density residential uses; the remainder being in large public and private landholdings and land conservation trusts. The bluffs are in no jeopardy of high intensity development. All coastal marshes in the county are protected from development by extensive, interlocking state and federal regulations.

Very little, however, is really known about all of Long County's complete coastal system. The Department of Natural Resources has developed a Coastal Zone Management Plan and is providing technical assistance to ensure that local concerns and values are incorporated into the Coastal Management Plan.

## **Flood Plains**

Participation in the National Flood Insurance Program is essential for communities located in or near flood prone areas. If a community is located in such an area and is not a program participant, federal agencies may withhold disaster relief and recovery funds from that locality. Long County experiences the type of flooding that warrants participation in The National Flood Insurance Program, and is therefore, participating at this time.

Several floodplains occur in the incorporated area, located most commonly along drainage ways and extensive bottomlands and swamps. Local flood hazard information corroborates Federal Emergency Management Agency (FEMA) and Federal Insurance Rate Map (FIRM) map information:

- Storm drainage ways and floodplains vary in width, but generally have low flow rates, with bays and swamps common in outlying areas.
- Flooding during periods of excessive seasonal rainfall may be caused by, or aggravated by, buildings or other restrictions in or adjacent to floodways, and the general flatness of the terrain adjacent constructed storm drainage ways.
- Areas within the community which are subject to 100-year, or based floods are coincident with extensive wetlands in predominately undeveloped areas and do not appear to represent general or special hazards to persons or property.

- Compliance with standard federal flood management regulations will neutralize many of the hazards resulting from the presence of floodways in the community.

The county does not have local flood hazard ordinances. This will need to be addressed before improvements in flood damage prevention can be made through the Community Rating System Program (C.R.S.P).

Long County participated in the FEMA Hazard Mitigation Planning process and anticipates formal adoption of the Long County Hazard Mitigation Plan by the end of year 2005. Specific mitigation strategies were formulated in the plan to reduce the damage of flooding events in Long County. The strategies developed by the committee include tasks such as building roads up so they won't be susceptible to flooding; identifying storm water infrastructure in need of upgrade; installing larger culverts to provide a better drainage system; considering special building codes for flood areas and update flood ordinance; update FEMA FIRM maps; and assessing storm water run-off, watershed plans and effectiveness of present drainage ditching, culverts, storm water and sanitation network.

## **Soils**

Physical location of homes, highways, industrial developments, recreation facilities and other uses requires determination of the soils suitability on each site. Soil type, slope, characteristics, drainage capabilities and engineering characteristics are essential for determining the suitability of, and capability of, land for any kind of urban or agricultural use. Extensive information regarding Long County's soil types, slope characteristics, general suitability of land for specified kinds of urban or agricultural uses, drainage capabilities and engineering characteristics is readily available in the "Soil Survey of Long County, Georgia" (USDA 1980). The Natural Resource Conservation Service, U.S. Department of Agriculture publishes the 129-page report, which includes 79 photomaps showing superimposed soil class boundaries at a scale of 1 inch to 1320 feet.

The SCS soil survey identifies three major soil groups subdivided into 32 "series," and further subdivided into 36 soils "types."

Most soils in Long County have a sandy surface layer over loamy or sandy layered subsoils, are mainly level or gently sloping broad areas drained by wet depressions, and are generally seasonally wet or perennially wet.

None of the identified soil profiles in the area represent special or significant problems; standard soil management practices are sufficient to assist use and development.

## **Topography and Steep Slopes**

Elevations across the county range from Mean Sea Level in the eastern sector, to 20 feet+ M.S.L. at the toe of the "Hinesville Beach Line," to 90+ feet M.S.L. However, the steepest gradient averages less than 50 feet per mile (or one percent). Therefore, special management practices for steep slopes are not applicable to Long County.

## **Prime Agricultural and Forest Land**

Prime agricultural and forest lands are areas valued for agricultural or forestry production that may require special land use classification consideration. Relatively small patches of the "prime farmlands" mapped by the U.S. Soil Conservation Service in Long County occur around Ludowici.

Long County and its municipalities have extensive commercial timber growing areas, but no known forests of "specimen" grade trees or other unusual forested areas.

No special problems exist in this category. Standard soil conservation activities will serve to protect the agriculture and silviculture lands in and adjacent to the city. Of course, that does not reduce local government responsibility and accountability for monitoring local activities that may adversely affect the county's environment. Long County has a local sedimentation and soil erosion control ordinance in place and is enforcing this law.

## **Plant and Animal Habitats**

Areas that support rare or endangered plants and/or animals are the subject of this section. There is some risk that once publicly identified, these unique ecological communities may become endangered by poachers or even the attention of enthusiastic environmentalists. Delineation of rare or endangered plant and/or animal species must be accomplished with considerable care, and with prearranged protective and isolative measures in place to assure survival.

Since no rare or endangered plants and/or animals have yet been identified, assessment requirements are not applicable. However, the presence of habitat for the redcockaded woodpecker may provide opportunities for environmental cooperation. Decisions concerning protection of the woodpecker will occur at the national level.

## **Parks And Recreation Areas**

Federal, state and regional parks, recreation areas and conservation areas (e.g., wildlife management areas, nature preserves, national forests, etc.) are the subject of this section. There are no state or federal parks in Long County

## **Scenic Views and Sites**

The county has numerous pleasant vistas and sites. The county needs land subdivision regulations and zoning which are valuable tools for maintaining and enhancing these, and other, valuable community scenic assets. Policies in the Land Use Element address the issue of scenic quality.

## **Cultural Resources**

Long County has an overabundance of cultural and historic resources. Continuing and improving the preservation and promotion of these historic resources would be of great value to the county. Local commitment and recognition are important and Warren County residents are aware of the rich history that surrounds them.

The three NRHP sites are of major historical importance to the county. Listing in the National Register recognizes a property's historic significance and ensures that the property will be taken into account in the planning of federally funded or licensed projects. In addition, owners of income-producing National Register listed properties are eligible for rehabilitation federal and state tax incentives. Local communities become aware of the history and architectural significance of the property, therefore encouraging its preservation.

## **4.3.0.0: Goals & Implementation**

### **Goal: Preserve and protect natural and cultural resources.**

Given the anticipated level of growth over the next 20 years, Long County will need to conserve, protect, and manage the community's natural resources.

Policy: Long County will coordinate with state and federal authorities to enforce and implement all applicable air and water quality, soil erosion, and sedimentation control regulations.

Policy: Long County will apply for funding to prepare and implement a natural resources management plan.

Policy: Long County will pursue and review alternative methods to zoning and building permit processes to manage the impact of development activities on natural resources.

### **Endangered Species**

There is a general need in Long County for more monitoring of local soil and water conservation measures, and closer scrutiny of rare or endangered plant and animal species.

Policy: Long County will participate with the detailed natural resource inventory and assessment efforts.

### **Wetlands**

Several wetland objectives need to be seriously considered. First, the county needs to coordinate with state and federal authorities to better define high value and productive wetlands; coordination with state and federal authorities is also needed to implement, all applicable wetlands and floodplain regulations. There is a need to consider a local building permitting program which would coordinate with the federal Environmental Protection Agency (EPA) and U.S. Army Corps of Engineers (USACoE) "Section 404" program by requiring a Corps permit -or an exemption letter -before issuing a local building permit that may impinge on wetlands. This can be accomplished through adoption of a local wetland protection ordinance.

### **Groundwater**

In cooperation with the County Environmental Sanitarian, Long County needs to identify all point-source and non-point source environmental pollution hazards, unplugged wells and other potential pollutants of groundwater recharge areas (into the shallow aquifer); the county should adopt local remedial programs and pollution control regulations.



Policy: Long County will establish a Comprehensive Water Supply Management Plan.

### **River Corridors**

All River Corridors in Long County are on the Altamaha River. Long County participated in the development of the Coastal Georgia Regional River Corridor Protection Plan and has adopted this plan by reference. Specifically, the county will adopt a local soil erosion and sedimentation control ordinance, which eliminates exemptions for residential uses.

Policy: Long County will continue to work to meet Part V of the Regional River Corridor Protection Act.

### **Flood Plains**

There appear to be no problems with loss of private property because of flooding. However, the county will continue to monitor the situation and, if necessary, consider adoption of a flood damage prevention ordinance.

### **Coastal Resources**

Long County will seek to better understand and protect its valuable coastal resources, which includes wetlands and uplands, through participation in the Coastal Zone Management Plan and the Coastal Advisory Commission.

### **Historic and Cultural Resources**

Policy: Long County will update the survey of historic resources as necessary and will participate in the update of the Regional Historic Preservation Plan.

Policy: Long County will assist in individual and district nominations to the National Register of Historic Places.

Policy: Long County will continue to promote "Heritage Tourism."

Policy: Long County will develop a Train Depot Museum.

**Long County Natural and Cultural Resource**

**Long: Report of Accomplishments**

<b>Natural and Historic Resources</b>		
<b>Activity</b>	<b>Status</b>	<b>Explanation</b>
Evaluate natural and scenic resources and regulations for protection of these resources.	Underway	
Apply for funding from appropriate sources to prepare and implement natural resources management plan.	Not Accomplished	Lack of funding.
Adopt building permit ordinance or other method for managing impact of development activities on natural resources.	Completed	
Continue participation in the Regional River Corridor Protection Effort.	Completed	
Participate in CZM panning effort. Capitalize on funding opportunity for resource planning and development.	Completed	
Adopt appropriate regulations to control soil erosion and sedimentation or continue participation in state program.	Completed	
Establish regulations to implement Part V environmental protection standards for wetlands, groundwater recharge areas, and Altamaha River corridor.	Underway	
Prepare Comprehensive Water Supply Management Plan.	Not Accomplished	Lack of funding.
Update survey of historic resources.	Completed	
Participate in update of Regional Historic Preservaion Plan.	Underway	
Assess need for local historic preservation ordinance and	Postponed	Assessment concluded that no action was warranted. Future

commission.		assessments will determine nature of future actions.
Promote "Heritage Tourism."	Underway	
Develop Railroad Depot Museum project.	Not Accomplished	Lack of funding.

### Short Term Work Program

Natural and Historic Resources				
Activity	Years	Responsible Party	Cost Estimate	Funding Source
Long County will apply for funding to prepare and implement a natural resources management plan.	2005, 2006, 2007, 2008, 2009	County	Not known	Coastal Zone Management Grant
Long County will pursue and review alternative methods to zoning and building permit processes to manage the impact of development activities on natural resources.	2005, 2006, 2007, 2008, 2009	County	None	None
Long County will participate with the detailed natural resource inventory and assessment efforts.	2005, 2006, 2007, 2008, 2009	County in cooperation with DNR	None	None
Long County will establish a Comprehensive Water Supply Management Plan.	2005, 2006, 2007, 2008, 2009	County	\$25,725	Local funds
Long County will continue to work to meet Part V of the Regional River Corridor Protection Act.	2005, 2006, 2007, 2008, 2009	County in cooperation with CGRDC	None	None
Long County will update the survey of historic resources as necessary and will participate in the update of the Regional Historic Preservation Plan.	2005, 2006, 2007, 2008, 2009	County in cooperation with CGRDC	None	None
Long County will assist in individual and district nominations to the National Register of Historic Places.	2005, 2006, 2007, 2008, 2009	County	None	None
Long County will continue to promote 'Heritage Tourism.'	2005, 2006, 2007, 2008,	Advisory Council	Unknown	Local Foundations,

	2009	Members		Local Development Funds
Long County will develop a Train Depot Museum.	2005, 2006, 2007, 2008, 2009	County	\$500,000	Local Foundations, Community support

# 5.0.0.0: Community Facilities & Services

Long County recognizes the importance of community facilities in enhancing residents' quality of life and economic development efforts, and will provide effective and efficient facilities as needed.

## Introduction

The adequacy and availability of community facilities is a necessary part of the comprehensive planning process because of the importance of maintaining and attracting future residents, businesses and industries to the area. Growth should be managed so not to cause an undue burden on existing community facilities which would negatively impact the overall quality of life in the county. The prioritizing, scheduling and construction of community facilities should meet the needs of current and future populations and at the same time guide and direct growth in an orderly and logical manner.

The Community Facilities Element inventories the various public and semi-private facilities and services available in Long County and assesses the quality and availability of these community facilities with respect to the impact of projected population and economic growth through 2025. This section utilized population estimates and projections as well as projections of economic growth as a basis for need assessment and the development of Level of Service (LOS) Standards, where appropriate.

## Community Facilities and Services Inventory

### INTRODUCTION

The primary objectives of this element are to address the impact that projected population and economic growth will have on the community's services and facilities. Information categories required by Department of Community Affairs' Minimum Planning Standards include:

- Transportation network
- Water supply and treatment
- Sewerage System and Wastewater Treatment
- Solid Waste Disposal
- Public Safety
- Fire Protection
- Public Health Services
- Recreation Facilities

- General Government
- Educational Facilities
- Libraries and Other Cultural Facilities

This chart lists public facilities servicing all Long County residents.

**Table C-1**

Jurisdiction	Water Supply	sewerage	Garbage & Trash	Storm Water	Street Repairs	Street Lights	Police Protect	Fire Protect	Elected Govt.	Zoning & Building	Real state tax income
Ludowici	Yes	Partially	Yes	Yes	Yes	Yes	Yes	Volunteer	Yes	No	Yes
Unincorporated areas	No	No	County	County	County	No	Sheriff	Volunteer	Yes	No	Yes

The quality and availability of community facilities, both publicly and privately operated, play a dominant role in attracting and maintaining sustainable residential, commercial, and industrial development. For this reason, capital improvements planning for community infrastructure is a vital element of the comprehensive planning process. This element provides an inventory and assessment of pertinent community facilities and services in Long County and the City of Ludowici.

A variety of community facilities and services are provided by the City of Ludowici, the Long County Board of Education, the Long County Board of Commissioners and other "constitutional officers," such as the Long County Sheriff, Tax Assessor and Magistrate Court Judge. The effectiveness of this plan relies upon cooperation among all elected bodies; however, there is no State requirement for this plan to be ratified by any other elected body other than the Ludowici City Council and the Long County Board of County Commissioners.

### **Transportation**

An efficient transportation network is a key element in determining Long County's ability to develop. Adequate transportation facilities are necessary both for the transport of people and goods and services. The efficiency of the network has a

direct impact on land use through its ability to disperse increased traffic levels as a function of residential, commercial, and industrial development.

## **Existing Road Network**

Roadways are classified by the U.S. Department of Transportation based on their function within the local highway network. Each major classification category is defined as follows:

**1. Principal Arterials:** These roads, which include interstates and rural freeways, serve substantial regional, statewide or interstate trips; connect most urban areas of 25,000 or more and virtually all urban areas of 50,000 or more; and provide an integrated network without stub connections except where geography dictates otherwise.

**2. Minor Arterials:** These roads form a rural network that links other cities, larger towns, and other traffic generators, capable of attracting travel over similarly long distances; links all developed areas of the state; and serve corridors with trip lengths and travel density greater than those predominantly served by rural collector or local systems. Minor arterials constitute routes whose design should be expected to provide for relatively high overall travel speeds, with minimum interference to through movement.

**3. Major Collectors:** These roads primarily serve the county rather than regional or state traffic. Consequently, more moderate speeds are typical. They serve any county seat or larger town not on an arterial route, and other traffic generators of equivalent intra county importance; link the latter places with nearby larger towns or cities, arterials and freeways; and serve the more important intra county travel corridors.

**4. Minor Collectors:** These roads also serve county-wide traffic and collect traffic from local roads and bring all developed areas within a reasonable distance of a collector road; provide service to smaller communities; and link the locally important traffic with more significant generators.

Georgia highways 57 and 38 intersect a portion of the county and are the primary arterials in Long County. Roads classified on the map are considered major county thoroughfares and serve as main transportation routes within the county and to surrounding areas. All other county or municipal roads not classified on the thoroughfare map are considered locally serving. Most of the roadway network is rural. This rural quality creates little need for intense road maintenance or expansions. The county has not had a need to conduct road paving. When major road repairs, re-surfacing or new paving is proposed the county relies on private contractors or the Georgia Department of Transportation

for project completion. Because of the infrequent need for a full time paving crew, the county saves money by outsourcing major roadwork.

Table C-2 identifies the route type and road system of the county as classified by the U.S. Department of Transportation for comparison. A significant portion of the network increased in the rural minor collector road system. These roads serve county-wide traffic and collect traffic from local roads and bring all developed areas within a reasonable distance of a collector road.

Table C-3 identifies the total mileage and paved roadways of the county. Most of the network is in the unincorporated areas. Less than 32 per cent of the county road network is paved.

**Table C-2  
Lane Miles by Route Type and Road System**

Type Road System	1997 Mileage	1997 VMT*	2003 Mileage	2003 VMT*	% Change In VMT
Rural Principal Arterial	13.66	120935.50	41.10	141418.90	16.94%
Rural Minor Arterial	22.95	65826.00	46.88	69098.40	4.97%
Rural Major Collector	53.49	86627.00	106.22	98465.70	13.67%
Rural Minor Collector	43.59	8718.00	87.18	68328.40	683.77%
Rural Local	185.41	27201.60	371.72	39046.80	43.55%
Rural Total	319.10	309308.10	653.10	416358.20	34.61%

Source: Georgia Dept of Transportation

\* VMT - Vehicle Miles Traveled is calculated by multiplying the Annual Average Daily Travel by the Section Length

**Table C-3: Long County Road Network**

Jurisdiction	Mileage	Paved
Long County		
State Routes	61.02	61.02
County Roads	246.60	78.43
City Streets	11.48	8.50
Total	319.10	147.98

Source: Office of Transportation Data, Georgia Department of Transportation, 2003



The Long County Road Department provides road grading and asphalt patching as a service to the residents in the unincorporated areas. The department also provides grading service on dirt roads within the City of Ludowici. However, the city conducts its own road patching through its public works department.

Despite the lack of necessity for a county paving crew, the county road department has a significant proportion of dirt roads to maintain. This is evident by the percentages shown in Table C-3. Maintaining dirt roads requires almost ten times the man-hours that paved roads require. As the number of unpaved roads increases in the county so will the budget for the road department. In order to prevent the need for higher taxes, the county should consider adopting and implementing subdivision regulations that require developers to pave the roads and streets within a subdivision. These regulations must apply to any division of land in order to prevent the creation of dirt roads.

Traffic throughout the county and the city is relatively free of congestion, which is not unusual for a predominantly rural area. However, traffic along the major arterial highways leading through the county and city is steadily increasing.

Table C-4 outlines the traffic patterns along Long County's roadways. Traffic counts along the Tattnall County line indicate sprawl growth from Tattnall County as well as that which is assumed to come from Liberty County. Traffic counts from within the city limits are indicated by the numbers within the yellow background. Traffic counts within the city are higher than in the unincorporated county as the numbers reflect both traffic passing through the city, and movement within the city.

Notice the consistent rise in traffic along the U.S. Highway #84 and #301 both inside the city and out.

**Table C-4**

**Traffic along Long County's Major Roads**

Location of Road Section	1997 Count	1998 Count	1999 Count	2000 Count	2001 Count	2002 Count	% change 1997-2002
US #84 west of Ludowici	9856	9686	12,279	11,314	11,743	11,831	20.03%
US #84 east of Ludowici	7763	7263	8422	8271	8525	8591	10.67%

US #84 E Liberty Co. Line	8043	7734	8968	8080	9607	9211	14.52%
US #301 north of Ludowici	3376	3450	4061	4071	4275	4308	27.61%
US #301 north	2923	2923	3436	3357	3496	3523	20.53%
US #301 Tattnall Co. Line	2922	2885	3496	3400	3502	3660	25.26%
GA #57 McIntosh Co. line	2035	1977	25533	2480	2246	2063	1.38%
GA #57 south of Ludowici	1845	1860	2402	2443	2639	2643	43.25%
Old Hinesville Rd NW	No data	2224	2280	1941	No Data	2003	
“ “ Liberty Co. Line	No data	2191	2246	2260	No Data	2170	
GA #196 Tattnall Co. Line	3971	3969	3919	4128	4346	4353	9.62%
GA #196 midway in Long Co.	2770	2656	2622	2940	3207	2977	7.47%
GA #196 Liberty Co. Line	2590	2456	2425	2643	2725	2729	5.37%
GA #144 in Ft. Stewart	2642	2646	2326	2429	2411	2430	-8.02%
US #84 west	11,323	12,154	14,754	14,414	15,186	15,300	35.12%
US #301 north	3870	4154	4689	4729	4968	5006	29.35%
GA # 57 south	4430	5493	7094	6520	6131	6409	44.67%
Old Hinesville Rd NW	2439	2577	2641	2480	2828	2810	15.21%
Macon St. south	1539	2112	No Data	2360	No Data	No Data	

Source: Georgia Dept of Transportation

Traffic congestion and traffic safety go hand in hand. As traffic counts rise so do traffic accidents. It is difficult to prevent "fender benders" in an urbanized area. However if traffic fatalities are disproportionately high, this could infer misuse of high volume transportation corridors. When improper development occurs along high volume transportation corridors traffic fatalities increase. High volume, high speed, and intense development result in traffic fatalities. Examples of such improper development along these corridors include single-family residential dwellings that front the highway.

**Table C-5  
Traffic Accidents**

	Long County			Georgia Average			Comparisons	
	Traffic Deaths Injuries	Total Accidents		Traffic Deaths Injuries	Total Accidents		Traffic Accident Rate (per 10,000 drivers) <b>Long GA</b>	
1996	2	46	48	1582	142,890	144,472	132.8	269.3
1997	3	82	85	1584	139,400	140,984	229.6	259.8
1998	3	73	76	1580	134,770	136,350	193.5	244.1
1999	3	62	65	1514	123,588	125,102	142.0	217.3
2000	1	84	85	1549	130,608	132,157	178.8	225.5
2001	2	74	76	1656	132,305	133,961	129.6	215.5
2002	4	95	99	1531	132,623	134,154	152.9	201.7
2003	2	73	75	1610	132,879	134,489	109.8	191.6
Totals	20 (rate: 5.2)*	589	609	12,606 (rate: 2.66)*	1,069,063	1,081,669		

Source: Georgia Dept. of Transportation

\* Rate per 10,000 drivers

Given the low number and consistency of the traffic accident data listed in table C-7, careless development has not become a problem. However as development increases along routes in and out of Liberty and Tattnall County, this could soon become a problem. Future land use regulations must address residential dwellings along high volume traffic corridors.

### **Pedestrian and Bicycle Facilities**

There are no known sidewalks in Long County. There are no bicycle facilities in Long County. Two state bicycle routes (Route 85 and 35) pass near Long County but do not enter the county.

### **Signalization and Signage**

The only signalized intersections and significant traffic signage in Long County are located within the City of Ludowici, along Georgia Highways 57 and 38. These corridors handle significant traffic volumes and represent the city's main commercial corridors. Signalization is essential at these intersections to provide an orderly flow of traffic in and out of the various commercial establishments.

## **Bridges**

There are 9 bridges scattered throughout Long County. The county has numerous state highways and all bridges along these roads are maintained by the Georgia Department of Transportation. Bridges located along county roads are maintained by Long County.

## **Public Transportation**

The county commission runs a public transit system that provides transportation to more than 280 users per month throughout the entire county. Operation, maintenance, administration, and capital purchases of this bus system are paid through a combination of fare revenue, county subsidy and a Federal grant administered through the Department of Transportation. At an 10 per cent subsidy per van, the county commission is providing a great service to residents at a minimal cost to tax payers.

## **Railroads**

The rail companies provide crucial cargo transport for industries in neighboring counties. Many items and materials are too bulky or heavy to be shipped by truck and are moved by rail. Both CSX Railroad and Norfolk Southern serve Long County.

## **Port Facilities and Aviation**

Long County is served by the following port and aviation facilities:

Water:

Navigable River: Altamaha (9 foot channel depth) with public barge dock at Brunswick (45 miles).

Seaport: Brunswick (45 miles) with maintained channel depth of 32 feet.

Seaport: Savannah (54 miles) with maintained channel depth of 42 feet.

Air:

Commercial: Brunswick (45 miles), service by ASA.

Commercial: Jacksonville, FL (121 miles), service by ASA, AirTran, American, American Eagle, Comar, Continental, Continental Express, Delta, Northwest, Southwest, United Express, US Airways, US Airways Express.

Commercial: Savannah (54 miles), service by ASA, AirTran, COExpress, Delta, Pinnacle, United Express, US Airways, US Airways Express.

Public: Jesup (11 miles), with a 5,000 feet bituminous runway, aircraft tiedown, airframe & power plant repair, hangar, lighted runway, NDB, 24-hour attendant.

Public: Walthourville (9 miles), with a 3,700 feet bituminous runway, aircraft tiedown, lighted runway, NDB, VASI, Unicom system. Wright Army Airfield at Ft. Stewart with 2 runways (5500 ft and 7000 ft) will be open by spring 2005 for both military and private use.

## Water Supply and Treatment

One of the most important issues throughout the state is the availability and quality of drinking water. The incredible growth rates experienced in the state's metropolitan areas have put tremendous pressure on public drinking water sources and have depleted numerous private wells as groundwater supplies continue to decline due to drought.

The only publicly operated water system in Long County is in the City of Ludowici. The water is drawn from one main well with one 725,000 gallon per day pump. The system is supported by a back-up pump that draws from a separate well. The system also has an elevated storage capacity of 100,000 gallons. Consumption averages 320,000 gal/day with a 330,000 gal/day maximum. Storage capacity is 12s (570 ft. and 579 ft.) and pumping capacity is 600 gal/min. New withdrawals from Upper Floridan is limited to 36mgd beyond April 1997 levels

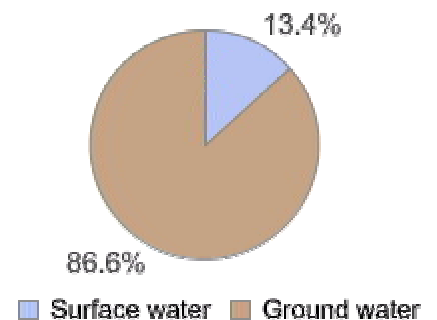
The U.S. Geological Survey compiles [National water-use estimates](#) every five years. The most recent compilation was for year 2000. The data includes water withdrawn from surface- and ground-water sources and used for various categories of water use. Fresh (non-saline) water-use estimates for Long County are presented below. Data are reported in million of gallons per day ([Mgal/d](#)).

Table C-6

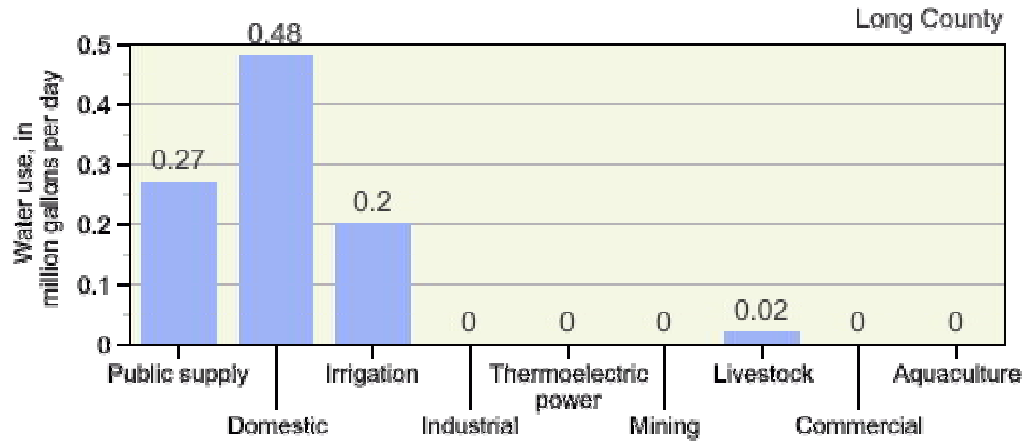
## Water use in Long County

### Total fresh-water use and source of water, Long County, 2000

Source	Water use, in million gallons per day	Percent of total use
Surface water	0.13	13.4%
Ground water	0.84	86.6%
Total	0.97	100.0%



## Total fresh-water use by category of use for Long County, 2000



## Water use by category of use for Long County, 2000

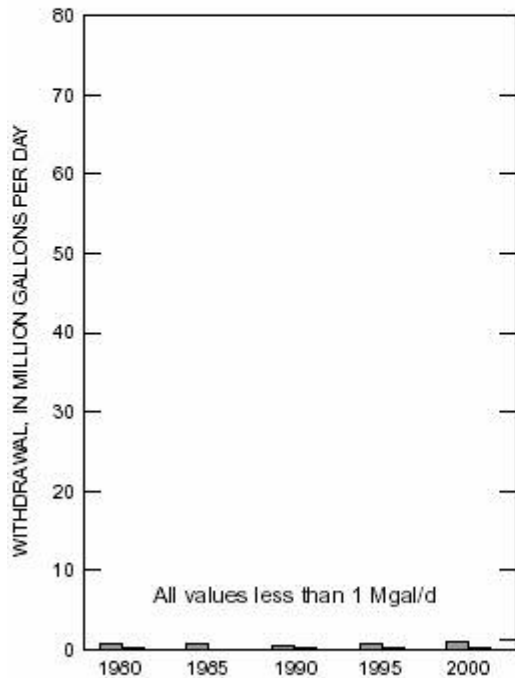
	Public supply	Domestic	Irrigation	Industrial	Thermo-electric power	Live-stock	Mining	Com-mercial	Aqua-culture	Total
Surface water	0.00	0.00	0.11	0.00	0.00	0.02	0.00	0.00	0.00	<b>0.13</b>
Ground water	0.27	0.48	0.09	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.84</b>
Total	0.27	0.48	0.20	0.00	0.00	0.02	0.00	0.00	0.00	<b>0.97</b>

**Withdrawals by Major Public Suppliers (Mgal/d):**

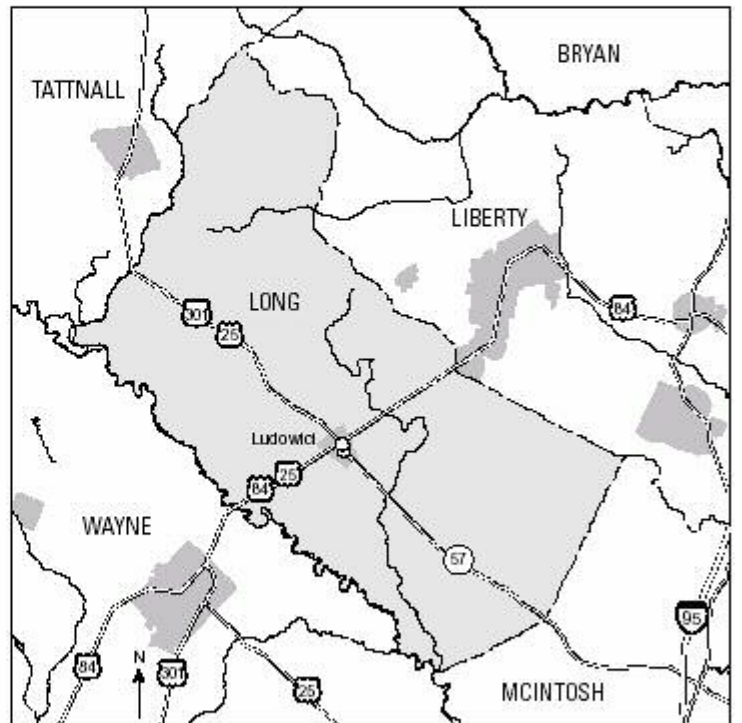
NAME	GW	SW
City of Ludowici	0.14	0.00

**Withdrawals by Major Industrial Groups (Mgal/d):**

SIC	GW	SW
None		



Ground water Surface water



**Sewerage System and Wastewater Treatment**

Another major issue concerning the development of Long County is public sewerage systems. Long County residents rely on individual septic systems as the county does not operate a public sewerage system in the unincorporated areas. The City of Ludowici provides a public sewerage system for the residents.

The system relies on an oxidation pond. Plant capacity cannot be determined but is not currently operating at full capacity.

**Table C-6**

<b>Source of Water</b>	<b>Number - 1990</b>	<b>Number - 2004</b>
Public System	917	1440
Individual drilled well	1,474	3313
<b>Sewage Disposal</b>		
Public sewer	582	1440
Septic tank or cesspool	2,021	4473

Source: U.S. Census of Population and Housing , STF3a, Long County Environmental Health Dept., 2005

**SEWAGE.**

Oxidation ponds are used. Plant capacity cannot be accurately determined. Service available within Ludowici.

The Long County Commission must adopt building codes and subdivision regulations that provide comprehensive inspection of septic tank system construction and installation.

**SOLID WASTE MANAGMENT**

The County has ample disposal capacity available in adjacent Wayne County at the public landfill facility near the City of Jesup for many years to come. A landfill in Long County is not needed.

The City of Ludowici offers garbage collection to its residents. There is no capital improvements fund set aside for replacement of the collection vehicle and the cost of administration and billing is absorbed entirely by the general fund.

The Long County Commission provides garbage collection service free of charge to only the residents in the unincorporated area of the county. The majority of solid waste in Long County comes from residential use or household garbage, including paper products, plastics, glass, and aluminum. This service is delivered in the form of a communal green box collection system. Residents in the unincorporated areas of the county drop off their household refuse at unmanned collection stations where open dumpsters are provided. Because there are no



fees assessed, there is no revenue. This service is provided to only a portion of the population, but paid for by all taxpayers.

**PUBLIC SAFETY**

Public safety includes sheriff services, emergency medical services, and fire protection. The Long County Sheriff’s Department provides police protection for all unincorporated areas of Long County. For police protection, currently there are four fulltime personnel for the city and twelve county officers. Operation, maintenance, equipment, training, and administration of the Police Department requires almost one third of the city’s entire budget. The only way to expand the police department without raising taxes is to raise water, sewer, or garbage collection fees so more of the city’s general revenue can go toward public safety funding.

The 1999 Crime Index rate (crimes per 1,000) for Long County was 1.5. Statewide, in 1999, the rate was 3.4. Of the total index crimes reported, 8.9 per cent were violent crimes, while 91.8 per cent were property crimes.

**Table C-7**

**Crimes reported in Long County**

Crime	1999	2000	2001	2002	2003
Murder	1	1	1	0	0
Rape	0	3	2	0	0
Robbery	2	3	1	5	5
Aggravated Assault	3	5	15	9	25
Burglary	82	51	87	98	84
Larceny - theft	101	87	127	96	75
Motor Vehicle thefts	12	7	13	12	9
<b>Total</b>	<b>201</b>	<b>157</b>	<b>246</b>	<b>220</b>	<b>198</b>

Source: Georgia Crime Information Center

Table C-8 on the following page provides a projection of the needed law enforcement personnel based on the population projections provided in the Population Element of this plan and established standards provided by the U.S. Department of Justice. The projections do not include the population element for the City of Ludowici. These numbers represent active duty officers and deputies and does not account for the needed administrative personnel required to support them.

**Table C-8**

## Projected Law Enforcement Needs

Year	Long County
2005	24
2010	25
2015	26
2020	28
2025	29

Source: U.S. Dept of Justice South Atlantic State Average for cities and counties based on population projections

The Long County Sheriff's Department staff has great difficulty providing protection countywide. As development increases in the unincorporated areas of the county, crime will rise. Without an adequate size deputy force to meet the population growth, the Sheriff's Department cannot be effective in crime prevention. The Sheriff and the Long County Board of Commissioners is actively seeking methods to increase jail facility space and county coverage.

Long County has a jail facility with only an eight-inmate capacity. When the Long County Sheriff's Department or Ludowici Police Department arrests a suspected felon they must often transport the prisoner either to Liberty County, Wayne County or Tattnall for incarceration. Not only does this process involve the time and cost of transportation, the county or the city pays the host institution for the boarding of the prisoner for each day he or she is incarcerated. This drives up the budget of the Long County Sheriff's Department and the Ludowici Police Department. Building a jail facility in Long County will relieve law enforcement of these costs. However, it will cost approximately \$2,000,000 to build a new jail facility and at least \$100,000 a year to operate. Included in the cost of operation are salaries for jailers, meals for prisoners, laundry, and utilities. Expanding the existing facility to 12 will avoid extra operations cost while lessening the county's dependence on other correctional institutions.

## FIRE PROTECTION

An effective fire department is a vital link in the chain of regional development, affecting insurance costs and, thus, the willingness of people and industries to settle in a given area. Fire protection is directly affected by the quality of the water system and a lack of infrastructure can severely reduce the community's ability to provide adequate fire protection.

The availability and adequacy of a water system is a determining factor in the rating given a fire department by the Insurance Services Organization (ISO). Other factors include: the size and type of buildings in a community, the presence or absence of fire alarm systems, how calls are received and handled,

whether fire fighters are paid or volunteer, whether there is a community water system, the size of water mains, and how long it takes a department to respond to an emergency call. This independent organization weighs all these factors to assign a department a rating between one and ten, where a rating of nine or ten indicates relatively little protection.

ISO ratings are not legal standards but recommendations that insurance companies can use to set fire insurance rates. However, because these ratings involve weighing several variables, comparing different communities is difficult. For instance, a rating of seven in two different communities does not mean that each is working with the same equipment under the same circumstances. Rather, one could have an adequate water system but inadequate personnel and equipment, the other, the reverse.

The ISO ratings in Long County are 5. The County is working diligently on upgrading fire protection facilities, with a new facility to be added in the Donald Community to improve the ISO rating, thus lowering their insurance premiums.

The City of Ludowici and the Long County Commission fund a joint city-county volunteer fire department. Much of the funding needed to support the volunteers comes from donations and local fundraising efforts. There are approximately 29 certified volunteers twelve of which are certified first responders. There is one station located in Ludowici and a pumper truck is parked at the Gum Branch Volunteer Fire Department in Liberty County to respond to emergencies in the northern end of Long County. The Fire Chief receives a small annual stipend from the County Commission for the time dedicated to administration of the Volunteers.

Ludowici has the most to gain from improvements to the Fire Department. Lower homeowner's insurance rates stimulate housing development growth. Improving the level of fire protection service in the city will lower the cost of housing to residents and developers. Since the city housing growth has been stagnant, this could enable a means of recovery.

Table C-9 below provides a projection of the needed professional fire fighting personnel based on the population projections provided in the Population Element of, this plan and established standards provided by the National Fire Protection Organization.

**Table C-9**

## Projected Firefighter Needs

Year	Long County	City of Ludowici
2000	10	2
2005	11	2
2010	12	2
2015	13	2

Source: National Fire Protection Organization and Population Projections

In the unincorporated areas of the county it is difficult to make improvements to fire protection service that will substantially lower homeowner's insurance rates. However, proper use of land development regulations, such as zoning, can prevent the spread of fire from dwelling to dwelling. The predominant housing structure in the unincorporated areas of the county is the mobile home. Once a fire breaks out in a mobile home, it will be a matter of minutes before the entire structure burns to the ground. If units are spaced at an adequate distance apart, it will allow the fire department time to at least stop the fire from spreading to other homes. Also, through subdivision regulations, real estate developers can be required to lay firebreaks and dry hydrants in residential subdivisions. This will increase the level of fire protection in the unincorporated areas of the county.

## HOSPITALS AND OTHER PUBLIC HEALTH SERVICES

The County's health care services and facilities are provided through a network of modern private hospitals and clinics, a coordinates system of public health clinics, and independent healthcare providers.

The Long County Commission has a Health Department for which it contributes approximately \$34,000 annually. All other funding to the Health Department is provided by the State of Georgia with some assistance from the Federal Government.

Beyond the County's Health Department, school infirmaries, and one private pharmacy, there are no other health care services available in Long County. The nearest hospitals are in Liberty County to the north, Tattnall County toward the northwest, and Wayne County to the south. From the City of Ludowici, the Liberty County Hospital in Hinesville is 15 miles, the Tattnall County Hospital in Reidsville is 45 miles, and the Wayne County Hospital in Jesup is 11 miles away. Table c.14 below describes these facilities in greater detail.

**Table C-10**

## Health Care Facilities Surrounding Long County

Category	Liberty	Tattnall	Wayne	Area Per 1000	State Per 1000
Population	52,745	18,134	20,750		
Hospitals	1	1	1	0.031	0.026
Hospital beds	50	40	138	2.331	3.933
Nursing Homes	1	2	3	0.061	0.053
Nursing Home Beds	169	252	244	6.797	5.657

Source: State Health Planning Agency

Ludowici Medical Center offers primary medical care to the residents located in the central area of the county.

According to figures compiled by the Centers for Disease Control, 181 people died in Long County in the years 1999-2001. The county death rate was 6 per thousand people, compared with 8 per thousand people statewide.

During the same period, 47 people died from cancer. The county death rate from cancer was 1.5 per thousand people, compared with 1.7 per thousand statewide.

A reported 6 people died in motor vehicle accidents.

The average age of people living in Long County at the time of the 2000 census was 29.4, compared with 34.5 statewide and 36.2 nationwide.

The Long County Board of Commissioners has begun to provide a Volunteer Emergency Medical Service to residents in the form of ambulance service. However, this service only provides emergency medical technical assistance because the ambulance currently in use is not designed to transport personnel. The county is in dire need of an ambulance equipped to transport rescued victims. Since there are no medical facilities in Long County, the EMS service must be able to transport rescued victims to the nearest facility in another county. Most often this is the Liberty County Hospital in Hinesville.

Long County has one nursing home. Coastal Manor Nursing home is a 66 bed certified Hospital Based and/or Medicare Only Skilled Nursing Home. The facility offers care for residents in need of skilled nursing care as well as various therapies to aid their recovery. Average occupancy rate is 98%. The nursing home is a private, for-profit nursing home. Residents at the home receive care, on average, 1.36 RN hours per day, and 2.16 CNA hours per day,

which total 3.52 nursing hours per day. The national average for total nursing hours per day is 3.83 hours per day.

Long County houses a Senior Citizens Center Building in Ludowici. In 2004, the Center provided 6,716 meals in the Center and 6,280 homebound meals.

## **RECREATION FACILITIES**

The availability of parks and recreation opportunities plays a significant role quality of life and business (re) location decisions. Passive and active recreations facilities for all age groups are essential public services. Recreation is physically and psychologically healthful, provides socially acceptable activities and improves the general quality of life. Landscaped parks and recreation areas also promote neighborhood aesthetic values. Most of the parks and recreation facilities in Long County are operated by the county recreation department, although Ludowici maintains several parks and has development plans for more.

The Georgia Department of Natural Resources has assessed the recreation needs for the counties in the State. This assessment is provided in the State Comprehensive Outdoor Recreation Plan (S.C.O.R.P) annual report. This annual assessment not only represents an inventory of recreational facilities, it also provides future demand for recreation based on activity. Table C-11 lists the existing supply and future recreation facility needs for the entire population of Long County.

The County also needs to invest in the development of a recreation complex and to consider developing walking trails. A recreational field is currently being developed in the northern end of the county. The field will include a soccer field, shelters and fencing. A walking trail will be considered.

In the unincorporated areas of long county there are three public boat ramp facilities that provide access to the Altamaha River. These facilities are located at Beards Bluff at the north end of the county, Hughes Old River at the end of county road 126 in the north-central portion of the county, and at Morgan Lake on county road 60 just off of U.S. Highway #84 near the Wayne County line. On occasion, picnic facilities were available at each of the boat ramps. However due to vandalism, few still remain.

**Table C-11**

<b>Activity</b>	<b>Unit</b>	<b>Long County</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>Coastal Region</b>
Tent Camping	Sites(s)	0	3	3	4	1
Trailer Camping	Sites(s)	0	3	4	4	97
Motor Boating	Acre(s)	0	34	40	47	0
Outdoor Swimming	Pool(s)	2	0	0	0	28
18 Hole Golf	Course(s)	0	0	0	0	1
9 Hole Golf	Course(s)	0	0	0	0	1
Baseball	Field(s)	2	1	1	1	51
Lighted Baseball	Field(s)	3	1	1	1	86
Football	Field(s)	0	1	1	1	17
Lighted Football	Field(s)	0	0	0	0	15
Tennis	Court(s)	2	2	2	2	69
Lighted Tennis	Court(s)	0	1	1	1	65
Outdoor Basketball	Court(s)	4	2	2	2	139
Bicycle Trails	Mile(s)	0	2	2	2	11
Canoe Trails	Mile(s)	0	0	0	1	0
Hiking Trails	Mile(s)	0	14	17	20	1
Horse Trails	Mile(s)	0	1	1	1	0
Interpretive Trails	Mile(s)	0	1	1	1	2
Pedestrian Trails	Mile(s)	0	0	1	1	12

Source: Dept of Natural Resources, State Comprehensive Outdoor Recreation Plan

## **GENERAL GOVERNMENT**

The most important factor of any community facilities plan is a clear understanding of a community's general government fiscal structure and limitations. It is difficult to plan and program community facilities and services without knowing where the government revenue is coming, where it must go, and what will be left over for new programs and facilities.

## **General Government**

Long County operates under a commission-based system of government in which five commissioners are elected to four-year terms. The Long County Courthouse located in Ludowici serves as the site for the Board of Commissioner's Office, Probate Court, Magistrate Court, Clerk of Superior Court, Local Emergency Management Office and meeting rooms. The Tax Assessor's Office, Tax Commissioner's Office is located adjacent to the Courthouse which also houses the Warren County Extension Office.

Long County collected \$2.2 million in total revenues in 1996. In 2000, the county received \$3.6 million, an increase of 66.1%. Total revenue in 2000 equaled \$350 per capita. The statewide revenue per capita for this same year was \$679.

From 1996 to 2000, own source revenues for Long County rose from \$2 million to \$3 million, an increase of 52.0%. Own source revenues include revenues from property taxes, excise and special use taxes, sales taxes, and service charges and fees. Per capita own source revenues amounted to \$290 in 2000. This compares to a statewide per capita amount of \$611.

The county collected an average of \$179 per capita in property taxes during the past five years. This amount was less than the average of \$197 per capita collected by similarly-sized counties. For the same period, the average per capita amount of county property tax collected in Georgia was \$190. On average, property taxes accounted for 64.1% of the county's own source revenue during the period of 1996 to 2000.

General operating expenditures for Long County in 1996 equaled \$2.4 million, or \$296 per capita. In 2000, general operating expenditures rose by 12.0% to \$2.7 million, which was \$264 per capita. General operating expenditures per capita for similarly-sized counties was \$431 in 2000. The statewide average was \$404 per capita during the same period.

Historically, the top three expenditure categories for counties are public safety, administration, and health and human services. In 2000, Long County spent \$653,200 or 22.9% of total county spending on public safety which includes spending for law enforcement, fire services and jails. Spending for administration totaled \$511,000, amounting to 17.9% of total expenditures. The county spent \$329,400 or 11.5% of total spending on health and human services.

From 1996 to 2000, Long County had an average of \$190,168 in long-term debt outstanding each year, resulting in an average per capita debt burden of \$21. This amount was less than the \$55 per capita average held among similarly-sized counties with outstanding debt during the period.



## EDUCATIONAL FACILITIES

The Long County Board of Education and one private school provide educational facilities in the county. There are 2 public schools serving county and municipality residents, one elementary and one high school. The elementary school houses grades K-5 and the high school serve grades 6-12.

The most recent enrollment figures are outlined in Table C-12. In 2002, total enrollment was 1967 students, representing a 5 per cent increase, and 86 high school graduates. The private school enrolled 285 students.

**Table C-12**  
**Full-Time Student Enrollments, 2000-2003**

School Name	2004 Enrollment
Smiley Elementary School	649
Long County School	1420
Totals	2,069

Source: Georgia Department of Education

**Table C-13**

Staffing Ratios	Total Number
Teachers	119
Instructional Aides	39
Guidance Counselors	3
Librarians/Media Specialists	2
District-level Administrators	4
School-level Administrators	6

Source: [www.greatschools.net](http://www.greatschools.net)

## HIGHER EDUCATION

Higher education and vocational opportunities are available as follows:

- Tech. College: Altamaha at Jesup (15 miles) with 2,012 students.
- Tech. College: Savannah at Savannah (53 miles) with 3,600 students.
- 2-yr: Waycross College at Waycross (45 miles) with 900 students.
- 4-yr: Armstrong Atlantic State University at Savannah (53 miles) with 6,026 students.

- 4-yr: Savannah State University at Savannah (53 miles) with 2,560 students.
- 4-yr: Georgia Southern University at Statesboro (56 miles) with 15,075 students.

In Long County the Average Expenditure per Student (public education) was \$3,912 per student each year between 1996 and 2000. This average expenditure per student was less than the statewide average of \$5,285. Total general fund expenditures used to teach and support a student in a school system includes expenditures for instruction, media, pupil services, capital project, school food, and debt services.

### **Libraries and Other Cultural Facilities**

Long County is a member of the Three Rivers Regional Library System. This system encompasses Brantley, Camden, Charlton, Glynn, Long, McIntosh, and Wayne County. Within the system there are a total of eight public libraries. The system employs ten full-time librarians and forty-one assistants. Library services include reference and information, bookmobile circulation, children's programs, an adult literacy program, free library cards to residents, and a collection of 286,436 books, magazines, newspapers, audio and video cassettes, and compact discs. The system receives approximately 364,340 patrons per year.

Currently, all other cultural facilities in the City of Ludowici and in the unincorporated areas of Long County are held by private organizations. There are no other publicly owned or leased cultural facilities in Long County.

## 5.2.0.0: Assessment

### Road Network

Roadways drive the Long County economy and are considered significant as much for their economic development function as for local transport needs. At just over 54%, the county has an unacceptably high percentage of unpaved roads. Neither current nor future needs are being met with so many unpaved roads. While some roads in very low density have always been and will continue remain dirt roads, the county will need to implement projects prioritized through the years. No major problem areas were identified during the inventory as current needs are being met.

Advisory members identified a critical element to economic development efforts and public safety. As the two railroads intersect the county seat of Ludowici, an important countywide road projects would be to construct an overpass across the railroad intersections. This project supports the economic development policy of industrial park expansion and the county should work with appropriate Georgia DOT officials to complete necessary improvements.

Future land use patterns will play a significant role in the continued efficiency of the transportation network. According to the Institute of Traffic Engineers, a typical single-family detached home generates an average of 9.54 vehicle trips per day while commercial and industrial facilities generate from 20 to 2000 vehicle trips per day. In year 2000, 44.1 per cent of Long County households owned two passenger vehicles. Population growth is projected to increase through 2025, countywide housing projections, based in part on continual increases in the number of new households, are anticipated to reach 7,356 units. Given current levels of service, the projected increase in new housing may significantly impact the existing network.

The economic development policy contained in this comprehensive plan calls for significant levels of growth in manufacturing, TCP and FIRE. Increases in TCP and FIRE employment will not significantly affect the existing traffic patterns but manufacturing has the potential to alter the network. Future manufacturing sites include the Long County/Ludowici Industrial Park and other areas in the unincorporated areas identified by the county. Once water and sewer infrastructure is provided, it is likely that manufacturing plants will locate in proximity to Long County. Should that occur, Long County will need to consider the traffic implications of potentially significant truck and vehicular traffic along State Route 57 and 84.

In order to better assess the impacts of land use on the transportation network and to identify potential implementation measures to mitigate those impacts a detailed thoroughfare study and plan is needed. A thoroughfare plan can provide a much more precise assessment and identify specific needs for implementation. Long County needs to draft and adopt subdivision regulations and a form of land development regulations, such as zoning, that address traffic safety issues and limit the creation of unpaved roads for the purpose of residential development. This will reduce the need for tax increases to support the Long County Road Department.

The City of Hinesville in neighboring Liberty County has organized a Hinesville Metropolitan Planning Organization. Studies are currently underway to determine transportation and regional facility needs to accommodate future regional economic development plans. The county will need to support regional economic development efforts by the planning organization.

### **Pedestrian and Bicycle**

Overall, there is lack of pedestrian and bicycle facilities in the county. There is a need to develop a bicycle and pedestrian plan for the area that could enhance the Wiregrass Trail. Funding could be sought to complete an inventory and assessment as well as recommendations. The county should continue applying for Transportation Enhancement grants to complete much needed pedestrian projects.

The bicycle and pedestrian plan could include recommendations for bicycle routes, including facilities along the proposed scenic byway route. In addition to identifying an internal network, the plan could examine ways to link local bicycle networks with the state system, thus providing residents with alternative transportation modes.

### **Bridges and Signalization**

The adequacy of the overall road network is dependent on bridge maintenance and the adequacy of signalized intersections to maintain a steady traffic flow. The county continues to monitor the condition of bridges and repair them on an as needed basis. The identified improvement bridge project involves railroad-crossing improvements along State Route 57 in Ludowici.

The advisory committee did identify the need for additional signage along State Highway 84 and the need for upgraded street signs.

### **Public Transportation**

Long County is currently able to meet demand for public transportation. With the projected growth in the seniors' population group through 2025, the county may need an additional vehicle to accommodate future demand.

The county will continue to provide public transportation to its residents and will pursue other transportation related programs through the Federal Intermodal Surface Transportation and Efficiency Act (ISTEA) to continue enhancement of the Wiregrass Trail (Georgia Hwy #57).

## **Railroads**

Both CSX and Norfolk Southern currently provide an acceptable level of service and are expected to continue to do so. Even with the anticipated economic growth policy outlines in the Economic Development section, both rail providers have enough capacity to continue providing adequate service.

The Advisory Committee recommends a public safety improvement of constructing a bridge overpass over the railroad crossings in Ludowici.

## **Water Supply and Treatment**

Based on population projections discussed in the Population Element of this Comprehensive Plan, community facilities and services must be assessed to determine their levels of service and ability to meet the demands of the existing and future population.

Water demand forecasts are derived from population, housing, and employment forecasts based on existing average use levels. These forecasts are based on minimal expansion of the network service area and would increase accordingly if water service were extended further into the unincorporated area.

In order for Long County to continue to attract commercial and industrial development and take full economic advantage of its Industrial Park, water and sewer services need to be completed. The provision of a comprehensive water and wastewater system is a requirement to support desired new development. Areas targeted for future industrial and commercial development will require adequate water service to attract higher density development and support more intensive land uses.

Currently, the water supply needs of the county are being met. Average and peak demand is less than half of the total permitted withdrawal, treatment, and storage capacities. Population growth is projected at 23 per cent through 2025 while housing units are anticipated to increase by approximately 2,499 units. Most of the county's housing growth is projected to be in the unincorporated areas of the

county. Given current water capacities, future growth may render it difficult to meet future demand.

## **Sewerage System and Wastewater Treatment**

The County does not operate a public sewerage system and does not plan to provide countywide service.

Across the state, regional watershed studies and TMDL implementation plans have increasingly identified septic tanks as an increasing non-point source pollutant. The abundance of septic tanks in unincorporated areas has increased dramatically over the past twenty years as suburban development has outpaced urban development. The number and location of all of the septic tanks in the county is not precisely known, but the number of households not using a public sewerage system would indicate that there are approximately 3,000 individual septic systems (according to the number of households in Long County). This estimate illustrates the large number of unmonitored septic systems in the county, which should be cleaned out every 3-5 years to ensure proper operation. Currently there are no regulations in place to monitor the maintenance of septic systems so once a problem occurs; it is generally too late to prevent contaminants from entering the ground and surface water.

Given the increased population and housing growth projected through the planning period, the county will need to coordinate on planning for future septic service expansion.

The county should consider adopting building codes and subdivision regulations that would require comprehensive placement and inspection of septic systems.

## **Solid Waste Management**

Long County is experiencing population growth and the County's current disposal programs and operations are adequate for meeting needs during the planning period. Collection programs in Long County are sufficient to meet the demands of residents and businesses.

A regional approach to solid waste is the only cost-effective way for rural counties to deal with the issue. A recycling program should be designed and implemented within a regional approach for handling recyclable materials. There is interest in initiating education programs for recycling as well as starting a

Clean and Beautiful and Recycling committee. There also is a need for educating businesses on waste reduction.

## **General Government**

Government facilities are generally meeting county needs and are adequate through 2025. Population projections may justify hiring additional government employees and the county will do so if required. The County has continually renovated the courthouse in the past two decades but will need to continue renovation efforts to other governmental buildings through the planning period.

There are no planned expansions of any government facilities.

## **Public Safety**

### **Law Enforcement**

According to the Federal Bureau of Investigation Uniform Crime Report (UCR) of 2002, national averages of rural counties for the number of sworn officers per 1,000 residents was 2.5 sworn officers per 1,000 residents. According to the staff figures for the Long County Sheriff's Department, Long County averages are currently less than one sworn officers per 1,000 residents. Although the number of officers and personnel falls below the national average, the Sheriff's Department adequately serves the existing population. Crime rates are close to half the state average and the geographic size of the area is relatively small.

Projected population growth may cause the Sheriff's Department unable to serve future populations. However, the county should support more clustered housing development as this can dramatically reduce the need for additional law enforcement.

Equipment needs will vary through the planning period. Long County may need to invest in vehicles and other equipment on a periodic basis to ensure adequate levels of service.

### **Fire Protection**

Overall, the county's level of fire protection is adequate and is expected to remain so. The Donald Community identified the construction of a new fire station as a pressing need.

Fire protection is directly affected by the quality of the water system and a lack of infrastructure can severely reduce the community's ability to provide adequate fire protection. A high ISO rating is an indication that water system infrastructure needs to be upgraded and improved to help lower the ISO rating. Upon completion of water system upgrades, ISO ratings will begin to improve. The County should support policies to lower the ISO ratings so that residents will be better protected and industries will have more incentive to locate or expand operations in the County and municipalities.

### **Emergency Medical Services**

The existing level of service is adequate. To improve the level of service, investment in new equipment and staff must keep pace with population growth. Long County is currently working with a regional plan with McIntosh and Tattnall counties to start and administer an Emergency 911 system.

### **Recreation Facilities**

The National Recreation and Park Association has set a guideline level of service of 10 acres of park, recreation, or open space per 1,000 persons. Long County exceeds this standard. Nevertheless, the County should identify areas critical for open space preservation and appropriate for park development to meet increasingly growing needs and set aside for future growth and development.

The County also needs to invest in the development of a recreation complex and to consider developing walking trails. A recreational field is currently being developed in the northern end of the county. The field will include a soccer field, shelters and fencing. A walking trail will be considered.

The County also needs to invest in the development of a recreation complex and to consider developing walking trails. A recreational field is currently being developed in the northern end of the county. The field will include a soccer field, shelters and fencing. A walking trail will be considered.

The County Commission maintains several boat ramps and public access easements along the Altamaha River. This river serves as a major form of tourism and recreation in the county. Therefore, the County Commission must do whatever possible to renovate these facilities so that they present a good image to visitors to the county and provide a high level of service to the residents of the county.

### **Hospitals and Other Public Health Facilities**



In general, current public facilities and private hospitals are adequate to meet the current and projected needs of Long County. While population growth is projected to increase, the combined effects of population growth in neighboring counties and an aging population may put stress on the existing system.

The county will need to encourage the development of extended care facilities to meet the future needs of its aging population as well as continuing the support it offers senior to aid them in living independently. The Coastal Manor Center has been operating at or near capacity and with the number of residents 65 years or age or higher projected to increase by 36%, additional facilities will be needed.

### **Educational Facilities**

Long County's educational facilities meet the current needs for housing the students enrolled in the school system. Population growth of younger school age children is projected to increase through the planning period, signaling the need for additional facilities.

Because population growth, including among lower age groups, is projected to be relatively large, future impacts on the public school system must be monitored to determine the ability of existing facilities to accommodate any rise in enrollment above projected levels.

Bus routes will be planned in compliance to road suitability and public safety. Road improvements will coincide with necessary bussing access routes.

### **Libraries and Other Cultural Facilities**

The library system possesses approximately 286,436 volumes, which is equal to 2.94 volumes per capita. The Georgia Public Library System has adopted standardized recommendations for libraries based on population size they are serving. For communities under 20,000 the basic level of service is 4 volumes per capita. Based on this standard, the Long County Library is operating below acceptable standards.

The library facility itself is in excellent condition and is well maintained. The space available for various collections is adequate for the current population and the relatively small growth that is projected through the planning period.

Long County would like to renovate the train depot that once served as City Hall for Ludowici. The renovated depot would provide Chamber of Commerce office

space, as well as another avenue for heritage tourism, a museum, and a community facility.

## **5.3.0.0: Goals & Implementation**

### **Goals and Policies**

Long County is committed to ensuring the safety and wellbeing of residents by considered support of public safety agencies, transportation networks, and community facilities.

### **Transportation Network**

Long County will continue to provide public transportation support to residents. In addition, the county will continue to pursue the paving of county roads with appropriate signage.

Goal 1: Upgrade and expand existing transportation facilities, as needed, to accommodate future growth in the most efficient manner.

Policy 1-1: Support the regional efforts of the Hinesville Metropolitan Planning Organization.

Policy 1-2: Request funds from GDOT to construct a railroad overpass in Ludowici.

Policy 1-3: Continue to make every effort to keep county roads, bridges, and right-of-ways free of litter and debris.

Policy 1-4: Continue to coordinate with state and federal highway agencies to accommodate the projects planned in Long County area.

Policy 1-5: Continue to apply for government assistance for targeted public infrastructure investments that will forward economic development, maximize returns on investments, and improve facility services.

Policy 1-6: Renovate and expand existing County Roads Department Barn.

Goal 2: Improve the mobility of pedestrians and bicyclists throughout the county.

Policy 2-1: Encourage sidewalks as part of new development.

Policy 2-2: Encourage GDOT to add bike lanes and sidewalks as part of resurfacing or new construction in appropriate areas along state highways.

### **Water Supply and Treatment**

Long County will review regulations to provide comprehensive inspection of well placement in new construction sites.

Goal 1: Provide service to citizens in the most efficient and cost effective manner possible.

Policy 1-1: Invest in new infrastructure as needed to ensure the continued provision of an adequate level of service.

Policy 1-2: Upgrade water infrastructure.

Policy 1-3: Continue to coordinate with state and federal authorities to implement all applicable potable water and wastewater quality requirements, and soil erosion and sedimentation control regulations.

Policy 1-4: Actively plan and program the provision of potable water service to growth areas of the county.

Goal 2: Coordinate new development with the availability of adequate water service.

Policy 2-1: Upgrade water infrastructure

Policy 2-2: Maximize the use of existing infrastructure for water service.

### **Sewerage System and Wastewater Treatment**

Long County is committed to ensuring the interests of public safety through wise management practices. One method to ensure public safety is the pursuit of comprehensive inspections of septic tank systems during installation and throughout the life of the system.

Goal 1: Provide service to citizens in the most efficient and cost effective manner possible.

Policy 1-1: Actively plan and program the provision of public Sewer treatment service to high growth areas of the county.

Goal 2: Consider developing monitoring and maintenance regulations for septic tank systems.

### **Solid Waste Management**

There is no need for Long County to develop a landfill within the county during the planning period. However, Long County is committed to ensuring the needs of residents are met through careful consideration of Solid Waste Management efforts. These efforts may include reviewing the need and feasibility of a community recycling program.

Goal 1: Provide service to citizens in the most efficient and cost effective manner possible.

Policy 1-1: Continue to maintain and purchase solid waste equipment needed to properly operate solid waste collection efforts.

Policy 1-2: Continue to identify viable collection efforts and implement efficiency programs when feasible.

Policy 1-3: Evaluate collection efforts periodically to determine if changes are needed or if new collection mechanisms are feasible.

Goal 2: Ensure that disposal facilities in the county meet regulatory requirements and can continue to support and facilitate effective solid waste handling programs.

Policy 2-1: Increase education and awareness of recycling programs and opportunities for paper and organic waste materials

Policy 2-2: Encourage waste reduction programs.

Policy 2-3: Participate in the Keep Georgia Beautiful Campaign.

Policy 2-4: Work with the State's Recycling Coordinator to identify viable recycling projects in the county in coming years.

Policy 2-5: Continue to adhere to the goals, policies, and objectives of the Solid Waste Management Plan for Long County.

### **General Government Goals**

Long County will periodically review the ability of the government to provide for the needs and requests of residents. To that end, the following policies will be enacted:

Goal 1: Provide adequate space, equipment, and technology to elected officials and staff.

Policy 1-1: Expand any needed space for government offices.

### **Public Safety**

Long County is committed to providing all county residents with the best possible police and fire protection. To ensure the safety of Long County residents, Long County will periodically assess the ability of current public safety agencies to respond to the needs of residents.

Goal 1: Continue investing in the public safety agencies to maintain an adequate level of service.

Policy 1-1: Build new Fire Station in Donald Community

Policy 1-2: Renovate Fire Stations as necessary.

Policy 1-3: Purchase fire and EMS equipment and vehicles

Policy 1-4: Purchase Law Enforcement equipment and vehicles as necessary.

Policy 1-5: Consider funding sources to construct and administer a county jail.

Goal 2: Provide services to citizens in the most efficient and cost effective manner possible.

Policy 2-1: Consider consolidation services to better serve the public.

Policy 2-2: Coordinate water and transportation infrastructure improvements with fire protection agencies to ensure that adequate fire protection can be maintained in all new developments.

### **Recreation Facilities**

Long County will listen and respond to resident desires for recreation facilities.

Goal 1: Provide services to citizens in the most efficient and cost effective manner possible.

Policy 1-1: Plan and program existing recreational facility improvements, new facilities, and programs in accordance with the needs and preferences of all county residents.

Policy 1-2: Pursue State and Federal grant assistance for existing recreational improvements, new facilities, and programs in the county.

Policy 1-3: Coordinate public park expansion with local law enforcement agencies to ensure that they are adequately protected.

Policy 1-4: Consider construction of a Teen Center.

Policy 1-5: Construct a walking trail.

### **Hospitals and Other Public Health Facilities**

Long County is committed to improving emergency medical services whenever the means are available. Long County will continue to monitor population growth to assess the ability of local area medical facilities to respond to area health care needs.

Goal 1: Continue to support public and private health care providers ensuring that all of the county's needs are capably met, including all special needs communities

Policy 1-1: Assist with senior center expansion to meet the county's projected growth in the senior population

### **Educational Facilities**

Long County is committed to improving education services whenever the means are available. Long County will continue to monitor population growth to assess the ability of school facilities to respond to area needs.

Goal 1: Coordinate facility expansion based on future population projections and local land use planning.

Policy 1-1: Facilitate school board participation in the development review process to ensure that adequate educational facilities exist to accommodate future growth

Policy 1-2: Coordinate the location of future school sites with local governments ensuring the compatibility of adjacent land uses.

### **Libraries and Other Cultural Facilities**

Goal 1: Continued support of the public library system and other cultural facilities to ensure adequate service is provided to existing and future populations.

Policy 1-1: Continue to provide financial and human resource support to the Long County Library to meet identified needs

Goal 2: Continue to support the preservation and enhancement of cultural facilities throughout the county.

Policy 2-1: Develop a Welcome Center and Museum

### **Long County Community Facilities**

### **Long: Report of Accomplishments**

<b>Community Facilities</b>		
<b>Activity</b>	<b>Status</b>	<b>Explanation</b>
Place road signs at every road intersection.	Underway	
Begin local recycling program.	Not Accomplished	Lack of funding.
Construct new EMS building.	Completed	
Construct large meeting facility.	Completed	
Enhance Wiregrass Trail.	Underway	
Develop Youth Center.	Not Accomplished	Funding not available.
Construct Walking Trail.	Not Accomplished	Funding not available.
Pave all county roads.	Underway	

Expand Volunteer Fire Dept. facilities.	Underway	
Upgrade facilities to meet ADA requirements.	Underway	
Re-establish Long County Community Center.	Postponed	Future project to be developed by Chamber of Commerce with Train Depot project.
Build another active recreation park in city.	Not Accomplished	Plans for a new park are underway for the northern portion of county. Park will include a soccer field.
Support development of Nursing Home facility.	Completed	
Renovate public boat ramps on Altamaha River.	Underway	
Study ways to broaden the county tax base.	Not Accomplished	To pursue as part of Regional Plan initiatives.
Expand Long County Library.	Postponed	Future project.
Construct new Senior Center.	Completed	

### Short Term Work Program

Community Facilities				
Activity	Years	Responsible Party	Cost Estimate	Funding Source
Support the regional efforts of the Hinesville Metropolitan Planning Organization.	2005, 2006, 2007, 2008, 2009	County	None	None
Request funds from GDOT to construct a railroad overpass in Ludowici.	2005, 2006, 2007, 2008, 2009	County	\$2,000,000	GDOT, FEMA
Continue to make every effort to keep county roads, bridges, and right-of-ways free of litter and debris.	2005, 2006, 2007, 2008, 2009	County	None	None
Continue to coordinate with state and federal highway agencies to accommodate the projects planned in Long County area.	2005, 2006, 2007, 2008, 2009	County in cooperation with GDOT	None	None



Continue to apply for government assistance for targeted public infrastructure investments that will forward economic development, maximize returns on investments, and improve facility services.	2005, 2006, 2007, 2008, 2009	County	Unknown	GDOT, ISTE A
Renovate the existing County road Barn	2005, 2006, 2007, 2008, 2009	County	\$200,000	SPLOST
Encourage sidewalks as part of new development.	2005, 2006, 2007, 2008, 2009	County	Unknown	Developers
Encourage GDOT to add bike lanes and sidewalks as part of resurfacing or new construction in appropriate areas along state highways.	2005, 2006, 2007, 2008, 2009	County in cooperation with GDOT	Unknown	GDOT
Invest in new infrastructure as needed to ensure the continued provision of an adequate level of service.	2005, 2006, 2007, 2008, 2009	County	Unknown	Local funds
Continue to coordinate with state and federal authorities to implement all applicable potable water and wastewater quality requirements, and soil erosion and sedimentation control regulations.	2005, 2006, 2007, 2008, 2009	County	None	None
Actively plan and program the provision of potable water service to growth areas of the county.	2005, 2006, 2009	County	None	None
Actively plan and program the provision of public sewer treatment service to high growth areas of the county.	2005, 2006, 2007, 2008, 2009	County	Unknown	Local Development Fund, Developers
Continue to maintain and purchase solid waste equipment needed to properly operate solid waste collection efforts.	2005, 2006, 2007, 2008, 2009	County	Unknown	Local funds
Continue to identify viable collection efforts and implement efficiency programs when	2005, 2006, 2007, 2008, 2009	County	None	None

feasible.				
Evaluate collection efforts periodically to determine if changes are needed or if new collection mechanisms are feasible.	2005, 2006, 2007, 2008, 2009	County	None	None
Begin local recycling program.	2005, 2006, 2007, 2009	County	\$10,000	Local Development Fund
Build new Fire SubStation in Donald Community	2005, 2006, 2009	County	\$75,000	GDF
Purchase fire and EMS equipment and vehicles	2005, 2006, 2007, 2008, 2009	County	\$75,000	GEMA, Office of Homeland Security
Purchase Law Enforcement equipment and vehicles as necessary.	2005, 2006, 2007, 2008, 2009	County	Unknown	Local funds
Construct and administer county jail facility.	2005, 2006, 2007, 2008, 2009	County	\$1,00,000	Unknown
Plan and program existing recreational facility improvements, new facilities, and programs in accordance with the needs and preferences of all county residents.	2005, 2006, 2008, 2009	County	Unknown	None
Consider construction of a Teen Center.	2005, 2006, 2007, 2008, 2009	County	\$100,000	CDGB
Construct a walking trail.	2005, 2006, 2007, 2008, 2009	County	\$10,000	RAF
Pave county roads.	2005, 2006, 2007, 2008, 2009	County	\$220,000	SPLOST, LARP
Improve road signage.	2005, 2006, 2007, 2008, 2009	County	\$75,000	GDOT

# 6.0.0.0: Land Use

## Vision Statement

**Long County recognizes the importance of land use planning and will promote the orderly development of land to accommodate growth.**

## Introduction

Land use and development patterns are the result of interaction between demographic trends, economic circumstances and social attitudes. Technological changes in areas such as transportation and construction, and the availability and cost of land, water, and energy also influence existing development patterns.

The purpose of the Land Use element is to ensure that the distribution of land uses meets the future economic, social, physical and environmental needs of Long County. The Future Land Use map can assist local governments in making development decisions that complement long-term goals established throughout this plan and avoid the emergence of inefficient development patterns.

Since the adoption of the Joint Long County Comprehensive Plan in 1994, the county has experienced relatively high growth rates. Overall, the county remains a rural area and has not experienced the suburban growth seen elsewhere in the region. This chapter links other elements of the plan to create a vision for the future of Long County, and provides direction for managing anticipated growth.

# 6.1.0.0: Inventory

## Existing Land Use

The current land use map was generated by obtaining as much information as possible from aerial photographs supplemented by field investigations by the County Administrator who has close familiarity with county land utilization. This analysis represents only a summary and generalized pattern of the existing land uses. The following land use categories are used for the current land use map:

**Residential.** The predominant use of land within the residential category is for single-family and multi-family dwelling unit organized into general categories of net densities. In the City of Ludowici residential land uses appear along every street and road corridor. Even along U.S. Highway 84, a four lane arterial corridor, are pockets of residential dwellings sprawled from one side of the city to the other. It is potentially dangerous to permit development along major traffic corridors. However, many of these dwellings were in existence prior to the widening of U.S. #84 and since there are no building or land development regulations like zoning or subdivision regulations, there is no way to prevent such development.

Throughout the unincorporated areas of the county many high volume traffic corridors are littered with sprawling residential development. Most of this residential development is a result of spill over settlement created by the re-activation of Fort Stewart. A portion of Fort Stewart covers the northern end of the county. The main entrance is in Hinesville just north of the Long County-Liberty County line along U.S. Highway #84, which is a four-lane highway. Commercial and industrial development is preferred along four lane corridors. At a minimum residential development along four lane corridors should be in clusters with limited access and set back a significant distance from the high volume traffic corridor.

Many residences are beginning to appear along un-paved roads though-out the unincorporated areas of the county. Un-paved roads are not designed to accommodate residential development beyond a minimal density. More than ten residential units along one mile of unpaved roads will create much more demand for road maintenance. In most rural countries dirt roads were created so that tractors can get from field to field and not for passenger cars, mail delivery trucks, fire trucks and ambulances. In a normal rainstorm event, an unpaved road one mile in length with more than ten units will become impassible at its entrance by most common passenger vehicles. Both subdivision regulations and a zoning ordinance can be used to limit development along un-paved roads.

There is a significant amount of residential development occurring in the north and northeastern end of the county and some of it is becoming rather dense. Unfortunately, the fire protection in Long County is not equipped to handle high density development. Increasingly dense development in once rural areas creates a problem for fire protection services. Given that much of this development has come in the form of manufactured and mobile homes, the ability of any fire department to save a burning home of such types is limited. However if there is substantial spacing between housing units, fire protection personnel can reach the catastrophe in time to prevent fire from spreading to other dwellings. Subdivision regulations and a zoning ordinance can be used to address this issue. Also, mobile home park regulations can require features to increase safety and fire prevention in dense forms of development.

**Commercial.** This category is for land dedicated to non-industrial business uses, including retail sales, office, service and entertainment facilities, organized into general categories of intensities. Commercial uses may be located as a single use on one building or grouped together in a shopping center or office building. Commercial development in the City of Ludowici has consistently occurred along the two major high volume traffic corridors that bisect the city. These corridors are the U.S. Highway #84 corridor which is four lanes wide and Georgia Highway #57 which is partially shared by U.S. Highway #301 to the north after it intersects U.S. #84. State Highway #57 is also commonly referred to as the Wiregrass Trail. Currently there are efforts to enhance the aesthetic quality of the Wiregrass Trail from its origin in Darien all the way to the point where the highway intersects Interstate Highway #16 in Candler County. It is natural for commercial land uses to occur along these routes due to their ideal location for the traveling consumer market. Also, these routes represent the central areas of the city, which makes businesses easily identifiable to residents of both the city and the unincorporated areas of the county.

There are very few commercial land uses in the unincorporated areas of the county. Many of these are in the form of mixed uses of both low volume commercial and residential. Many are in the form of home businesses, home occupations, and rural businesses. In some cases there are restaurants coupled with the proprietor's residence. Combinations of agricultural, residential, commercial, and even industrial land uses are common to rural areas and country living. Any future development regulations must accommodate this phenomenon because it is a necessary component of the quality of life in rural areas.

**Industrial.** This category is for land dedicated to manufacturing facilities, processing plants, factories, warehousing and wholesale trade facilities, mining or mineral extraction activities, or other similar uses, organized into general categories of intensity. Currently there are no truly industrial land uses in

Ludowici. In the mid 1970's there were two industrial land uses within the City of Ludowici that together encompassed only 5.4 acres of the total useable land in the city. One company, Mantex Corporation, manufactured apparel in a structure located on a small corner lot at Main and McQueen street. The other company was Florida Plywood Corporation, which had a lumber yard with rail access at the end parcel on Plywood Street. Today these businesses no longer exist and their land is no longer under industrial use. The apparel plant is now under a commercial classification and the lumber yard has been converted into residential use according to a recent survey.

Most Industrial land uses in the unincorporated areas of the county have been resource based such as clay and sand surface mining, lumber, and pulpwood processing. However, there is industrial land available in the unincorporated portion of the county for businesses not dependent upon their approximation to raw materials. The Long County Development Authority owns an industrial site one mile north of Ludowici off of U.S. Highway #84 next to the County Road Department.

**Public/Institutional.** This category includes certain state, federal or local government uses, and institutional land uses. Government uses include city halls and government building complexes, police and fire stations, libraries, prisons, post offices, schools, military installations, etc. Examples of institutional land uses include colleges, churches, cemeteries, hospitals, etc. Almost all of the public and institutional land use acreage in the county is Fort Stewart. The remainder that is not part of Fort Stewart is either in the City of Ludowici or the Long County Road Department. The existing public buildings are displayed on the community facilities map of Ludowici.

**Transportation/Communication/Utilities.** This category includes such uses as major transportation routes, public transit stations, power generation plants, railroad facilities, radio towers, telephone switching stations, airports, port facilities or other similar uses. This land use classification is dominated in Long County by easements and right-of-ways. The number reflects an estimate based on the length and width of all recorded roads, power lines, rail lines, gas pipelines, and drainage easements. It is not certain how many of these easements may now be abandoned or may exist but are not recorded on a map. Given the steadily climbing cost of land throughout the State of Georgia, it is best that different service and utility providers coordinate their future easement plans and share right-of-ways whenever possible.

**Park/Recreation/Conservation.** This category is for land dedicated to active or passive recreational uses. These areas may be either publicly or privately owned and may include playgrounds, public parks, nature preserves, wildlife management areas, national forests, golf courses, recreation centers or similar uses. The recreation facilities in Ludowici and along the Altamaha River are described in the community facilities element. Currently these facilities occupy

only a small portion of the city and even smaller in the context of the entire county. Recreational facilities such as lighted stadiums, gun ranges, and motor vehicle parks are often incompatible uses in residential neighborhoods due to noise, traffic, and bright lighting during peak use. For this reason, such facilities are better suited for location on the outskirts of the city.

There are several private and non-profit organizations like the Trust for Public Lands and the Georgia Nature Conservancy that actively identify and purchase sensitive lands throughout the state. If any areas were to be set aside for conservation and protection, they would be best located along the Altamaha River flood basin.

**Agriculture.** This category is for land dedicated to agriculture, farming (fields, lots, pastures, farmsteads, specialty farms, livestock production, etc.) or other similar rural uses such as pastureland not in commercial use. Agriculture is predominantly confined to the northern end of the county where the land is more suitable for growing row crops, tobacco, and feed grains, which are the main staples of Long County's harvested agriculture. Also located in the northern tier of the county are broiler hen houses. In 2002 these farms sold more than 3.4 million broiler hens. Hen houses, hog pens, and cattle feed lots are often considered undesirable when located near residential land uses. Aerial application of chemical pesticides is also an annoyance to residents. When people settle in rural areas for residential purposes, they often overlook the negative externalities associated with country living. Then when these negative impacts from agricultural land uses become bothersome, the residents cry out for zoning and prohibition from the undesirable features of rural living. The State of Georgia was founded on its abundant agricultural resources. Agriculture has and will always be the main stay of the State's economic prosperity. For this reason, residential land uses should not be located where they will be a potential threat to established agricultural uses. Also, local farmers should be actively involved in the promulgation of any future land use regulations in Long County.

**Forestry.** This category is for land dedicated to commercial timber or pulpwood harvesting or other similar rural uses such as woodlands not in commercial use. Forestry is the most dominant land use in the county comprising 233,000 acres. Much of what is listed as undeveloped and unused in the land use map has a high potential for forestry cultivation. These undeveloped and unused areas are made up of mixed woodland and can be harvested separately for their hardwoods and pine. Much of this resource will only be good for pulp, presswood, or particle board, but once the land is harvested, this land can be used to grow pines for lumber and pole timber. For this reason, much of the unused or undeveloped land should be considered potential forest land. However, it is extremely difficult to determine how much will be harvested cultivated in the future without extensive knowledge of the market demand in the wood products industries.

**Table LU-1**

**Estimated Land Use Distribution by parcel in acres**

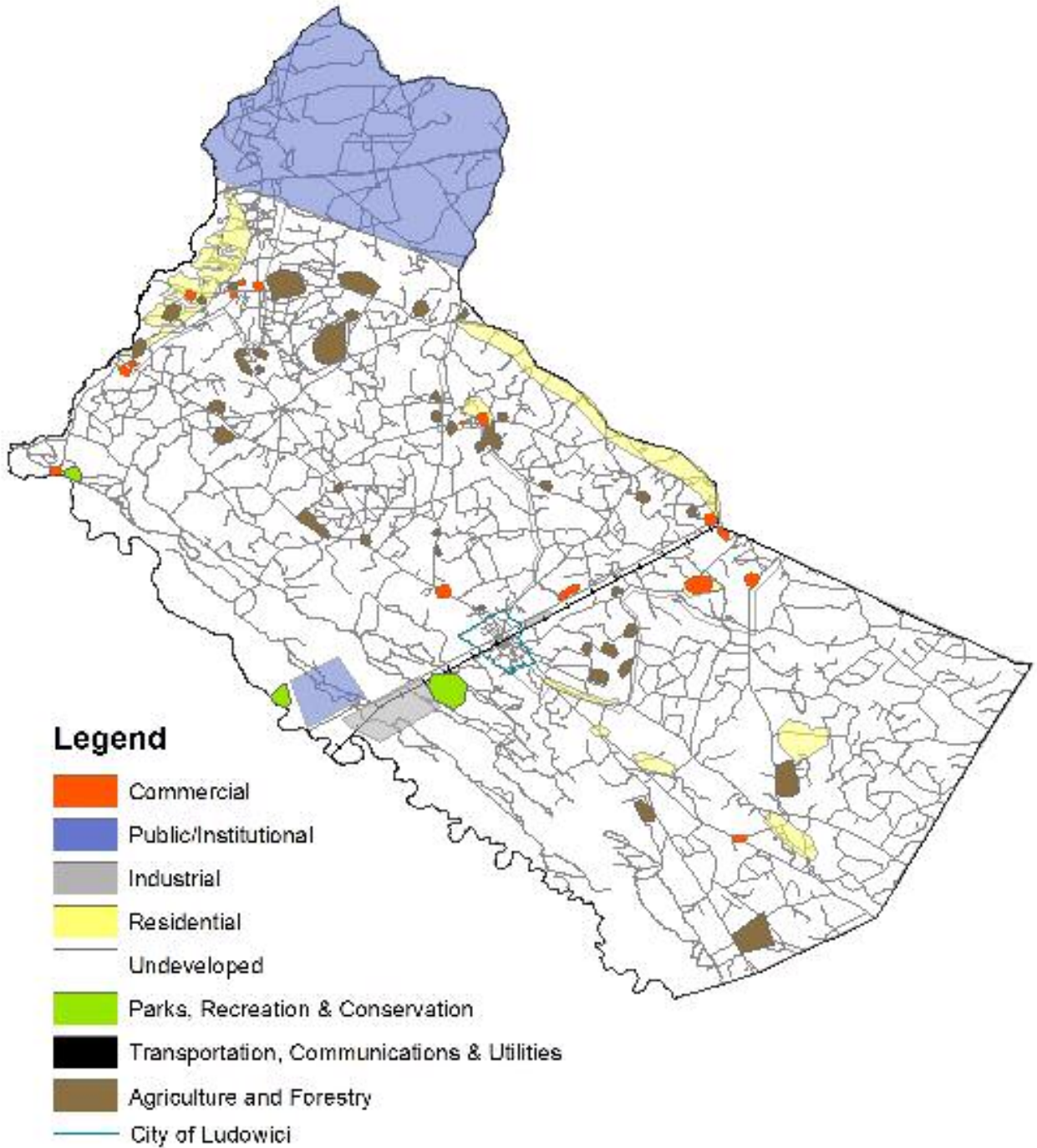
Classification	Long County	City of Ludowici	Uninc. Areas
Agriculture & Forestry	24,182	558	23,624
Residential	11,219	507	10,712
Commercial	25	15	10
Industrial	66	0	66
Public & Institutional	28,156	38	28,118
Recreation & Conservation	12	9	3
Transportation, Communication & Utilities	33,363	185	33,178
Unused or Undeveloped	159,617	95	159,521
<b>Total</b>	<b>256,640</b>	<b>1,408</b>	<b>255,232</b>

Source: Coastal Georgia Regional Development Center Geographical Information System  
Long County 2004 Tax Digest



---

# Long County Existing Land Use



## **Future Land Use**

To ensure that adequate land is dedicated to each land use according to future needs acreage must be projected throughout the planning period to ensure the future land use map reflects anticipated development and growth. The City of Ludowici is expected to see a slight decline in population over the next twenty years given current policies and past population growth. For this reason, it is anticipated that less residential land will be needed. However, because Ludowici is the only place in the county where water and sewer service are available, it is expected that many of the residential lands along U.S. Highway #84 and Georgia Highway #57 will become commercial land uses. Therefore despite a decline in population, there will be a rise in commerce in the city.

The city is in a current population decline which does not mean it will become less utilized. On the contrary, much of the actual residential growth of the city lies just beyond the current city limits. On average, people in our society demand more space. For residential development this trend translates to large lot sizes. Current local taxation policies and ease of modern travel make owning larger residential lots outside the city limits more feasible.

Ludowici Industrial -Even though there are no existing industrial uses in the City of Ludowici, there is still a need to set aside lands for such uses. These industrial lands must have direct access to either U.S. Highway #84, Georgia Highway #57 or a spur from the CSX rail line that bisects the city.

**Agricultural and Forestry in the unincorporated areas of Long County** -In spite of thriving agricultural and forestry industries, portions of existing agricultural and forest lands in the unincorporated areas of the county will be sold off in small parcels for residential purposes. Development pressure from neighboring Liberty County will tempt many foresters and farmers to sell off road front parcels to prospective residents. This activity may have short term benefits and profits. However in the long run, such activity may work against the forestry and farming industry as a whole.

Table LU-2 explains the anticipated exchange of undeveloped, unused, agricultural, and forest land uses for greater amounts of residential land uses.

**Table LU-2 Long County unincorporated area  
Future Land Use Distribution in acres**

Classification	2000	2005	2010	2015
Agriculture & Forestry	38,975	23,624	23,624	23,150
Residential	2,546	10,712	11,783	12,702
Commercial	11	12	13	15
Industrial	76	84	92	100
Public & Institutional	28,118	28,118	28,118	28,118
Recreation & Conservation	3	4	4	4
Transportation, Communication & Utilities	33,178	33,178	33,178	33,178
Unused & Undeveloped	152,325	159,500	158,420	157,965
<b>Total</b>	<b>255,232</b>	<b>255,232</b>	<b>255,232</b>	<b>255,232</b>

Source: Coastal Georgia RDC, 1994  
Long County Tax Digest 204

**Residential land uses in the unincorporated areas of Long County -**

Residential concentrations are increasing in the north and north western portions of the county which is evident from increased traffic counts reported in these areas. Much of this development is the result of the population surge caused by a constantly expanding military installation, Fort Stewart. If there is a reduction in forces or a closure of the Fort, these areas will become vacant once again. Fortunately, much of the residential housing in this area is in the form of mobile homes. These structures can be easily removed from the property and the land can once again revert to its original agricultural or forestry use. In the event of base closure, permanent housing structures will be devalued and perhaps unable for resale.

Residential development must not be allowed to impede agricultural or forestry uses as well as any potential for industrial or commercial development. This requires all new residential development to be located on roads other than major highway corridors and away from agricultural uses that may be a nuisance to residents. Also, residential development must be limited on unpaved roads. It is important that growth be managed so that county facilities and services are put to their most efficient and economical use.

**Industrial Growth in the unincorporated areas of Long County -**There will be industrial growth in the unincorporated areas of the county. Concerted efforts are underway to further develop the Long County Development Authority's industrial

site. This facility may expand the industrial/manufacturing base of the county planning period. Land parcels fronting U.S. #84 must be preserved for either industrial development, warehousing or high volume commercial. Single family residential development with parcels abutting this highway will be a waste of this valuable land.

**Transportation, Communication and Utility easements** -It is assumed that that needed easements for transportation, communication, & utilities will be constant. With the adoption and enforcement of proper subdivision regulations, there will be an increase in these easements. However, it is difficult to predict an amount for these since there are currently no land development policies defined.

**Public Recreation and Conservation lands** -Recreation and conservation land will grow minimally. Public access points to the Altamaha River are established. These points will possibly see some minor expansion. Most new recreation facilities will be developed in the City of Ludowici, which is central to all locations in the county. Neither the City Council nor the County Commission has the fiscal resources to purchase and dedicate land for conservation.

**Unused and Undeveloped lands** -These lands are in no way to be unused or remain undeveloped. Their current and future use has not been determined in this plan. Any future land use regulations will associate these lands with agricultural and forestry land uses.

### **Areas within the Community Proposed to Receive Particular Types of Growth**

Some areas along State Highway 84 are proposed to receive industrial growth. Long County expects higher levels of residential and commercial growth as a result of new industry developing in the county.

Recent development in Long County has occurred primarily in unincorporated areas. Development in the unincorporated areas of Long County is scattered with no apparent locations of intense density. The county does not currently have any policies or regulations linking development and infrastructure availability, which limits its ability to encourage growth in particular areas where infrastructure is available or expansion is planned.

### **Areas Likely to be Annexed**

There are no plans for annexation during the planning period. There is an existing annexation agreement between the county and the City of Ludowici should an annexation issue arise.

## **Timing and Sequence of Infrastructure Improvements**

Currently, there is an infrastructure expansion project being developed in the industrial sites along State Highway 84.

## **Areas identified as Critical and Sensitive Areas Subject to Natural Hazards**

Water quantity and quality were identified as the most important natural resources issues throughout the planning process. Development regulations for impaired watersheds, groundwater recharge areas with high susceptibility to pollution, water supply watersheds, and along the Altamaha River need to be developed. Currently, the county has adopted the minimum required environmental protection ordinances. New land use regulations should include these minimum requirements as well as more stringent requirements for the most critical and sensitive areas.

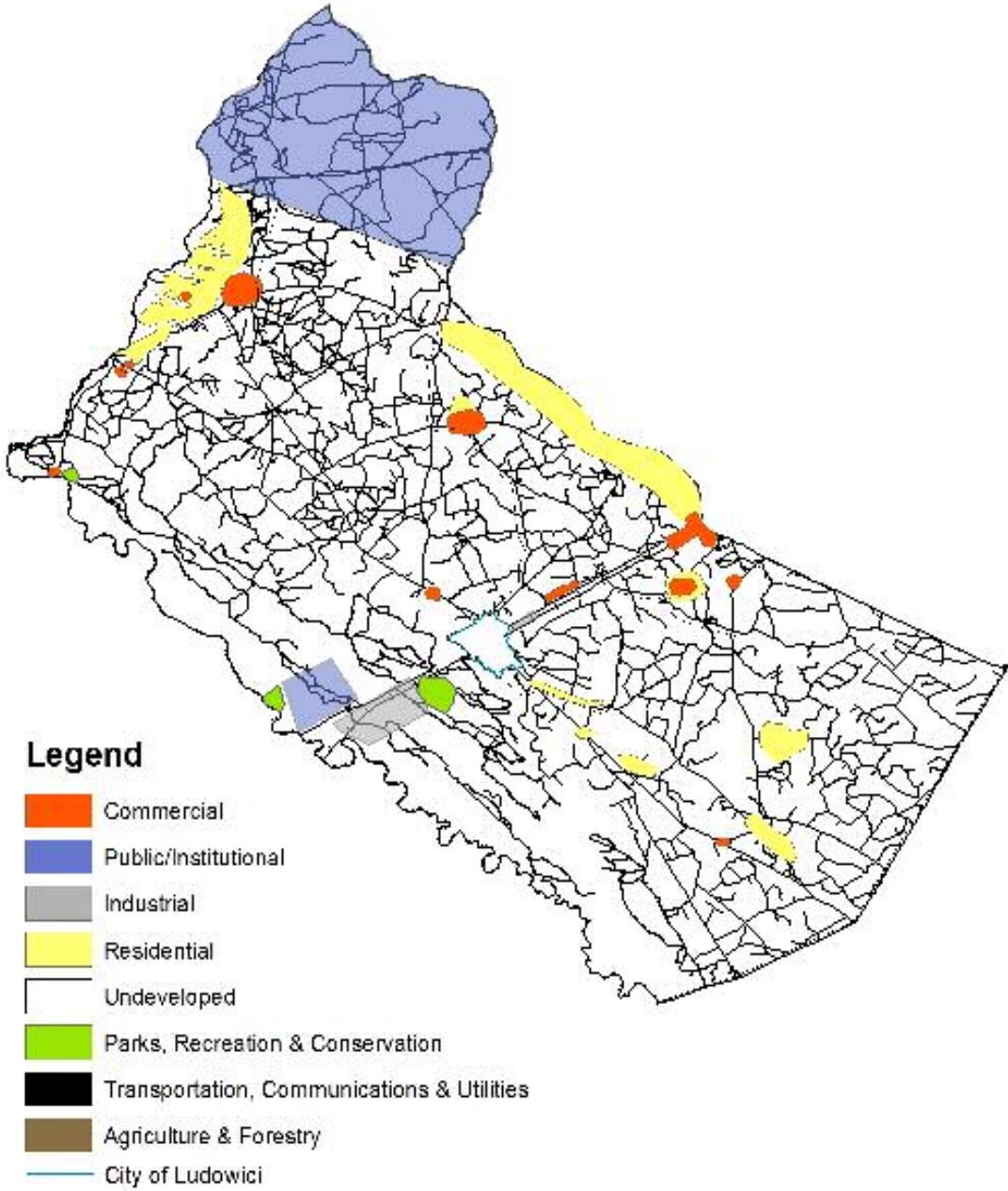
## **Areas of Cultural, Historic, or Archeological Interest**

Preservation of the scenic view sheds along Scenic Byway route SR 57 is important due to the scenic significance of this roadway. The development of land use regulations in Long County will be required if these scenic view sheds are to be protected.

There is currently no review mechanism other than national historic property legislation to evaluate negative effects of potential projects. Since many projects do not involve the use of federal funds, not all historic properties are subject to such comprehensive review. The NRHP-listed historic properties will need to be incorporated in land use regulations such as historic preservation guidelines.

---

# Long County Future Land Use



## 6.2.0.0: Assessment

### Current Land Use

#### Historical Factors

Long County is a unique coastal Georgia county whose history has been affected by geography and international politics. Its history mirrors the nation's: Indian and Colonial settlements, the American Revolution, the War Between The States, and all the military conflicts of the twentieth century. Archaeological evidence indicates Native Americans lived along the coast in 2500 B.C. Their seminomadic lifestyle was supported by abundant supplies of animals, birds and seafood - especially shellfish. Mounds of oyster shells eventually provided the aggregate for settler's "tabby" houses constructed of timber covered with a mixture of sand, lime and oyster shells.

History records the Spanish explorer Menendez de Aviles, settled St. Catherine's Island in 1565, while founding St. Augustine, Florida and Port Royal, South Carolina. Spanish, English, French and privateer forces alternately ruled the area for most of the following two centuries, until 1733 when British General James Oglethorpe founded the Province of Georgia on the site of the city of Savannah. Oglethorpe affirmed British governance of the coast through exploration, road and fortification building, and battles against the Spanish.

Long County was founded on August 14, 1920 out of land previously belonging to Liberty and McIntosh counties. Consequently, the character of Long County is quite different than the coast.

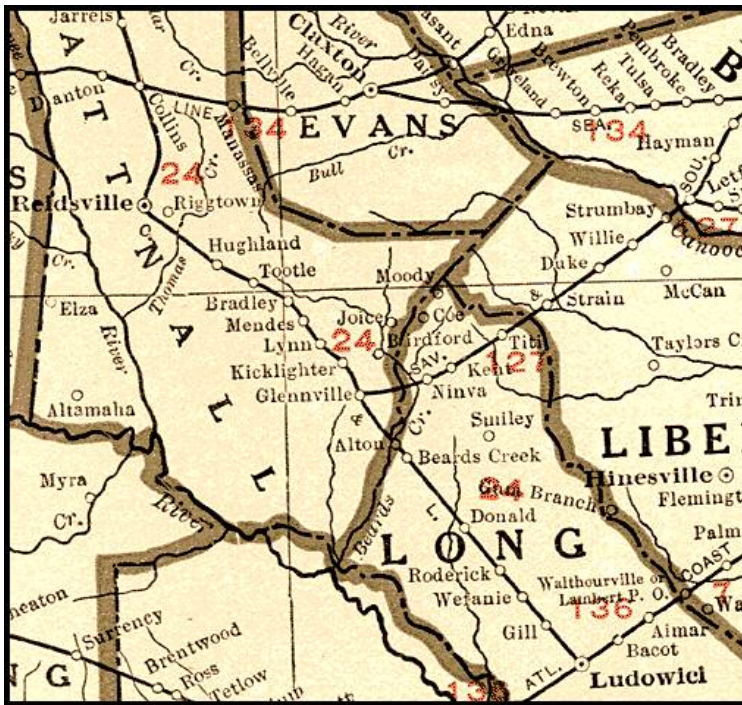
Probably the single most important factor in giving Long County distinction is the almost universal use of the red tile roofs on the buildings. The Ludowici Celadon Company operated a tile factory in Ludowici from 1905-1914. Almost every house built during that time was covered with the red Ludowici tile.

The tile company had another quite noticeable effect in the town. Mr. Ludowici put up \$1000 to help build a new school if the town would take his name; the town agreed. Thus, Ludowici was named for a German tile manufacturer and is not an Indian name as some people have alleged.

The development of the railroad has strongly influenced development patterns. The Georgia Railroad Company was chartered by an Act of the Georgia

Legislature in 1833 to build a line of railroad from Augusta to Athens with branches to Madison and Eatonton. In 1919 the Collins and Ludowici took over the northern section of the former Georgia Coast and Piedmont Railroad which had been sold and broken up after entering receivership in 1915. Although the southern part of the line, from Glennville to Darien and Brunswick, was abandoned, the northern segment retained enough traffic to continue operating.

## Collins & Ludowici Railroad



The railroad provided the impetus for growth in the county and strongly influenced land use patterns. Almost uniformly throughout the county, residential development was clustered along both sides of the railroad tracks so workers could walk to work. Commercial establishments were also located in residential areas. In short, the railroad became the focus of residential and commercial development.

By the 1960s, railroad traffic gave way other transportation modes as the wave of large-scale highways projects through the southeast and the nation led to declining rail needs. Both passenger and commercial rail service declined substantially. The Interstate and State Route system developed in the 1960s has a significant impact on land use in the county. As several State Routes cut



through Long County, residents no longer had a need to reside in or around the municipalities. With the automobile providing mobility, more and more residents worked in neighboring jurisdictions. Furthermore, more and more manufacturing plants located away from Long County. Further sprawl was limited only by the lack of water and sewer infrastructure.

The agricultural history of the county is also important in understanding land use changes. Throughout the years, the county’s farming and forestry sectors have evolved to respond to market demands. The trend indicates fewer but larger farms as compared to the early part of the 20<sup>th</sup> century. Based on the USDA National Agricultural Statistics Service, 2002 Census of Agriculture, Long County farm lands had the following properties:

**Table LU-3**

<b>Farms</b>	<b>2002</b>	<b>1997</b>	<b>1992</b>	<b>1987</b>
<b>Number</b>	<b>76</b>	<b>73</b>	<b>67</b>	<b>75</b>
<b>Acreage</b>	<b>23,624</b>	<b>18,572</b>	<b>11,969</b>	<b>12,380</b>
<b>Average Size (acres)</b>	<b>311</b>	<b>254</b>	<b>179</b>	<b>165</b>

**Land Use Patterns and Infrastructure Improvements**

Certain types of infrastructure, such as water, sewer, and transportation influence where and how much development occurs. To date, water and sewer availability has ensured that most commercial and industrial development has occurred in proximity to the municipality. Residential development, on the other hand, has not been subject to this limitation. As noted in the Housing section, the exponential growth of housing in the unincorporated areas is due to the availability of septic tanks and the lack of land use regulations concerning mobile home units. The county’s vast State Route system provides further incentive for residents to locate away from populated areas.

Throughout communities all over the State of Georgia and the United States there are many types of local government policies used to manage and control land use and land development. Subdivision regulations, agricultural protection ordinances, zoning ordinances, business license requirements, building codes, Mobile home park regulations, performance regulations, utility tap on regulations, sign regulations, and impact fees are among few types of local policies used in various ways to manage development and protect the public interests.

**Subdivision Regulations** -Often subdivision regulations are the first forms of land use regulation established by a county or city so that the local authority can track and manage means by which land is divided and sold. Without effective and enforced subdivision regulations, many counties have allowed land fraud to perpetuate. Section 15-6-67 O.C.G.A. now requires an officially licensed land surveyor to certify the validity of the land, a legal description of the property and its ownership, and, if regulations are in place, permission of either a planning commission or elected municipal body to authorize the division of any parcel of land into two or more parts. Prior to this legislation, only a legal description was needed to record land subdivision regardless of whether the person recording the deed actually owned the property or if the property physically existed.

When Long County drafts subdivision regulations the following issues must be addressed:

1. Requirements for minor subdivisions vs. major subdivisions.
2. Lot size and easement widths.
3. New road and street construction including; asphalt and substrate thickness, road width, curb & gutter, cul-de-sac radius, etc.
4. Preliminary Plat requirements, inspection and enforcement.
5. Wetlands and flood plains.
6. Storm water management, soil erosion and sedimentation.
7. Water and sewerage system compatibility.
8. Existing road conditions. (limits to dirt road capacity)
9. Special features; e.g. fire hydrants, dry hydrants, street lighting, garbage collection, mail boxes, fire breaks.

**Zoning Ordinance** -Zoning is a popular style of land use regulations. In a zoning ordinance, there are different sets of land development regulations associated directly with the uses that apply to property depending on which zone the property lies. This style of regulation works well in city to manage the level of development in certain areas so that it may not overburden existing facilities and services. Zoning also acts to preserve neighborhood environments in cities. However, it does not work as well in a rural county. Since a county does not provide water or sewer, development capacity depends mostly on roads. For this reason, rural counties are better served by land development regulations that limit development by the type of road a parcel of property fronts.

**Enforcement** -Both subdivision regulations and zoning ordinances are worthless unless there is a competent and efficient means of enforcement. There are several ways in which land development regulations can be enforced. The more popular forms of enforcement are through building permits and business licensure. Building permits include mobile home relocation, well, and septic tank permits and business licenses include alcohol beverage license. The most effective form of enforcement is through electric service. This requires full cooperation of every electric company in the county. The only means of enforcement practiced currently by the city and county is business licensure. This will only serve to regulate commercial land uses. Building, well, septic tank, and mobile home placement inspection are most needed by the county and city.

### **Blighted Areas**

In general, Long County has very few and isolated blighted areas. While there are buildings falling into disrepair due to abandonment, these buildings are isolated. While there are dwelling units in the unincorporated areas of the county that are deteriorating or dilapidated, they are scattered and not noticeable in any discernable area.

There are currently no transitional areas undergoing shifts in predominate land use.

### **Environmentally Sensitive and Locally Valued land**

Environmentally sensitive areas are in need of protection. To the extent possible, the County should attempt to encourage development away from the groundwater recharge areas, wetlands, floodplains, and primary agricultural lands. There are significant land parcels outside these environmentally sensitive areas to develop. Population and housing growth rates are projected to be significant; however, there are plenty to locations that do not impact environmentally sensitive areas.

Cultural resources are highly valued by residents of Long County. The county is pursuing historic-based tourism as an economic development strategy. Furthermore, the county is participating in trail projects including The Wiregrass Trail along SR 57. This trail was selected for recognition because of its scenic importance. Future development should not impact these resources.

### **Future Land Use**

#### **Assessment**

Approximately 808 acres of undeveloped land will be needed to accommodate growth in other land uses. The largest increase in land use growth share will occur in residential and industrial, both projected to grow by 19 per cent.

Other land use changes are relatively minor; however, residential acreage will increase by more than 700 acres. This reflects an assumption, based on housing projections contained in the Housing section, of approximately 0.5 dwelling units per acre. The density assumption is supported by the distribution of housing. Current trends indicate that typical residential densities in the unincorporated areas are approximately 1 dwelling units per acre and between 0.2 to 0.75 dwelling units per acre in the municipalities. Applying those ratios to projected housing location yields the 0.5 figure.

The industrial land use classification is expected to increase reflecting the county's economic goal of above average growth in manufacturing. Approximately 50 additional acres will be needed to accommodate industrial growth through the planning period.

Natural and cultural resources account for much of Long County's acreage. The need to protect these resources is paramount. As noted, the County attempt to encourage development away from the groundwater recharge areas, wetlands, floodplains, and primary agricultural lands. There are significant land parcels outside these environmentally sensitive areas to develop. Population and housing growth rates are projected to be significant. There are plenty to locations to develop that do not impact environmentally sensitive areas.

The Future Land Use map is an important tool used in implementing the Comprehensive Plan. The map does not represent an exact pattern of development but identifies appropriate areas of opportunity for each land use category to accommodate the projected growth.

Throughout the planning horizon, real estate markets and the availability of infrastructure and services will determine the exact location and timing of development. The map is intended as a guideline for elected officials and local government staff in making development decisions. As local economics and demographics change over time, so too should the Future Land Use map. It requires periodic monitoring to ensure that development decisions are being made using the most accurate illustration of the desired future growth patterns.

# 6.3.0.0: Goals & Implementation

## Goals and Policies

Long County will continue to work to ensure wise management of its natural resources. To ensure that end, Long County will periodically evaluate the need and feasibility of establishing a Planning Commission, subdivision regulations, zoning ordinances, and land development regulations.

Goal 1: Promote the health and safety of the general public.

Policy 1.1: Ensure developments are setback at proper intervals so as to prevent potable water well contamination.

Policy 1.2: Prohibit single family residential developments from fronting high volume traffic corridors.

Policy 1.3: Require buffer zones between heavy industrial and high volume commercial land uses and residential areas.

Goal 2: Minimize negative impacts associated with new development on environmentally sensitive areas.

Policy 2-1: Maintain water quality through the protection of environmentally sensitive lands.

Goal 3: Coordinate new development with public facilities.

Policy 3-1: Invest in facilities construction and expansion and services in areas designated for growth.

Policy 3-2: Base project approval decisions on the ability of the existing or planned public facilities to accommodate increased use.

Goal 4: Protect property values.

Policy 4.1: Protect residential areas from intrusion of incompatible and conflicting land uses.

Policy 4.2: Promote the development of scenic buffers between conflicting land uses.

Policy 4.3: Maintain the integrity of land use districts and strictly adhere to policies set forth in future land use regulation ordinances.

Policy 4.4: Protect agricultural and forestry land uses from being encumbered by uncontrolled residential growth.

Goal 5: Use development regulations to maximize the efficiency of existing and future facilities and services.

Policy 5.1: Promote higher density development growth in areas where water and sewer are available.

Policy 5.2: Focus residential development within close proximity to fire stations and locate structures within developments near fire - hydrants.

Policy 5.3: Promote industrial and high volume commercial development along highways of four lanes or greater.

### Long County Land Use

### Long: Report of Accomplishments

Land Use		
Activity	Status	Explanation
Create Consolidated City-County Planning Commission.	Not Accomplished	Previous evaluation indicated insufficient need and lack of adequate resources. Issue will be periodically evaluated.
Consider establishment of consolidated City-County land subdivision regulations.	Not Accomplished	Previous evaluation indicated insufficient need and lack of adequate resources. Issue will be periodically evaluated.
Consider establishment of consolidated City-County Zoning Ordinance and Land Development Regulations.	Not Accomplished	Previous evaluation indicated insufficient need and lack of adequate resources. Issue will be periodically evaluated along with alternatives.

### Short Term Work Program

Land Use				
Activity	Years	Responsible Party	Cost Estimate	Funding Source
Ensure developments are setback at proper intervals so as to prevent potable water well contamination.	2005, 2006, 2007, 2008, 2009	County	None	None
Require buffer zones between heavy industrial and high volume commercial land uses and residential areas.	2005, 2006, 2007, 2008, 2009	County	Unknown	Commercial developers
Maintain water quality through the protection of environmentally sensitive lands.	2005, 2006, 2007, 2008, 2009	County in cooperation with DNR	Unknown	Coastal Zone Management Grant

## 7.1.0.0: Intergovernmental Coordination

### Inventory

#### Adjacent Local Governments

**Relationship to the Comprehensive Plan:** Long County and its only incorporated municipality, Ludowici, participated in and developed a joint Comprehensive Growth Management Plan in 1994. Although not participating jointly with the 2004 comprehensive plan update, participation between the local governments is frequent and cooperative.

**Existing Coordination Mechanisms:** Long County and Ludowici have a history of cooperation and coordination. In 1997 the two jurisdictions implemented a formal SPLOST agreement to benefit education that outlines the use of tax revenues for each jurisdiction, tax appropriations for each type of project allowed under the agreement, as well as distribution breakdowns by jurisdiction and project type. The city and county also have other coordinated efforts including cemeteries, tax collection, magistrate court, tax assessor, clerk of court and the extension service. The county commission and city councils meet informally several times a year to discuss coordination efforts.

#### School Boards

**Relationship to the Comprehensive Plan:** Two representatives from the school board served on the comprehensive plan advisory committee. In addition, the county chairman gives presentations at regular school board meetings in order to gain insight to the school board's various needs. The school board consults the comprehensive plan for data and direction when in school funding matters.

**Existing Coordination Mechanisms:** Long County is a member of the Three Rivers Regional Library system that also includes Brantley, Camden, Charlton, Glynn, McIntosh and Wayne counties. The Long County Public Library is located in Ludowici and the city and county jointly pay the operating costs of the Long County library. There is also a coordinated effort between Long County local governments and the school board to provide recreational opportunities. The governmental departments coordinate with the school system to share athletic facilities.

#### Independent Special Districts

There are no independent special districts in Long County and/or Ludowici.



## **Industrial Development Authorities**

**Relationship to the Comprehensive Plan:** Long County is served by the Long County/Ludowici Industrial Development Authority. The industrial development authority refers to the comprehensive plan, for data, guidance, and implementation purposes, more than any other authority within the county. As a result, the comprehensive plan is a document these organizations will use to develop future projects.

**Existing Coordination Mechanisms:** The Long County Chamber of Commerce and the Long County/Ludowici Industrial Development Authority serve Long County. The Industrial Authority is a branch of the Long County Chamber of Commerce. The two organizations hold joint meetings and work together on economic development projects.

## **Utility Companies**

**Relationship to the Comprehensive Plan:** Two utility companies provide service to customers in Long County and Ludowici. Georgia Power provides service to all jurisdictions while the Canoochee Electric Membership Corporation provides service to some areas. There are no relationships between utility companies and the comprehensive plan.

**Existing Coordination Mechanisms:** Although no formal process for coordinating activities is in the place, the county and city clerks within their jurisdictions have primary responsibility for coordination.

## **Service Delivery Strategy**

The Service Delivery Strategy identifies several agreements between Ludowici and Long County and with neighboring jurisdictions. Cooperation in carrying out these agreements is generally managed at the staff level on a day-to-day basis. They include agreements:

- Between Long County and the City of Ludowici for the Long County to provide fire services;
- Between Long County and Wayne County and Liberty County to provide housing for Long County inmates;
- Between Long County, the City of Ludowici to share the operations cost of the public library;
- Between Long County and the City of Ludowici for the county to provide certain public works assistance such as road plowing;
- Between Long County and the City of Ludowici for Emergency Management services including rescue services; and
- Between Long County and the Cities of Ludowici on an adopted joint dispute resolution process for resolving land use disputes and annexation disputes.

### **Governor's Greenspace Program**

Long County and the municipalities do not qualify for Greenspace grants and therefore have not participated in the Governor's Greenspace Program.

### **Coastal Management**

Long County lies within the eleven-county organizational boundary of the Georgia Coastal Management Program. The Coastal Advisory Council links Program components to local governments and provides a means by which communities and the coastal managers can communicate. The Long County Board of Commissioners has a permanent seat on the Coastal Advisory Council and the county regularly participates in the activities of the Council. Long County benefits from direct technical assistance and training opportunities provided by the Georgia Coastal Management Program and from project funding by the Coastal Incentive Grants Program.

### **Appalachian Regional Commission**

Long County is not located within the Appalachian Regional Commission.

### **Water Planning Districts**

Long County is not located within a state designated water-planning district.

### **Transportation Requirements for Non-Attainment Areas**

Long County is not located within a non-attainment area.

## **7.2.0.0: Assessment**

### **Land Use Conflicts at Jurisdictional Borders**

Existing coordination mechanisms are important both regionally and within jurisdictions. Long County and neighboring counties have no land use conflicts at jurisdictional borders due to the lack of development at or near their respective boundaries. There are no formal mechanisms in place to ensure future conflicts can be resolved. Part of the Governor's Road Improvement Program (GRIP) to provide four-lane highway access to most Georgia communities, has the potential to alter traffic patterns given Long County's proximity to major highways. One of the primary purposes of GRIP is to encourage development in the state's smaller communities. Historically, major highway projects have encouraged development in scattered areas, primarily commercial development as a response to increases in traffic. Such conflicts with land use patterns are not expected to arise in Long County due to the ample availability of developable land and the county's existing efforts to locate commercial and industrial development in designated corridors. In the event that such conflicts should arise, the Coastal Georgia RDC serves as an *ad hoc* forum to resolve the issues.

Neither Long County nor Ludowici currently has land use regulations in place. Both governments have available developable land within their respective jurisdictions. Projections for Long County highlight high population and household growth over the planning period. Adequate land resources exist in Long County to accommodate the growth. One of the economic development objectives pursued jointly between Long County and Ludowici is to locate industrial development in an established industrial park where infrastructure is accommodated.

There were no incompatibilities or conflicts between the land use plans of Long County and Ludowici or between Long County and bordering counties identified in the development of this plan. Long County and the City of Ludowici have implemented a conflict resolution process. In 1998 the city and county adopted the Land Use and Annexation Dispute Process Resolution for use in the event of intra-county conflicts.

### **Lack of Information about Plans of Adjacent Communities**

Because of the regular meetings and coordinated efforts of local governments within Long County, the lack of information about plans, policies or other documents relating to the communities is not an issue. There exists an obvious effort by surrounding counties to coordinate economic development activities with Long County officials. Both the Liberty County Industrial Authority and the

Hinesville Metropolitan Planning Organization invite Long County officials to respective planning meetings and make efforts to keep Long County informed about development plans and projects. Coordination between the counties is especially apparent regarding Adult Technical Education as it is recognized that an educated and trained workforce is necessary to growth and development and preparing such a workforce is mutually beneficial.

### **Service Provision Overlaps or Conflicts**

Little potential conflict regarding service provision was identified in this planning effort. The existing mechanism of formal and informal coordination is currently adequate will be adequate through the planning period.

### **Annexation Issues Between Cities and Counties**

Long County and Ludowici have an existing annexation agreement in place and no annexation issues are expected. The existing agreement will continue to be adequate through the planning period.

### **Conflicting Development Projections and Public Facility Sitting**

Due to existing coordination mechanisms, meetings and information sharing, there are no issues related to conflicting development projections and public facility sitting. All public entities currently use consistent population projections and the sitting of public facilities, particularly schools, recreation facilities and industrial parks, have been and continue to be coordinated through the combined efforts of local governments, the school board, and the development authorities.

### **Issues Relating to Applicable State and Regional Programs**

No rising issues relating to state or Regional Programs were identified.

## **7.3.0.0: Goals and Implementation**

Goal 1: Maintain existing formal and informal intergovernmental coordination mechanisms within county jurisdictions, among neighboring jurisdictions, and within regional organizations.

Goal 2: Encourage, where outlined, formal intergovernmental coordination mechanisms.

# **Long Term Projects and Activities**

Long County is committed to providing for the safety, health and well-being of all Long County residents. The following sections provide the specific goals, objectives and policies that will be utilized to provide the means for enhancing the quality of life, whether in work or recreation, for all Long County residents.

# 5-Year Short Term Work Program

## *Long: Short Term Work Program Update*

<b>Community Facilities</b>				
<b>Activity</b>	<b>Years</b>	<b>Responsible Party</b>	<b>Cost Estimate</b>	<b>Funding Source</b>
Support the regional efforts of the Hinesville Metropolitan Planning Organization.	2005, 2006, 2007, 2008, 2009	County	None	None
Request funds from GDOT to construct a railroad overpass in Ludowici.	2005, 2006, 2007, 2008, 2009	County	\$2,000,000	GDOT, FEMA
Continue to make every effort to keep county roads, bridges, and right-of-ways free of litter and debris.	2005, 2006, 2007, 2008, 2009	County	None	None
Continue to coordinate with state and federal highway agencies to accommodate the projects planned in Long County area.	2005, 2006, 2007, 2008, 2009	County in cooperation with GDOT	None	None
Continue to apply for government assistance for targeted public infrastructure investments that will forward economic development, maximize returns on investments, and improve facility services.	2005, 2006, 2007, 2008, 2009	County	Unknown	GDOT, ISTEAA
Encourage sidewalks as part of new development.	2005, 2006, 2007, 2008, 2009	County	Unknown	Developers
Encourage GDOT to add bike lanes and sidewalks as part of resurfacing or new construction in appropriate areas along state highways.	2005, 2006, 2007, 2008, 2009	County in cooperation with GDOT	Unknown	GDOT
Invest in new infrastructure as needed to ensure the continued provision of an adequate level of service.	2005, 2006, 2007, 2008, 2009	County	Unknown	Local funds

Continue to coordinate with state and federal authorities to implement all applicable potable water and wastewater quality requirements, and soil erosion and sedimentation control regulations.	2005, 2006, 2007, 2008, 2009	County	None	None
Actively plan and program the provision of potable water service to growth areas of the county.	2005, 2006, 2009	County	None	None
Actively plan and program the provision of public sewer treatment service to high growth areas of the county.	2005, 2006, 2007, 2008, 2009	County	Unknown	Local Development Fund, Developers
Continue to maintain and purchase solid waste equipment needed to properly operate solid waste collection efforts.	2005, 2006, 2007, 2008, 2009	County	Unknown	Local funds
Continue to identify viable collection efforts and implement efficiency programs when feasible.	2005, 2006, 2007, 2008, 2009	County	None	None
Evaluate collection efforts periodically to determine if changes are needed or if new collection mechanisms are feasible.	2005, 2006, 2007, 2008, 2009	County	None	None
Begin local recycling program.	2005, 2006, 2007, 2009	County	\$10,000	Local Development Fund
Build new Fire SubStation in Donald Community	2005, 2006, 2009	County	\$75,000	GDF
Purchase fire and EMS equipment and vehicles	2005, 2006, 2007, 2008, 2009	County	\$75,000	GEMA, Office of Homeland Security
Purchase Law Enforcement equipment and vehicles as necessary.	2005, 2006, 2007, 2008, 2009	County	Unknown	Local funds
Plan and program existing recreational facility improvements, new facilities, and programs in accordance with the needs and preferences of all	2005, 2006, 2008, 2009	County	Unknown	None



county residents.				
Consider construction of a Teen Center.	2005, 2006, 2007, 2008, 2009	County	\$100,000	CDGB
Construct a walking trail.	2005, 2006, 2007, 2008, 2009	County	\$10,000	RAF
Pave county roads.	2005, 2006, 2007, 2008, 2009	County	\$220,000	SPLOST, LARP
Improve road signage.	2005, 2006, 2007, 2008, 2009	County	\$75,000	GDOT

<b>Economic Development</b>				
<b>Activity</b>	<b>Years</b>	<b>Responsible Party</b>	<b>Cost Estimate</b>	<b>Funding Source</b>
Enhance Long County's visibility as a place for business to locate.	2005, 2006, 2007, 2008, 2009	County	N/A	ISTEA and Local Development Funds
Facilitate a relationship between federal, state, and local governments with business and industry to promote economic development.	2005, 2006, 2007, 2008, 2009	County, Chamber of Commerce	None	None
Complete and promote the Long County/Ludowici Industrial Park.	2005, 2006, 2007, 2008, 2009	County	\$500,000	CDGB
Encourage future development in areas with adequate services and infrastructure.	2005, 2006, 2007, 2008, 2009	County	None	None
Encourage economic growth of existing populated and developed areas.	2005, 2006, 2007, 2008, 2009	County	None	None
Continue to offer financial programs, tax incentives and credits, and technical assistance to new and existing businesses and industry.	2005, 2006, 2007, 2008, 2009	County	None	None
Encourage collaboration between employers, employees, and existing educational facilities to establish an educated, quality, and sustaining workforce.	2005, 2006, 2007, 2008, 2009	County, Board of Education	None	None

Collaborate on a multi-jurisdictional level to promote tourism throughout the region.	2005, 2006, 2007, 2008, 2009	County, Chamber, CGRDC	None	None
Review and update strategies for achieving targeted development types.	2005, 2006, 2007, 2008, 2009	County in cooperation with CGRDC	None	None
Identify potential sites for historic and environmental-based tourism.	2005, 2006, 2007, 2008, 2009	County, Chamber of Commerce	None	None
Use authority granted under the Georgia Enterprise Zone Employment Act to create jobs and economic activity in distressed neighborhoods.	2005, 2006, 2007, 2008, 2009	County	None	None
Nurture sectors that provide high earnings and wages.	2005, 2006, 2007, 2008, 2009	County	None	None
Encourage higher labor participation rates.	2005, 2006, 2007, 2008, 2009	County	None	None
Develop and maintain criteria for targeting types of economic development activity.	2005, 2006, 2007, 2008, 2009	County	None	None
Support and advertise job training, business assistance and education programs available through the University of Georgia Small Business Center, Georgia Tech Economic Development Institute and the Coastal Georgia Regional Development Center.	2005, 2006, 2007, 2008, 2009	County with cooperation from CGRDC	None	None
Work closely with surrounding area technical schools to assist local residents with job training and employment placement.	2005, 2006, 2007, 2008, 2009	County, Board of Education	None	None
Continue to actively promote and support Wiregrass Trail Scenic Byway tourism activities.	2005, 2006, 2007, 2008, 2009	County, Chamber of Commerce	\$10,000	ISTEA
Apply for state and federal grants to support tourism projects.	2005, 2006, 2007, 2008, 2009	County	None	ISTEA, Local Development Funds
Annually review Capital	2005, 2006,	County	None	None

Improvement Program for economic development needs and revise as necessary.	2007, 2008, 2009			
Periodically investigate the need for and the feasibility of establishing a community revolving loan fund.	2005, 2006, 2007, 2008, 2009	County	None	None

<b>Housing</b>				
<b>Activity</b>	<b>Years</b>	<b>Responsible Party</b>	<b>Cost Estimate</b>	<b>Funding Source</b>
Periodically review the need for a county-wide building department and code enforcement board.	2005, 2006, 2007, 2008, 2009	County	\$100,000	Permit fees
Encourage and support facilities for the homeless.	2005, 2006, 2007, 2008, 2009	County	Unknown	Local, community support
Periodically review the need for adoption and administration of zoning regulations.	2005, 2006, 2007, 2008, 2009	County	None	Permit fees
Consider adoption and administration of subdivision regulations to avoid scattered, non-contiguous residential development patterns and promote clustered residential development.	2005, 2006, 2008, 2009	County	Unknown	Permit fees, developers

<b>Land Use</b>				
<b>Activity</b>	<b>Years</b>	<b>Responsible Party</b>	<b>Cost Estimate</b>	<b>Funding Source</b>
Ensure developments are setback at proper intervals so as to prevent potable water well contamination.	2005, 2006, 2007, 2008, 2009	County	None	None
Require buffer zones between heavy industrial and high volume commercial land uses and residential areas.	2005, 2006, 2007, 2008, 2009	County	Unknown	Commercial developers
Maintain water quality through the protection of environmentally sensitive lands.	2005, 2006, 2007, 2008, 2009	County in cooperation with DNR	Unknown	Coastal Zone Management Grant

<b>Natural and Historic Resources</b>
---------------------------------------

<b>Activity</b>	<b>Years</b>	<b>Responsible Party</b>	<b>Cost Estimate</b>	<b>Funding Source</b>
Long County will apply for funding to prepare and implement a natural resources management plan.	2005, 2006, 2007, 2008, 2009	County	Not known	Coastal Zone Management Grant
Long County will pursue and review alternative methods to zoning and building permit processes to manage the impact of development activities on natural resources.	2005, 2006, 2007, 2008, 2009	County	None	None
Long County will participate with the detailed natural resource inventory and assessment efforts.	2005, 2006, 2007, 2008, 2009	County in cooperation with DNR	None	None
Long County will establish a Comprehensive Water Supply Management Plan.	2005, 2006, 2007, 2008, 2009	County	\$25,725	Local funds
Long County will continue to work to meet Part V of the Regional River Corridor Protection Act.	2005, 2006, 2007, 2008, 2009	County in cooperation with CGRDC	None	None
Long County will update the survey of historic resources as necessary and will participate in the update of the Regional Historic Preservation Plan.	2005, 2006, 2007, 2008, 2009	County in cooperation with CGRDC	None	None
Long County will assist in individual and district nominations to the National Register of Historic Places.	2005, 2006, 2007, 2008, 2009	County	None	None
Long County will continue to promote 'Heritage Tourism.'	2005, 2006, 2007, 2008, 2009	Advisory Council Members	Unknown	Local Foundations, Local Development Funds
Long County will develop an Elam School House Museum.	2005, 2006, 2007, 2008, 2009	County	\$500,000	Local Foundations, Community support