

City of Ludowici

Comprehensive Plan 2005 - 2025



July 15, 2005

Prepared by:

Coastal Georgia
Regional Development Center

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Brunswick, Georgia 31521

City of Ludowici

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City of Ludowici

Comprehensive Plan 2005 - 2025

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Footnote

Information for the Natural Resources section was drawn from the Georgia Department of Community Affairs, the Georgia Department of Natural Resources, the University of Georgia, the U.S. Department of Agriculture and the U.S. Fish and Wildlife Services.

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Chapter 1 Population

The population element provides the City of Ludowici the opportunity to inventory and assess the trends and the demographic characteristics of the population. This information will form the foundation for planning decisions such as economic development, community facilities and services, transportation, housing, and land use elements of the comprehensive plan. In addition, this element may be used as a basis for determining desired growth rate, population densities and development patterns that are consistent with the goals and policies established in the other plan elements. Both past and present population data will be analyzed to project future population. Characteristics that are analyzed in the element include total population, households, age distribution, racial composition, educational attainment, and income.

1.1 Past, Present, and Projected Population Trends

Total population includes the historic, current, and projected total population of the community. Ludowici's growth rate is compared to that of the County, state, and US. This information will assist the community in identifying trends and future needs.

The historic data is from the Department of Community Affairs, Data View Sets. Information contained in these tables spans a 45-year period. Twenty-five years before the planning year and twenty years after the planning date. The information in this chart is used to identify past, current and future trends.

**Table 1
Population Growth Rates (1980-2025)**

Year	Ludowici		Percent Change (%)		
	No.	%	Long County	Georgia	U.S.
1980	1,286	N/A	N/A	N/A	N/A
1985	1,289	0.2	25.8	8.7	4.7
1990	1,291	0.2	20.5	9.1	4.9
1995	1,366	8.4	40.2	12.6	6.7
2000	1,440	2.9	28.7	12.4	6.0
<i>(Projections)</i>					
2005	1,479	2.7	15.9	6.7	5.0
2006	1,486	0.5	2.4	1.3	0.9
2007	1,493	0.5	2.3	1.3	1.0
2008	1,500	0.5	2.3	1.3	1.0
2009	1,508	0.5	2.2	1.2	1.0
2010	1,517	2.6	13.7	6.4	4.9
2015	1,556	3.2	12.0	6.3	4.9
2020	1,594	2.4	10.7	6.1	4.9
2025	1,633	2.4	9.7	6.0	4.8

Source: Georgia Department of Community Affairs
www.georgiaplanning.com/dataviews/census2/

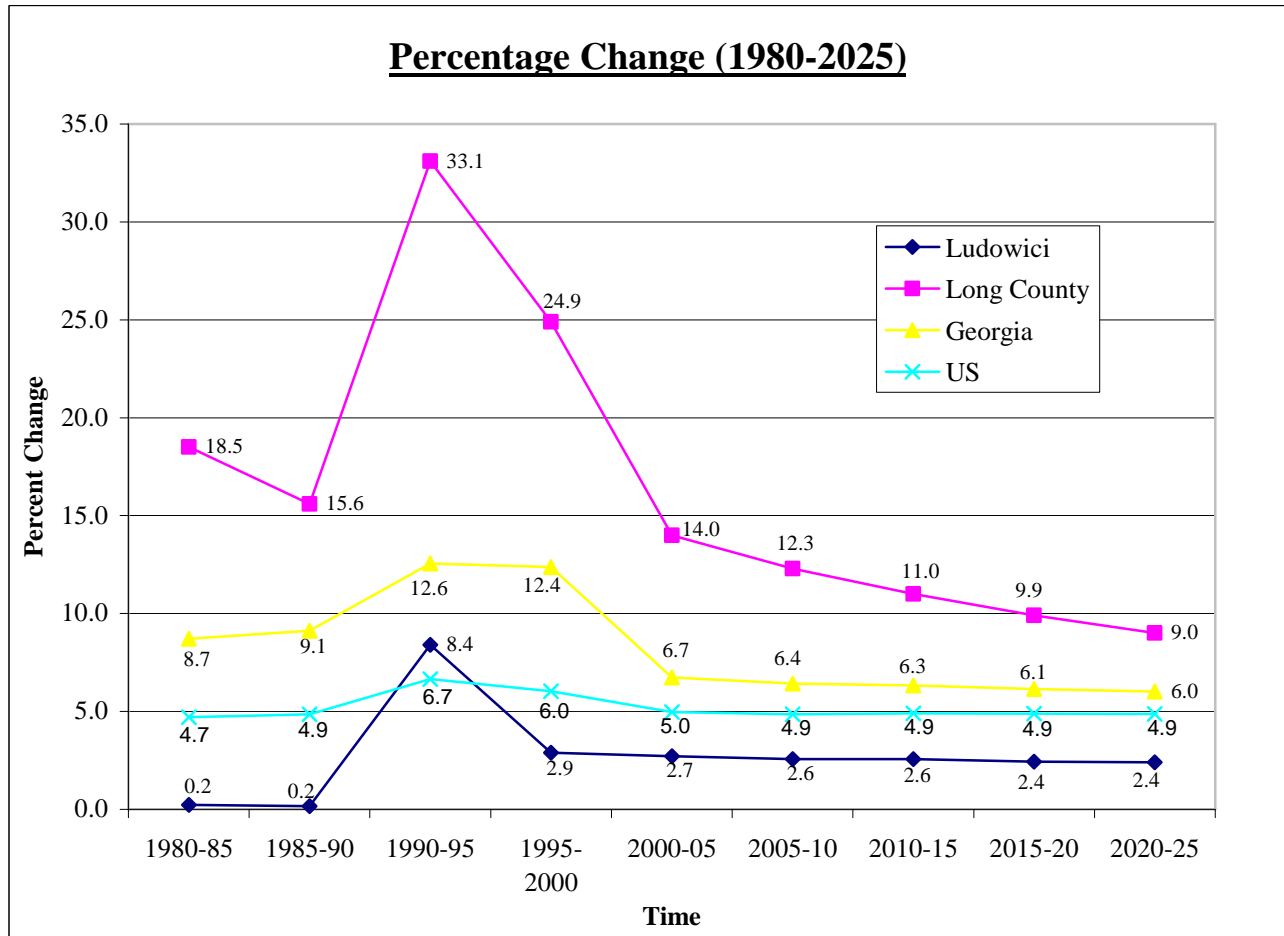


Figure 1 shows the population growth experienced within the city, county, state, and nation. When comparing population growth rates for the period 1980 to 2000, the city is similar to both the state and nation. From 1990 to 2000, the city grew at a slightly faster rate than the nation. A lower population growth rate was experienced in the city, state and nation from 1995 to 2005. In general, the population growth is expected to level out and remain stable to the end of the planning period (2025).

The lack of employment opportunities is hindering growth in the city. Approximately 63.7 percent of Ludowici’s population works outside of Long County. Employment does exist in Long County and Ludowici; however, many people prefer to work out of the County for higher wages. Also, it should be noted that the city and county are rapidly becoming a bedroom community of Liberty and Wayne counties.

1.2 Household Population and Analysis

A household is defined as the number of people occupying a housing unit. A house, an apartment, or other group of rooms or a single room is regarded as a housing unit when it is occupied or intended for occupancy as separate living quarters; that is, when the occupants do not live and eat with any other persons in the structure and there is direct access from the outside or through a common hall.

A household includes the related family members and all unrelated people such as lodgers, foster children, wards, or employees who share the housing unit. A person living alone in a housing unit, or a group of unrelated people sharing a housing unit such as partners or roomers, is also counted as a household. The count of households excludes group quarters.

Table 2
Ludowici: Households (1980-2025)

Year	No.	Household Size
1980	482	2.66
1985	482	2.67
1990	481	2.68
1995	504	2.71
2000	526	2.74
<i>(Projections)</i>		
2005	537	2.74
2010	539	2.78
2015	541	2.80
2020	543	2.82
2025	545	2.84

Source: Georgia Department of Community Affairs
www.georgiaplanning.com/dataviews/census2/

As depicted in Table 2, the number of households in Ludowici grew 9.1 percent from 1980 to 2000. The Georgia Department of Community Affairs (DCA) projects a 1.5 percent increase in the number of households in Ludowici from 2005-2025.

Average household size increased from 1980 to 2000 and will likely continue to increase throughout the planning period.

An increase in the number of households in the city will have little impact on housing. An overall increase in the number of housing units is expected to occur during the twenty-year planning period.

1.3 Age Distribution and Analysis

Population data by age group for the city are shown in Table 3. The particular age groups have been chosen because of their relationship to community needs.

For instance, the 5-13 age group represents elementary school age students; whereas, the 14-17 age group represents middle and high school students. Age groups 25-34 and 35-44 represent the heart of the workforce, and residents 65 and over represent the retirement age.

**Table 3
Ludowici: Age Distribution (1980-2000)**

Age	1980		1985		1990		1995		2000	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
0 – 4	130	10.1	128	9.9	125	9.7	132	9.6	139	9.7
5 – 13	189	14.7	212	16.4	234	18.1	244	17.8	254	17.6
14 – 17	85	6.6	72	5.6	59	4.6	75	5.5	91	6.3
18 – 20	103	8.0	86	6.7	69	5.3	72	5.3	75	5.2
21 – 24	118	9.2	101	7.8	83	6.4	88	6.4	93	6.5
25 – 34	182	14.2	198	15.3	214	16.6	215	15.7	215	14.9
35 – 44	111	8.6	138	10.7	165	12.8	173	12.6	180	12.5
45 – 54	124	9.6	112	8.7	99	7.7	120	8.8	140	9.7
55 – 64	108	8.4	103	8.0	98	7.6	99	7.2	99	6.9
65 and over	136	10.6	141	10.9	145	11.2	150	11.0	154	10.7
TOTAL	1,286	100	1,291	100	1,291	100	1,368	100	1,440	100

Source: Georgia Department of Community Affairs
www.georgiaplanning.com/dataviews/census2/

The percentage of children eligible to attend elementary school increased from 1980-1989. From 1990-1999, this age group increased slightly and is projected to continue rising. The age group eligible to attend middle and high school as a percentage of the population experienced a decline in population between the years of 1985-1989; nonetheless, the population is expected to remain stable. The numbers in the workforce increased throughout the twenty-year planning period (1980-1999). The most recent data (1990-1999) shows a decline in this age group as a percentage of the population, but it is projected to fully recover over the planning period. The age group 65 and over remained relatively stable during the last twenty years.

Table 4
Ludowici: Age Distribution

Age	2005		2010		2015		2020		2025	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
0 – 4	141	9.5	144	9.5	146	9.4	148	9.3	150	9.2
5 – 13	270	18.3	287	18.9	303	19.5	319	20.0	335	20.5
14 – 17	93	6.3	94	6.2	96	6.2	97	6.1	99	6.1
18 – 20	68	4.6	61	4.0	54	3.5	47	2.9	40	2.4
21 – 24	87	5.9	81	5.3	74	4.8	68	4.3	62	3.8
25 – 34	223	15.1	232	15.3	240	15.4	248	15.6	256	15.7
35 – 44	197	13.3	215	14.1	232	14.9	249	15.6	266	16.3
45 – 54	144	9.7	148	9.7	152	9.8	156	9.8	160	9.8
55 – 64	97	6.6	95	6.3	92	5.9	90	5.6	88	5.4
65 and over	159	10.8	163	10.7	168	10.8	172	10.8	177	10.8
TOTAL	1,479	100	1,520	100	1,557	100	1,594	100	1,633	100

Source: Georgia Department of Community Affairs

www.georgiaplanning.com/dataviews/census2/

Table 4 shows projected population of Ludowici by age group from 2005 to 2025. The 5-13 age group is projected to increase by 2.2 percent by the end of the twenty-year planning period (2005-2024). The middle to high school age group (14-17) is projected to experience a slight increase in the number of children, but a decline in the overall percentage of population distribution. Persons in the workforce age grouping will increase in number. This growth is projected to be slow, but continuous. The percentage of residents 65 and older is projected to remain constant for the next twenty years.

The population of Ludowici is stable and growing at a slow and steady rate. No radical change in the distribution of age is expected for the next 20-year planning period.

1.4 Racial Composition and Analysis

Racial composition includes the historic, current, and projected racial breakdown of the residents of Ludowici. Race is broken into five categories: *White*, *Black or African American*, *American Indian and Alaskan Native*, *Asian or Pacific Islander*, and *Other* which includes mixed races.

Table 5 shows a slight change in the racial composition of Ludowici during the past twenty-year planning period. The *White* and *African American* categories experienced a slight decrease as a percentage of the population, while the category of *Other Race* experienced a slight increase. The steering committee attributed this change to an increase in the Hispanic population of Ludowici.

Table 5
Racial Composition-Ludowici (1980-2000)

Race	1980		1985		1990		1995		2000	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
White	942	72.9	941	72.9	939	72.7	994	72.7	1,048	72.8
African American	333	25.8	336	26.0	338	26.2	341	24.9	343	23.8
American Indian	0	0	1	<1	2	<1	10	<1	17	1.2
Asian American	9	<1	6	<1	9	<1	7	<1	4	<1
Other Race	9	<1	6	<1	3	<1	16	1.2	28	1.9
TOTAL	1,293	100	1,290	100	1,291	100	1,368	100	1,440	100

Source: Georgia Department of Community Affairs
www.georgiaplanning.com/dataviews/census2/

Table 6
Racial Composition-Ludowici (2005-2025)

Race	2005		2010		2015		2020		2025	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
White	1,075	72.6	1,101	72.5	1,128	72.4	1,154	72.4	1,181	72.3
African American	346	23.4	348	22.9	351	22.5	353	22.2	356	21.8
American Indian	21	1.4	26	1.9	30	1.9	34	2.1	38	2.3
Asian American	5	<1	5	<1	6	<1	6	<1	7	<1
Other Race	33	2.2	38	2.5	42	2.7	47	2.9	52	3.2
TOTAL	1,480	100	1,518	100	1,557	100	1,594	100	1,634	100

Source: Georgia Department of Community Affairs
www.georgiaplanning.com/dataviews/census2/

Table 6 projects racial composition in the city from 2005 to 2025. The *White* and *African American* categories are projected to decrease and the *Other Race* is projected to increase over the next twenty years.

1.5 Educational Attainment

Data on educational attainment are derived from a single question that asks, "What is the highest grade of school completed, or the highest degree received?"

This subsection contains information on public, private, and parochial elementary and high schools (both junior and senior high schools), colleges, universities, and professional schools.

Students living in the City of Ludowici attend Long County schools. According to the Service Delivery Strategy, the Long County Board of Education is the entity that is charged with education all citizens within Long County.

Table 7
City of Ludowici: Educational Attainment

Category	1980		1990		2000	
	No.	(%)	No.	(%)	No.	(%)
Less than 9th Grade	178	27	119	17	76	10
9th to 12th Grade	189	29	130	18	137	18
High School Graduate/GED	179	27	300	42	352	45
Some College	60	9	92	13	142	18
Associate Degree	NA	NA	25	3	15	2
Bachelor's Degree	24	4	29	4	30	4
Graduate/Professional Degree	31	5	24	3	30	4
TOTAL	661	100	719	100	782	100

Source: Georgia Department of Community Affairs
www.georgiaplanning.com/dataviews/census2/

Table 8
Long County: Educational Attainment

Category	1980		1990		2000	
	No.	(%)	No.	(%)	No.	(%)
Less than 9th Grade	674	29	607	18	551	10
9th to 12th Grade	556	24	617	18	852	16
High School Graduate/GED	753	33	1,446	43	2,272	42
Some College	156	7	388	12	1,238	23
Associate Degree	N/A	N/A	133	4	233	4
Bachelor's Degree	88	4	117	4	189	4
Graduate/Professional Degree	57	3	59	2	124	2
TOTAL	2,289	100	3,367	100	5,459	100

Source: Georgia Department of Community Affairs
www.georgiaplanning.com/dataviews/census2/

Table 9
Georgia: Educational Attainment

Category	1980		1990		2000	
	No.	(%)	No.	(%)	No.	(%)
Less than 9th Grade	730,846	24	481,679	12	393,197	8
9th to 12th Grade	613,975	20	683,833	17	718,152	14
High School Graduate/GED	878,923	29	1,189,740	30	1,486,006	29
Some College	411,517	13	682,350	17	1,058,692	20
Associate Degree	NA	NA	198,951	5	269,740	5
Bachelor's Degree	450,267	15	518,433	13	829,873	16
Graduate/Professional Degree	NA	NA	257,201	6	430,305	8
TOTAL	3,081,513	100	4,012,329	100	5,185,965	100

Source: Georgia Department of Community Affairs
www.georgiaplanning.com/dataviews/census2/

Educational attainment for residents of Ludowici, Long County and Georgia is shown in Tables 7 – 9. Ludowici compares favorably to Long County and the state in educational attainment. More students are staying in the school system longer. Seventy five (75) percent of Long County residents in 2000 had a High School Diploma, GED or higher level of educational attainment. Within the City of Ludowici alone, 72 percent of adults have a High School Diploma/GED or higher.

The education attainment levels in the city are a good match with the skills, knowledge and abilities needed to participate in the work force. The Long County Board of Education has worked hard to provide an excellent technical curriculum for individuals who are pursuing industrial programs or college.

1.6 Income

Per capita income is the mean income computed for every man, woman, and child in a geographic area. It is derived by dividing the total income of all people 15 years old and over in a geographic area by the total population in that area. Note -- income is not collected for people under 15 years old even though those people are included in the denominator of per capita income. This measure is rounded to the nearest whole dollar.

Table 10
Per Capita Income: 1980 – 2000 (1996 \$)

Category	1980	1990	2000
Ludowici	\$4,161	\$7,854	\$11,701
Long County	\$4,513	\$8,815	\$12,586
Georgia	NA	\$13,631	\$21,154

Source: Georgia Department of Community Affairs
www.georgiaplanning.com/dataviews/census2/

From 1990-2000, the per capita income in Ludowici rose by \$3,847, representing a 149.0 percent increase over a ten-year period (see Table 10). The state's per capita income increased by \$7,523, equivalent to a 155.2 percent increase over the same ten-year period. The City of Ludowici has been lagging behind the state in per capita income, and this trend is likely to continue.

Table 11
1980-2000 Household Income (1996 \$)

Category	1990	2000
Ludowici	20,883	31,835
Long County	24,613	35,725
Georgia	36,810	80,077

Source: Georgia Department of Community Affairs
www.georgiaplanning.com/dataviews/census2/

As shown in Table 11, from 1990-2000, the average household income in Ludowici rose by \$10,952, resulting in a 152.4 percent increase over the ten-year period. On the other hand, Georgia's household income increased by \$43,267, representing a 217.5 percent increase. The Department of Community Affairs, Data Views, shows that the average household income for Ludowici in 2000 was \$31,835, compared to \$80,077 statewide.

Table 12
Ludowici Household Income Distribution (1990-2000)

Income level	1990	2000
Less than \$9999	164	77
\$10000 - \$14999	50	63
\$15000 - \$19999	70	66
\$20000 - \$29999	76	99
\$30000 - \$34999	25	20
\$35000 - \$39999	17	46
\$40000 - \$49999	38	47
\$50000 - \$59999	16	59
\$60000 - \$74999	15	25
\$75000 - \$99999	7	21
\$100000-124999	1	2
\$125000-149999	0	0
\$150000 or more	0	4
Total	479	529

Source: Georgia Department of Community Affairs
www.georgiaplanning.com/dataviews/census2/

Table 12 depicts the distribution of household income. From 1990 to 2000, the percentage of households making less than \$20,000 per year decreased from almost 60 percent to about 40 percent. During that same period, the percentage of households making \$20,000 to \$60,000 increased from 36 to 51 percent.

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Chapter 2 Housing

The housing element inventories the existing housing stock and its condition, occupancy, and affordability characteristics for the City of Ludowici. The information provided in the housing element will form the basis for assessing of the adequacy and suitability of the existing housing stock for serving current and future population and economic development needs. This chapter will also allow for the articulation of community housing goals. Overall, the information provided in the housing element will formulate an associated implementation program for the adequate provision of housing to include all sectors of the population.

Housing is the one of largest consumers of land in the City of Ludowici and one of the most important factors in people’s lives. It directly affects the quality of life, health, safety, and welfare of the residents of Ludowici. With respect to housing, Ludowici’s primary goal is to ensure that residents have access to adequate and affordable housing.

2.1 Inventory of Existing Conditions

It is important to examine data on the existing housing supply in Ludowici prior to projecting needs for the twenty-year planning period. A summary of city housing data is presented to familiarize the reader with comparable and contrasting housing data and trends.

2.1.1 Inventory of Housing Types

**Table 13
Ludowici Housing Units by Type: 1980 to 2000**

Category	1980		1990		2000	
	No.	(%)	No.	(%)	No.	(%)
Single Units (detached)	390	65	337	57	294	46
Single Units (attached)	5	0.8	6	1	2	0.3
Double Units	16	2.7	2	0.3	3	0.5
3 to 9 Units	14	2.3	12	2	11	1.7
10 to 19 Units	0	0	0	0	0	0
20 to 49 Units	2	0.3	0	0	2	0.3
50 or more Units	4	0.7	0	0	0	0
Mobile Homes	166	28	233	39	323	51
All Other	0	0	4	0.7	2	0.3
TOTAL	597	100	594	100	637	100

Source: Georgia Department of Community Affairs
www.georgiaplanning.com/dataviews/census2/

From 1980 to 2000, the number of year round housing units in Ludowici increased by 40 units, from 597 to 637 units (see Table 13). Over the same time period, 99 single-family homes were removed from Ludowici’s housing stock decreasing the number of single-family units by 24.6 percent. From 1980 to 2000, the number of manufactured homes increased by 157 units, or 94.6 percent.

In 1980, manufactured homes constituted 27.8 percent of the Ludowici’s total housing supply. By 2000, 50.7 percent of all housing in Ludowici was manufactured housing. Conversely, single-family housing (site-built) units have dropped from 65.8 percent of the total housing units in 1980 to 46.3 percent in 2000.

Like site-built single-family units, multi-family units are also declining in number and as a percent of the housing stock. In 1980, multi-family units represented 6 percent of the total housing stock. By 2000, multi-family units had dropped to 2.5 percent of the city’s housing stock.

2.1.2 Inventory of Age and Condition of Housing Stock

**Table 14
Historic and Current Age of Housing**

Year Built	Ludowici				Region		Georgia	
	1990		2000		1990	2000	1990	2000
	No.	(%)	No.	(%)	(%)	(%)	(%)	(%)
1970 - 1979	143	24.1	115	18.1	23.4	17.6	24.5	18.6
1960 - 1969	49	8.2	89	14.0	13.4	10.5	17.2	13
1950 - 1959	101	17.0	52	8.2	13.3	9.7	11.7	8.6
1940 - 1949	77	13.0	34	5.3	8.4	5.5	6.4	4.4
1939/earlier	73	12.0	65	10.0	9.3	7.0	8.1	5.9

Source: Georgia Department of Community Affairs
www.georgiaplanning.com/dataviews/census2/
 Regional data provided from CGRDC Technical Staff Report

As indicated by Table 14, data from 2000 shows that the City of Ludowici has approximately 251 housing units that are 40 or more years old. When the age of housing is compared, the city has a higher percentage of older housing units than the region and state.

Ludowici shows a higher percentage of housing “built before 1939” than the CGRDC region and the state of Georgia in both 1990 and 2000. The number of homes built in or before 1939 within the city has declined 11 percent since 1990. A large number of homes in the city within this category have been maintained and passed on to succeeding generations. In 2000, only 10 percent of housing stock in Ludowici fell in the “built before 1939” category. Within the state of Georgia, the percentage of housing built before 1939 in 2000 was just fewer than 6 percent of total housing units.

Table 15
Historic and Current Condition of Housing

Category	Ludowici				Region		Georgia	
	1990	2000	1990	2000	1990	2000	1990	2000
	No.	(%)	No.	(%)	(%)	(%)	(%)	(%)
Plumbing	Complete	587	99	630	98.9	99.1	99	99.1
	Lacking complete	7.0	1.2	7.0	1.1	<1	1.1	1.0
Kitchen	Complete	589	99	633	99.4	99	99	99
	Lacking complete	5.0	<1	4.0	<1	2.0	1.2	1.0
TOTAL	594	---	640	---	---	---	---	---

Source: Georgia Department of Community Affairs
www.georgiaplanning.com/dataviews/census2/
 Regional data provided from CGRDC Technical Staff Report

Table 15 demonstrates the condition of housing stock in Ludowici, the CGRDC region, and the state as measured by the presence or absence of complete plumbing and/or kitchen facilities. In the City of Ludowici, a total of 7 units lack complete plumbing. From 1990 to 2000, the number of units lacking complete plumbing facilities has remained the same and number of units lacking kitchen facilities has decreased by 20 percent.

When Ludowici is compared to the CGRDC region and Georgia, the percentage for each category is similar. Although there has been some progress in the elimination of substandard housing, Ludowici, nevertheless, needs to acquire adequate tools to combat substandard housing.

The City Council is addressing substandard housing by seeking opportunities to apply for federal and state funding when appropriate. In 2006, The City of Ludowici will be applying for a Community Housing Improvement Program (CHIP) and a Community Development Block Grant to address substandard housing. By creating a housing redevelopment program, encouraging community involvement, and pursuing an aggressive code enforcement program the problem of substandard housing will be addressed.

2.1.3 Inventory of Owner and Rental Units

Table 16
Occupancy Status

	Ludowici				Region				Georgia			
	1990		2000		1990		2000		1990		2000	
Housing Units	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Vacant	113	19.0	100	15.7	21,211	11.5	19,387	9.1	271,803	10.3	217,521	8.3
Owner Occupied	298	50.2	321	50.4	99,947	54.0	126,341	57.3	1,536,759	58.2	2,029,293	61.8
Renter Occupied	183	30.8	216	33.9	63,901	34.5	74,579	33.6	829,856	31.5	977,076	29.8
TOTAL	594	100	637	100	185,059	100	226,807	100	2,638,418	100	3,006,369	100

Source: Georgia Department of Community Affairs
www.georgiaplanning.com/dataviews/census2/
 Regional data provided from CGRDC Technical Staff Report

Table 16 indicates the current and historic number of owner and renter units, and vacancy rates of each type of unit. Between 1990 and 2000, owner occupied units in Ludowici increased by 7.7 percent from 298 to 321. The number of owner occupied units in Georgia and the CGRDC region increased by 32 percent and 39.1 percent respectively during that period.

Rental occupancy in the city has correspondingly increased by 18.0 percent in the ten-year time period between 1990 and 2000. The percentage of renter occupied units in Ludowici is nearly identical to the region and very similar to that of the state. However, this trend of increasing the percentage of renter occupied homes goes directly against the current trend of the region and of the state.

Owner vacancy rates in Ludowici decreased by 11.5 percent (13 units) from 1980-2000. Georgia had a 32 percent increase in owner occupied units and a 19.4 percent decrease in owner vacancy rate. Likewise, the CGRDC region had a 6.1 percent increase in the owner occupancy rates and a 16 percent decrease in renter occupied units.

Table 17
Vacancy Status for 2000

Category	Ludowici		CGRDC		Georgia	
	No.	(%)	No.	(%)	No.	(%)
For Rent	37	37.0	9,097	32.8	90,320	33.8
For Sale Only	8	8.0	3,502	16.9	46,425	13.0
Rented or Sold Not Occupied	22	22.0	2,365	8.5	23,327	8.8
For Seasonal, Recreational, or Occasional Use	6	6.0	6,616	21.0	57,847	24.6
For Migrant Workers	0	0.0	73	0.5	1,290	0.3
Other Vacant	27	27.0	5,290	20.4	56,159	19.6
TOTAL	100	100.0	26,943	100.0	275,368	100.0

Source: Census 2000 Summary SF3
Regional data provided from CGRDC Technical Staff Report

Tables 17 and 18 depict that in 2000, Georgia had a homeowner vacancy rate* of 2.2 percent, down by less than one percent from 1990. The renter vacancy rate for the state was higher at 8.5 percent; however, that rate is still down from the 1990 rate of 12.2 percent. In comparison, Ludowici had a homeowner vacancy rate of 2.7 percent and a renter rate of 14.6 percent, declining from 1990 by less than one percent and 3.3 percent respectively. Likewise, regional data shows vacancy rates similar to the city and the state in 2000. The high rate of owner occupancy (50.4%) has stabilized the housing market in the city.

Table 18
Owner to Renter Ratio

Category	1990	2000
Ludowici	1.6/1	1.5/1
CGRDC	1.6/1	1.7/1
Georgia	1.9/1	2.1/1

Table 18 was derived using data from Table 16 to determine the owner to renter ratio in the city, state, and region. The owner to renter ratio has increased from 1990 to 2000 for both the state and the region by 90.5 percent and 6.3 percent respectively. On the other hand, this ratio has experienced a slight decrease in the City of Ludowici (6.3 percent). It is important to note, however, the overall number of owner occupied units within the city has increased by nearly 8 percent for the same time period.

* Homeowner and renter vacancy rates calculated by formula provided by First Quarter 2005 definitions (<http://www.census.gov/hhes/www/housing/hvs/qtr105def.html>)

Homeowner/Renter vacancy rate equals Units for Sale/Rent Only divided by the sum of Owner/Renter Occupied Units and Units for Sale/Rent Only.

2.1.4 Cost of Housing Inventory

The following data are constructed from data provided by the Georgia Department of Community Affairs (DCA). DCA's Data View sets provide insight into the cost of owning property and renting in Georgia. The Data View sets provide information on median values for owner-occupied and rented housing units.

Table 19
Housing Value and Rent (\$)

Category	1990			2000		
	Ludowici	Region	Georgia	Ludowici	Region	Georgia
Median property value	34,700	61,300	70,700	56,000	94,300	111,200
Median rent	288	370	433	460	556	613

Source: Georgia Department of Community Affairs
www.georgiaplanning.com/dataviews/census2/
 CGRDC data provided by CGRDC Technical Staff Report

Data from Table 19 indicates median values of owner-occupied housing and median monthly rent from 1990-2000 in the CGRDC region, Ludowici, and Georgia are increasing at a similar rate. Georgia has seen a 57.3 percent increase in median property values since 1990 and a 41.6 percent increase in median monthly rent. The CGRDC region's average property values and rent have increased by 53.8 percent and 50.3 percent respectively. The City of Ludowici has experienced a similar trend with average property values increasing by 61.4 percent and average rent increasing by 59.7 percent. However, the average cost of property and the average monthly rent in Ludowici are significantly lower than in the region and the state as a whole.

2.2 Current and Future Needs

Information from the Department of Community Affairs Data Views sets and the 2003 Georgia County Guide has been used to analyze housing within the city, state and region.

The city has a total of 2.2 square miles of combined land and water. Approximately 51 percent of the 1,408 acres in Ludowici is vacant land and the remaining land is occupied.

2.2.1 Assessment of Housing Types

Data summarized in section 2.1.1 indicates that within the city a wide-range of housing does not exist. Multi-family housing units decreased by 56 percent, or 2.7 percent annually, and single-family (site built) housing units decreased by a total 25.4 percent at an annual rate of 1.2 over the period of 1980-2000.

The city has an inadequate supply of available housing. Data suggest that there is a market for low to moderately priced single and multi-family units. The lack of effective land use planning and zoning regulations has contributed to the lack of growth within the city. The City Council must recognize the need for growth regulations, and would be well advised to structure "Land

Use Codes” after the Department of Community Affairs “Model Code for Alternatives to Conventional Zoning.”

The city can alleviate the housing shortage problem by using effective planning and implementing Land Use Codes, as well. The City Council’s goal is to develop a plan to achieve a reasonable balance between housing cost and quality.

It is crucial for the city to encourage diversified housing types such as clustered, infill developments, and high-density residential development in areas served by existing infrastructure. Currently the type of development taking place is site-built structures being replaced by manufactured homes or individuals purchasing land in the city and placing a manufactured home on that property.

Manufactured housing, having similar quality, lower cost per square foot, more availability, and less stringent requirements for financing affords low to moderate-income families the opportunity to become homeowners. The steady decline of traditional single-family and multi-family housing units in the city can be directly attributed to the growth in manufactured housing. Low to moderate income families in the city are choosing manufactured housing as an alternative to more costly traditional single family housing.

According to the Long County Tax Assessor, the city is losing tax revenue due to the large percentage of manufactured homes within the city. The Tax Assessor assesses manufactured homes as either personal property or fixed structures. Manufactured homes attached to non-moveable foundations are assessed at levels near that of site built homes. On the other hand, manufactured homes that are not attached to non-moveable foundations are assessed as personal property, thus bringing in much less revenue than single family homes.

**Table 20
Future Housing Units by Type: 2010 to 2025**

Category	2010		2020		2025	
	No.	(%)	No.	(%)	No.	(%)
Single Units (detached)	246	38	198	29	174	25
Single Units (attached)	1	0.2	0	0	0	0
Double Units	0	0	0	0	0	0
3 to 9 Units	10	1.5	8	1.2	7	1
10 to 19 Units	0	0	0	0	0	0
20 to 49 Units	2	0.3	2	0.3	2	0.3
50 or more Units	0	0	0	0	0	0
Mobile Homes	402	61	480	71	519	76
All Other	3	0.5	4	0.6	5	0.7
TOTAL	657	100	677	100	687	100

DCA projects that single-family housing units in Ludowici will decline over the next 20 years, while the number of manufactured housing units will increase as shown in Table 20.

The reality is that growth in the city is slow. If the pattern of growth continues as it is now, single-family housing will decline by 35.6 percent and manufactured housing will increase by 43.4 percent within the next twenty-year planning period. Continuing a trend such as this requires property taxes to be increased in order to make up for the declining revenues. The city should develop an ordinance requiring that all homes be placed on fixed non-moveable foundations. This will allow tax revenues to be assessed more equitably for all homes (site-built and manufactured).

The city must recognize that in order to provide quality housing, a safe environment, and a higher quality of life, codes and regulations must be implemented and enforced.

2.2.2 Assessment of Age and Condition of Housing Stock

Data provided in section 2.1.2 indicates that seven homes within the city lack complete plumbing. Ludowici is currently working with its grant writer and the Department of Community Affairs to eliminate substandard housing conditions such as this.

The city will work with the Long County Building and Code Enforcement Officer to develop a Code Enforcement Program. The Code Enforcement Officer will recommend ordinances as required to ensure the housing stock is safe and of adequate quality. In the past, Ludowici has applied for a Community Housing Improvement Program (CHIP) in order to address substandard housing and to assist low-to-moderate income families. Housing programs for the low-to-moderate income families, such as CHIP, will continue to be supported by the local governments.

Overall, housing conditions for low-income families are improving. Many housing programs provide low interest loans for which the borrower must qualify and repay the lender. However, due to poor credit rating, some of these families have severe difficulty in obtaining a loan.

As shown in section 2.1.2, the city is reducing substandard housing at a rate similar to the state and the rest of the CGRDC region. The reduction of substandard housing is expected to continue at the same pace into the future.

Areas that contain the majority of substandard housing are contiguous to the southern and western edges of the city. The majority of substandard housing is inhabited by low-income families. Deterioration of these homes is further accentuated due to the fact that these individuals lack the funds to properly maintain their homes. The city will be able to address substandard housing by developing a code enforcement program, performing building inspections, and applying for funds from state and federal housing programs to alleviate this problem.

The city has no ordinances in place to encourage property owners to maintain their properties. Nonetheless, property owners are encouraged to keep all properties clean. As an incentive, the city offers free curbside service for homeowners with items that cannot be placed into the solid waste stream. Programs encouraging pride within the local community in addition to supporting of the elderly and low-to-moderate income families are being used to address the problem.

The city has adopted a Historic Preservation Ordinance; however, there is no active Historical Society or Commission. The CGRDC Historic Preservation Planner is encouraging the city to develop a commission to conduct a historic sites survey. Ludowici will work with the CGRDC to develop support programs in order to preserve historically significant resources.

2.2.3 Assessment of Owner/Rental Occupied Units

Owner occupied units have risen by less (<) than 1 percent from 50.2 percent to 50.4 percent between 1990 and 2000. During the same ten-year planning period, the city's rate of owner occupied units was 76 percent less than Georgia's and 80 percent less than the CGRDC Region.

The affordability of manufactured homes has halted the decline of owner occupied homes statewide. Ludowici is no exception. The city's average level of personal income (\$31,835) allows the residents to purchase an affordable manufactured home, triggering the rise of owner occupancy in Ludowici.

Vacancy rates in Georgia and the CGRDC region are lower than those of the city. Between 1990 and 2000, the number of vacant housing units in Georgia increased from 271,803 to 275,368, or 1.3 percent. Conversely, in the CGRDC region, the number of vacant units declined by less (<) than 1 percent.

In 2000, Georgia had a housing vacancy rate of 8.3 percent and a not occupied vacancy rate of less (<) than 1 percent. The CGRDC region had a housing vacancy rate of 9.1 percent and a not occupied vacancy rate of 1 percent. The city had a homeowner vacancy rate of 15.7 percent and a not occupied vacancy rate of 19.5 percent. Due to the high amount of owner occupied housing units at the moment, the housing market in the city is stable.

2.2.4 Assessment of Housing Cost

As discussed in section 2.1.3, Georgia as a whole has seen a significant increase in the cost of housing, Ludowici being no exception. This market driven increase is likely to continue for the next five years. When compared to the CGRDC region, the cost of housing within the city in 2000 was 40.6 percent less. Additionally, the cost of monthly rent was 33.5 percent lower than the average regionally. The city, when compared to the state, paid 50 percent less for a home and 25 percent less in rent.

Several reasons exist for the differences. More land is available and at cheaper prices in Ludowici at this time than it is in other parts of the state. The cost of construction and the fees required for construction are less. In addition, an alternative to traditional site built housing does exist within the market.

2.3 Goals and Implementation

Goal 1

Ensure that residents of Ludowici have access to adequate and affordable housing with a suitable living environment for all residents.

Objective 1.1

Revitalize existing, deteriorating neighborhoods so that they are attractive and will draw people back to them. Support rehabilitation plans and encourage the replacement of dilapidated structures.

Policy 1.1.1

Support programs that encourage ownership and pride in neighborhoods.

Objective 1.2

Ludowici will develop a building and code enforcement program that uses the SBCCI.

Policy 1.2.1

Support the building and code enforcement program.

Objective 1.3

The city should use local ordinances, grants and housing standards to eliminate substandard housing.

Policy 1.3.1

The city should address the need for affordable housing by utilizing volunteer efforts and state and federal projects.

Policy 1.3.2

The city should implement housing rehabilitation through the Community Development Block Grants, CHIP funds and other funding sources that may become available.

Policy 1.3.3

The city should continue to identify, apply for and administer grant funding to improve housing stock for low-income families. This may be accomplished either internally or through the services of an outside consultant.

Policy 1.3.4

Develop programs and ordinances to eliminate blight areas within the city of Ludowici through condemnation and rehabilitation initiatives.

Policy 1.3.5

Develop an ordinance requiring a fixed foundation for all structures.

Chapter 3

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 benefit all segments of the population
- Develop implementation strategies that will achieve the desired economic goals and objectives

3.1 Inventory of Existing Conditions

The existing conditions of the community have been inventoried by addressing employment, wages and planned economic activities.

3.1.1 Economic Base

A. Employment and Earnings by Sector

Within this specific sub-element each economic sector within the community (e.g., retail trade, services, manufacturing, wholesale trade, etc.), including current, historic and projected employment and earnings will be compared with the state's percent figures.

Table 21 indicates that government is the largest employer in both the city and the state, with each employing 34.8 and 39.0 percent of the available work force. Retail, as shown by Table 21, is the second largest employer within the city and state, respectively 12.0 and 12.6 percent.

Because of growth within the coastal region and quick access to excellent transportation systems, the city has a higher percentage of individuals working in the construction, transportation, and manufacturing sectors than the state.

Table 22 displays information for the current planning year to 2025. From 2005-2025, no trends are noted that would indicate nothing other than a slow shift in the economy towards service. This transfer is very similar to what the state is experiencing at this time.

Table 21
Ludowici and State Employment 1990 to 2000: Percent by Sector

Category	1990		1995		2000	
	Ludowici (%)	GA (%)	Ludowici (%)	GA (%)	Ludowici (%)	GA (%)
Agriculture	3.7	2.0	2.3	1.6	1.0	1.4
Construction	10.9	0.9	10.7	1.1	10.4	1.1
Manufacturing	12.3	0.3	10.9	0.2	9.7	0.2
Wholesale	1.3	5.8	1.2	5.6	1.2	6.1
Retail	15.5	15.5	13.8	14.3	12.0	12.6
Transportation	8.3	5.9	8.8	5.7	9.1	6.1
Information	NA	6.2	NA	5.7	1.9	5.7
Finance	2.2	16.4	2.1	17.1	1.9	16.8
Professional	1.5	6.6	2.6	6.4	3.5	7.1
Education	16.8	23.8	20.5	26.6	23.8	28.6
Arts	0.4	2.8	3.7	2.3	6.6	1.9
Other	7.7	2.5	7.8	2.2	7.9	1.9
Public Admin	19.3	11.5	15.0	11.1	11.0	10.4
Total	100	100	100	100	100	100

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

Key for Tables 21 -22

Agriculture	Agricultural, Forestry, Fishing, hunting & mining
Construction	Construction
Manufacturing	Manufacturing
Wholesale	Wholesale Trade
Retail	Retail Trade
Transportation	Transportation, warehousing, and utilities
Information	Information
Finance.	Finance, Insurance and Real Estate
Professional	Professional, scientific, management, administrative, and waste management
Education	Education, health and social services
Arts	Arts, entertainment, recreation, accommodation and food services
Other	Other Services
Public	Public Administration

Table 22
Ludowici and State Employment by Sector: 2005 to 2025

Category	2005				2010				2015			
	Ludowici		Georgia		Ludowici		Georgia		Ludowici		Georgia	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Agriculture	5	1.0	64,877	1.2	4	<1.0	62,438	1.1	4	<1.0	60,240	1.0
Construction	60	11.0	60,079	1.1	65	11.5	65,359	1.2	71	12.0	70,538	1.2
Manufacturing	44	8.0	9,645	0.2	38	6.7	9,813	0.2	31	5.2	10,047	0.2
Wholesale	6	1.1	316,876	6.1	7	1.2	333,895	5.9	7	1.2	349,870	5.8
Retail	66	12.2	632,106	12.1	70	12.3	649,864	11.6	74	12.5	665,184	11.0
Transportation	51	9.4	322,804	6.2	55	9.7	347,846	6.2	58	9.8	371,521	6.2
Information	NA	NA	300,312	5.7	NA	NA	322,310	5.7	NA	NA	344,504	5.7
Finance	12	2.2	893,996	17.1	13	2.3	973,979	17.3	15	2.5	1,055,500	17.5
Professional	20	3.7	369,137	7.1	22	3.9	392,407	7.0	24	4.0	416,440	6.9
Education	133	24.5	1,532,290	29.3	142	25.0	1,692,630	30.1	152	25.7	1,873,380	31.1
Arts	37	6.8	91,889	1.8	41	7.2	91,883	1.6	44	7.4	92,089	1.5
Other	47	8.7	95,235	1.8	54	9.5	96,403	1.7	60	10.1	97,224	1.6
Public Admin	5	1.0	546,388	10.4	4	<1.0	584,820	10.4	4	<1.0	622,628	10.3
Total	542	100	5,235,630	100	567	100	5,623,650	100	592	100	6,029,160	100

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

Category	2020				2025			
	Ludowici		Georgia		Ludowici		Georgia	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Agriculture	3	<1.0	58,297	0.9	3	<1.0	56,584	0.8
Construction	76	12.3	75,465	1.2	82	12.8	80,033	1.2
Manufacturing	25	4.1	10,324	0.2	19	3.0	10,653	0.2
Wholesale	7	1.2	365,279	5.7	7	1.2	380,526	5.5
Retail	78	12.6	677,683	10.5	82	12.8	687,263	10.0
Transportation	62	10.0	392,902	6.1	66	10.0	411,295	6.0
Information	NA	NA	367,022	5.7	NA	NA	389,992	5.7
Finance	16	2.6	1,138,660	17.7	18	<1.0	1,223,640	17.8
Professional	26	4.2	440,943	6.8	28	4.4	465,714	6.8
Education	161	26.1	2,074,950	32.2	171	26.6	2,298,230	33.4
Arts	47	7.6	92,439	1.4	50	7.8	92,936	1.3
Other	66	10.7	97,709	1.5	72	11.2	97,839	1.4
Public Admin	3	<1.0	659,644	10.2	3	<1.0	695,636	10.1
Total	617	100	6,451,320	100	642	100	6,890,350	100

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

Data on Long County and Georgia earnings by economic sector are similar (see Tables 23 and 24). Farm earnings have been declining. Construction earnings, which declined from 1990 to 1995 stabilized in 1995 and experienced an upward trend from 1996-2000. The service related sectors of the economy have been growing steadily since 1980.

Farm earnings in Long County are projected to increase from 2005 to 2025. However, the share of farming earnings compared to total earnings is projected to decline after 2015.

The construction sector of the economy experienced growth from 1990-2000. This trend holds true from 1990 to approximately 2019. From 2020-2025 construction earnings are projected to decline slightly as a percentage of total earnings.

Table 23
Long County and Georgia Earnings by Sector 1990 to 2000 (in thousands)

Category	1990				1995				2000			
	Long (\$)	Long (%)	Georgia (\$)	Georgia (%)	Long (\$)	Long (%)	Georgia (\$)	Georgia (%)	Long (\$)	Long (%)	Georgia (\$)	Georgia (%)
Farm	910	7.9	21,557	0.3	1,151	7.7	31,374	0.4	1,108	5.4	22,205	0.3
Ag. Services	201	1.7	35,543	0.5	275	1.8	45,353	0.6	332	1.6	53,660	0.6
Mining	342	3	1,279	0	466	3.1	1,168	0	301	1.5	4,615	0.1
Construction	1,345	12	540,188	8.3	1,154	7.7	395,266	5.2	1,661	8.2	514,457	5.8
Manufacturing	729	6.3	1,150,972	18	1,059	7.1	1,126,834	15	1,143	5.6	1,399,378	16
Transportation	395	3.4	456,594	7	478	3.2	452,591	6	791	3.9	561,622	6.3
Wholesale	102	0.9	232,787	3.6	234	1.6	272,918	3.6	74	0.4	294,881	3.3
Retail	483	4.2	584,964	9	1,184	7.9	723,714	9.6	1,285	6.3	865,676	9.8
Finance	19	0.2	226,558	3.5	227	1.5	267,253	3.5	674	3.3	376,549	4.2
Services	1,067	9.2	1,294,937	20	1,540	10	1,692,547	23	2,390	12	2,029,598	23
Fed. Civilian	375	3.2	415,396	6.4	395	2.6	518,618	6.9	479	2.4	514,108	5.8
Fed. Military	308	2.7	750,711	12	366	2.4	1,065,959	14	421	2.1	1,106,566	13
Total	11,550	100	6,497,052	100	14,942	100	7,534,006	100	20,361	100	8,860,918	100

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

Key for Tables 23-24

- Farm
- Agricultural Services, Other
- Mining
- Construction
- Manufacturing
- Transportation, Communications & Public Utilities
- Wholesale Trade
- Retail Trade
- Finance, Insurance & Real Estate
- Services
- Federal Civilian Government
- Federal Military Government

Table 24
Long County and Georgia Earnings by Sector 2005 to 2025 (in thousands)

Category	2005				2010				2015			
	Long		Georgia		Long		Georgia		Long		Georgia	
	(\$)	(%)	(\$)	(%)	(\$)	(%)	(\$)	(%)	(\$)	(%)	(\$)	(%)
Farm	1,171	9.6	1,682,760	0.9	1,224	9.1	1,802,910	0.9	1,284	11	1,933,340	0.9
Ag. Services	386	3.2	1,086,060	0.6	437	3.3	1,239,330	0.6	488	4.2	1,400,730	0.6
Mining	323	2.7	445,441	0.2	344	2.6	456,347	0.2	365	3.2	471,301	0.2
Construction	1,720	14	10,606,800	5.9	1,775	13	11,506,000	5.7	1,837	16	12,401,400	5.5
Manufacturing	1,227	10	26,143,500	15	1,313	9.8	28,510,600	14	1,401	12	30,854,700	14
Transportation	831	6.8	18,059,600	10	865	6.5	20,304,900	10	897	7.8	22,610,400	10
Wholesale	81	0.7	15,124,900	8.4	86	0.6	16,662,400	8.2	91	0.8	18,269,600	8
Retail	1,405	12	16,215,300	9	15,390	12	18,126,500	8.9	1,681	15	20,144,900	8.9
Finance	745	6.1	13,862,800	7.7	815	6.1	15,688,500	7.7	890	7.7	17,666,000	7.8
Services	2,794	23	50,244,000	28	3,277	25	58,890,800	29	3,827	33	69,107,300	30
Fed. Civilian	518	4.3	5,621,590	3.1	560	4.2	5,826,300	2.9	603	5.2	6,051,600	2.7
Fed. Military	447	3.7	3,501,760	1.9	473	3.5	3,705,550	1.8	498	4.3	3,907,320	1.7
Total	22,360	100	180,866,000	100	24,339	100	202,919,000	100	26,483	100	227,019,000	100

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

Category	2020				2025			
	Long		Georgia		Long		Georgia	
	(\$)	(%)	(\$)	(%)	(\$)	(%)	(\$)	(%)
Farm	1,361	9.1	2,075,970	0.8	1,457	7.2	2,233,020	0.8
Ag. Services	541	3.6	1,566,550	0.6	597	2.9	1,733,320	0.6
Mining	387	2.6	489,686	0.2	410	2.0	510,946	0.2
Construction	1,907	12.8	13,309,000	5.3	1,985	9.7	14,242,900	5.1
Manufacturing	1,492	10.0	33,129,100	13.1	1,584	7.8	35,298,600	12.5
Transportation	931	6.2	24,909,000	9.8	969	4.8	27,140,000	9.6
Wholesale	\$96	0.6	19,955,500	7.9	101	0.5	21,729,700	7.7
Retail	1,830	12.2	22,276,700	8.8	1,984	9.7	24,530,800	8.7
Finance	974	6.5	19,784,200	7.8	1,070	5.3	22,033,100	7.8
Services	4,438	29.7	81,084,500	32.0	5,110	25.1	95,046,200	33.7
Fed. Civilian	647	4.3	6,295,200	2.5	693	3.4	6,556,750	2.3
Fed. Military	524	3.5	4,105,500	1.6	548	2.7	4,298,440	1.5
Total	28,859	100	253,253,000	100	31,504	100	281,758,000	100

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

B. Average Wages

The most current data on average weekly wages by economic sector are provided for Ludowici and Georgia (see Table 25). Currently, no historic information on weekly average wages is available for either the city or state. This limited the review to only current wages.

In 2003 the highest average weekly wages in the city are the federal and state government sectors. In Georgia as a whole the highest paid sector is the federal government followed by the goods producing sector. The average weekly wage paid in the state in 2003 was \$704, compared to \$559 in Ludowici.

**Table 25
Ludowici and Georgia Average Wages (2003)**

Category	<u>Ludowici</u>		<u>Georgia</u>	
	Average Weekly Wages (\$)	(%)	Average Weekly Wages (\$)	(%)
Goods producing	324	91	735	104
Agricultural, forestry & fishing Services	317	89	421	60
Construction	303	85	710	101
Service producing	259	73	702	100
Retail trade	277	78	454	65
Real estate and rental and leasing	442	124	715	102
Administrative and waste services	335	94	514	73
Accommodation and food services	135	38	261	37
Other services	380	107	483	69
Total private sector	277	78	709	101
Total government	403	113	681	97
Federal government	559	157	1,036	147
State government	545	153	640	91
Local government	385	108	610	87
Average for all industries	356		704	

Source: Georgia Employment and Wages 2003

C. Personal Income

Table 26 presents data on personal income by type. The table includes both historic and current information on personal income. In the 10 years from 1990 to 2000, the city increased its overall aggregate income by 67 percent. Considering that population growth in the city is slow, and there was no major industry relocation or development in the decade, residents are traveling outside of the city and county to earn higher wages. Within the state, total income and aggregate wages or salaries grew by 95 percent within the same ten-year period.

Table 26
Personal Income by Type (\$)

Category	Ludowici		Georgia			
	1990	2000	1990	2000		
	Dollars	(%)	Dollars	(%)	(%)	(%)
Aggregate wage or salary income for households	7,225,581	71.9	12,683,900	75.7	78.5	78.2
Aggregate other types of income for households	318,256	3.2	366,400	2.2	1.1	1.7
Aggregate self employment income for households	470,993	4.7	611,600	3.7	6.3	5.6
Aggregate interest, dividends, or net rental income	253,583	2.5	257,900	1.5	5.6	5.3
Aggregate social security income for households	751,923	7.5	1,325,700	7.9	4.3	4.0
Aggregate public assistance income for households	182,572	1.8	327,200	2.0	0.7	0.0
Aggregate retirement income for households	841,871	8.4	1,172,600	7.0	3.4	4.6
Total Income	10,044,779	100	16,745,300	100	100	100

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

D. Recent and Planned Community-Level Economic Activities

Currently the city has no major planned industrial or commercial developments. Long County is developing an industrial park and all large-scale commercial and industrial development will be guided towards the park where infrastructure will be readily available. The city will provide water and treat the waste.

Listed below are established community-level economic activities within the city.

- Georgia Department of Corrections Probation/Detention Center: A state-run correctional facility that will employ 40 people. Ludowici furnishes water to this facility even though the facility is outside of Ludowici's jurisdictional boundaries.
- Long County School System: Student population is approximately 2,178 and is one of the county's top employers with 279 employees.
- Coastal Manor Nursing Home: A 100 bed facility which employees 104 people.
- Coastal Forklift: Sells and services material handling equipment and has 10 employees.

The city has begun to capitalize on the uniqueness of its historic resources. Through promotion of its historic resources, local entrepreneurs hope to find new opportunities in the tourist trade. The city assists and supports the Long County Industrial Authority and the Long County Chamber of Commerce.

E. Special and Unique Economic Activities

The Long County Industrial Authority works with the Georgia Department of Economic Development, Georgia Power, Coastal Rural Electric Corporation and the city in recruiting industry. In addition, the authority assists industries in expanding and resolving problems that may arise with local governments. There are many tools used for industry recruitment such as:

- Quick Start Training
- Tax Credits
- Port Tax Credits
- Tax Abatements
- Site Location
- Providing Infrastructure
- Industrial Bonds
- A large pool of available people with diverse skills

The Long County Chamber of Commerce is a vital part of business and tourism through sponsorship of local programs and assisting with community events. In addition, they use local media as a tool for promotion.

The Long County Education System is competitive with other rural Georgia systems. It offers both pre-college and vocational training. Higher education is available within a one-hour drive. Four-year, two-year programs as well as two-year technical programs exist in neighboring counties.

3.1.2 Labor Force Characteristics

A. Employment by Occupation

Data on employment by occupation were presented in Section 3.1.1, part A.

B. Employment Status

The employment status of the residents of the city is compared with that of the state and nation in Table 27. Employment status includes total labor force, military and civilian, and participation by sex.

Labor force participation rates for Ludowici are similar to those of the state and nation. The state and national participation rates did not change significantly from 1990 to 2000. However, in Ludowici the labor force participation rates for *Male Civilian Employed* rose from 54 percent in 1990 to 89.5 percent in 2000.

Table 27
Ludowici, State and US Labor Force Participation 1990 and 2000 (%)

Category	1990			2000		
	Ludowici	GA	US	Ludowici	GA	US
In Labor Force:	61.3	67.9	65.3	61.9	66.1	63.9
Civilian Labor Force	55.2	66.4	64.4	55.5	65	63.4
Civilian Employed	49.7	62.6	60.3	50.2	61.4	59.7
Civilian Unemployed	5.4	3.8	4.1	5.2	3.6	3.7
In Armed Forces	6.1	1.5	0.9	6.4	1.1	0.5
Not in Labor Force	38.7	32.1	34.7	38.1	33.9	36.1
Male in Labor Force	72	76.7	74.5	77.5	73.1	70.8
Male Civilian Labor Force	60.9	73.9	72.8	63.3	71.2	69.8
Male Civilian Employed	54	70.1	68.2	89.5	67.7	65.8
Male Civilian Unemployed	12.8	3.8	4.6	6.7	3.6	4
Male in Armed Forces	11	2.8	1.7	14.2	1.9	0.9
Male Not in Labor Force	28	23.4	25.5	22.5	26.9	29
Female in Labor Force:	51.7	59.9	56.8	49	59.4	57.5
Female Civilian Labor Force	50	59.6	56.6	49	59.2	57.4
Female Civilian Employed	45	55.8	53.1	44.9	55.6	54
Female Civilian Unemployed	4	3.8	3.5	4.1	3.6	3.4
Female in Armed Forces	1	0.3	0.2	0	0.3	0.2
Female Not in Labor Force	48.3	40.1	43.2	51	40.6	42.5

Source: U.S. Bureau of the Census

C. Unemployment

Table 28
Unemployment Rate (%)

Year	Liberty Co.	Long Co.	McIntosh Co.	Region	State	U.S.
1993	8.6	4.9	7.1	5.6	6.7	6.9
1994	8.8	4.0	6.5	5.1	5.9	6.1
1995	8.7	4.2	5.9	4.8	5.8	5.6
1996	7.6	3.5	6.2	4.5	6.0	5.4
1997	7.4	3.8	5.3	4.5	6.0	4.9
1998	7.1	3.3	4.5	4.2	5.7	4.5
1999	6.3	3.0	4.2	3.8	5.4	4.2
2000	5.9	2.9	5.1	3.7	4.9	4.0
2001	5.1	2.3	4.2	3.4	5.2	4.8
2002	6.3	3.5	4.7	4.1	5.6	5.8
2003	4.3	2.5	3.7	3.3	4.0	6.0
2004	7.1	3.7	4.6	3.7	4.3	5.6

Source U.S. Census Bureau and Georgia Department of Labor

The Long County unemployment rate in 1993 was 4.9 percent. It dropped steadily and reached a low point of 2.3 percent in 2001. Unemployment has risen since then and in 1994 was estimated to be 3.7 percent. Long County's unemployment rate has consistently been lower than the unemployment rates in neighboring McIntosh and Liberty counties (see Table 28). The current unemployment rate in Long County is the same for the coastal region (3.7 percent) and lower than the state and national rates (4.3 and 5.6 percent respectively).

Figure 2

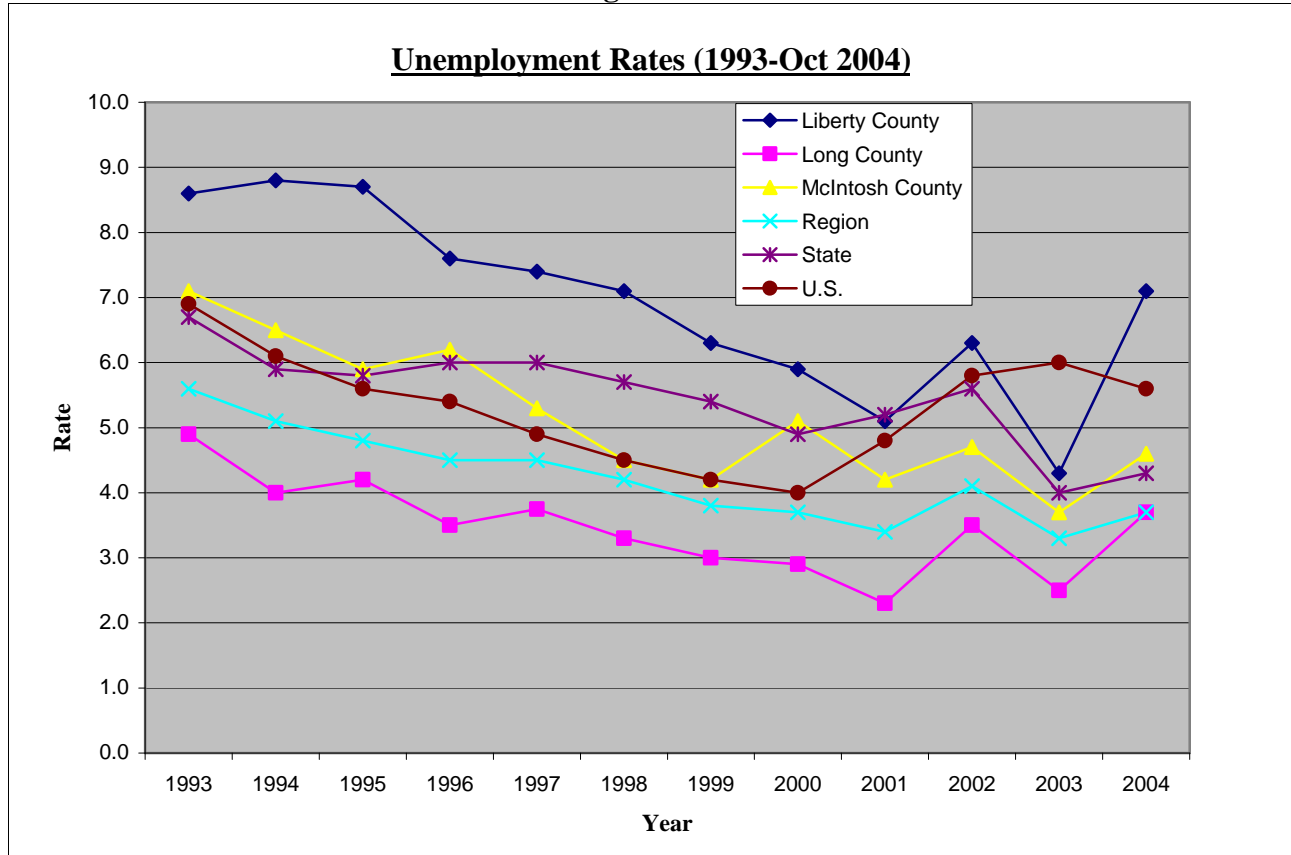


Figure 2 depicts, graphically, Long County’s unemployment rate as lower than the surrounding counties, the state, the region and the nation as a whole. Liberty County, Long County, McIntosh County, the region, and the state are experiencing a general decline in unemployment rates. In 2000, the nation’s unemployment rate began to increase, however as of 2003, it appears to be declining while unemployment rates in Georgia seem to be increasing slightly during this same period (2003-2004).

D. Commuting Patterns

The US Census captures basic commuting data including work location. In 1990 five hundred seven (507) Ludowici residents were employed. Thirty one (31) percent or 156 persons worked in Long County, and the remainder worked outside the county. In 2000 the percentage of residents working in Long County dropped slightly to 29 percent (See Table 29). No Ludowici residents worked outside the state in 1990 or 2000.

Table 29
Ludowici Commuting Patterns

Category	1990		2000	
	No.	(%)	No.	(%)
Worked in county of residence	156	31.0	168	29.0
Worked outside county of residence	351	69.0	406	71.0
Workforce residing in Ludowici	507	100.0	574	100.0

Source: 2000 U.S. Census Bureau

3.1.3 Local Development Resources

A. Economic Development Agencies

The Long County Chamber of Commerce is a vital part of the community. Its primary functions include providing information about local businesses and attractions to tourists as well as assisting existing businesses by offering a variety of events and networking opportunities.

The Chamber also sponsors an annual banquet, which is a wonderful networking opportunity for the local businesses and industry professionals. The chamber is constantly improving its services and support.

To develop a more diversified economy and to expand the economic base, the Long County Industrial Authority is developing a 55-acre park that is strategically located near US 84 approximately one-half mile east of Ludowici.

B. Economic Development Programs and Tools

The Long County Industrial Authority works with the Georgia Department of Economic Development, Georgia Power, Coastal Rural Electric Corporation and the city in recruiting industry. In addition, the authority assists industries in expanding and resolving problems that may arise with local governments. There are many programs and tools used for industry development and recruitment such as:

- Quick Start Training
- Tax Credits
- Port Tax Credits
- Tax Abatement
- Site Location
- Providing Infrastructure
- Industrial Bonds
- Large pool of people available with diverse skills in Ludowici and surrounding counties

C. Educational or Training Opportunities

The Long County Education System is competitive with other rural Georgia school systems. It offers K-12 grades. They offer both pre-college and vocational training. Higher education is available within a one-hour drive. Four-year, two-year programs as well as two-year technical programs are available.

3.2 Assessment of Current and Future Needs

The services sector of the economy will experience growth well into the next twenty-year planning period and beyond. The Long County Industrial Authority and the city are taking advantage of development in the service sector by developing programs and incentive packages for businesses. Contributing to growth within the service sector is the fact that the city is becoming a bedroom community of Liberty and Wayne counties. The other sectors of the economy appear to remain constant throughout the twenty-year planning period.

The economic sectors that paid the highest wages during the second quarter of 2003 were local governments and the goods producing sector. The average wages were \$704 for the state and \$356 for the city.

Compared to the state and U.S., the city has a far greater number of persons on active military duty due to the proximity of Fort Stewart. Eleven (11) percent of the total workforce in the city is active duty military, primarily associated with Ft. Stewart. In 2000, 1.1 percent of Georgians were employed by the armed forces, and .53 percent of employable individuals within the U.S. were employed by the armed forces.

From 1990-2000, the female labor force in the city decreased by 2.7 percent. During the same period, Georgia had a decrease of less than 0.07 percent; whereas the Nation during the same period experienced a 1.32 percent increase in the female labor force.

The decrease in the availability of female employees could indicate that many are staying home with children. The Long County Department of Family and Children Services (DFACS) had noticed an increase in the PO1 Medicaid for pregnant females from 1990-2000. These trends will more than likely continue. According to DFACS, more females at a younger age are having more children.

DFACS in Long County felt that work is available for females seeking employment. However, many of these jobs pay minimum wage. Affordable childcare is an issue when working a minimum wage job. According to the DFACS office in Long County, money is available for subsidized childcare, and they are encouraging individuals to apply. However, these funds are limited and may not be available throughout fiscal year 2006.

Long County has one of the lowest unemployment rates in the region. Long County, the City of Ludowici and the Long County Industrial Authority have done an outstanding job in planning for economic development, including recruitment and retention of industries that adequately utilize the skills, knowledge and abilities of the local residents.

Ludowici is similar to many other communities in the region that are near Metropolitan Statistical Areas (MSAs). A high percentage of the region's labor force works outside of the county in which they reside. Chatham and Glynn counties have the lowest percentage of commuting outside of the county of residence because they are manufacturing, retail and service centers

for the region. Ludowici's situation is unique because it is between Liberty and Wayne counties, and Glynn County is within a 30-45 minute drive.

Economic development is rarely confined to a single jurisdiction. Therefore, an assessment of economic assets, transportation, climate, education and infrastructure has been conducted.

The Long County Industrial Authority is completing a 55-acre park located strategically off US Highway 84. US 84 is a four-lane highway that splits Long County east and west. This four-lane highway provides quick access to the ports in Brunswick and Savannah. Another major transportation asset is the CSX railway that runs southwest to northeast.

The ports of Brunswick and Savannah are located 45 minutes from Ludowici, and the Port of Jacksonville is located about two hours south of Ludowici. All three ports provide roll-on, roll-off and break-bulk services. Ludowici offers Free Port Exemption for certain levels of raw materials, goods in process, and finished goods for export out-of-state.

Wright Army Airfield is the only commercial airfield within a 30 minute drive of the city. Savannah's International Airport is a 1-hour drive from Ludowici, and Jacksonville's International Airport is approximately two hours from Ludowici.

Long County has an abundant water supply; the city's water and waste water system is currently operating below capacity. The climate is mild, with an average temperature of 52°F in January and 81°F in July. Rainfall averages 51 inches per year. Currently no zoning exists in Long County or the City of Ludowici.

With additional funding, the industrial authority could actively recruit a more diversified range of industries and businesses. Long County, Ludowici and the Industrial Authority are taking full advantage of every resource available to them to ensure that local citizens have access to jobs that pay a reasonable wage.

Long County and Ludowici do have effective programs. This is evident by the low rate of unemployment, reasonable wages, and the number of industries recruited and retained that match the local resource pool. However, more coordinated planning between regional development authorities and local governments can only strengthen an already excellent economic development planning team.

The industrial authority is not passive, but very proactive. Market trends are identified and local entrepreneurs are encouraged to take advantage of the opportunities. Nationwide, existing businesses create at least 75 percent of all new jobs in the community.

In the previous section *Special and Unique Economic Activities*, a list of tools is provided that are available for local governments and the industrial authority to use to recruit and retain industry.

To take advantage of the tourism trade, the city is planning to develop a historic preservation ordinance and become a certified local government with the Georgia Historic Preservation Division (HPD). The City of Ludowici is planning to participate in the Better Home Town Program to revitalize the downtown area using neo-traditional principles. However, the city cannot survive if businesses do not exist in the downtown area. The city council is very active in promoting growth and wants to promote the entrepreneurial spirit.

There are several post-secondary institutions used by the city's residents to further their education and training, including:

- a. Altamaha Technical College in Jesup, with programs for completing an unfinished high school education, self-development, trade and professional skills, and special training courses.
- b. Coastal Georgia Community College in Brunswick, Georgia is a two-year college of the University System of Georgia, offering basic courses for transfer to four-year institutions and special courses for continuing education and self-development;
- c. Valdosta State University, a member of the University System of Georgia, has programs available at off-site locations in Kingsland and St. Marys;
- d. The Private Industry Council in Waycross is an eight county regional consortium which manages federal funding for programs including the Graduate Equivalency Diploma (GED), On the Job Training, TRYOUT, Youth Competency, Occupational Training, and specialized classroom training; and
- e. Other educational and training resources exist in Jacksonville, Florida and Savannah, Georgia.

Long County High School is in constant touch with employers within the region and is gearing the students' education towards modern employment needs, including requiring computer experience before a student graduates and making changes in the curriculum to teach usable skills to non-college track students.

The labor force is a key element of the economy. A community with a surplus of skilled workers has obvious opportunities to attract a new business. In contrast, communities with overly specialized or uneducated workers may have difficulty in attracting new industry. In Long County the industrial authority has done an excellent job of matching local resources, both human and natural, with the correct industry.

The industrial authority works well with the Long County School Board, Altamaha Technical College and local colleges to ensure that students have the necessary knowledge base, skills and basic abilities to become successful employees with local industries.

3.3 Goals and Implementation

Goal 1

Create an economic climate that promotes economic diversity and growth by encouraging a stable local economy compatible with planned growth, economic opportunities, and prosperity for all residents with an improved quality of life.

Objective 1.1

Ludowici and its community organizations will continue to promote employment opportunities for community residents.

Policy 1.1.1

The City of Ludowici will promote the availability of employment for all that desire it. This should be accomplished by:

- A. Coordinating with public and private agencies to identify and help individuals requiring special assistance to obtain and maintain employment;
- B. Encouraging local employers to provide job opportunities; and
- C. Encouraging public schools and local community colleges to determine what vocational and professional training is necessary and available for the current and future labor market needs with the possibility of setting up satellite programs in or near the community.

Objective 1.2

The City of Ludowici will continue to encourage cooperation and assist with private and public efforts to attract new employers and expand existing business firms in the community.

Policy 1.2.1

The City of Ludowici will continue to sponsor economic activities that will enhance the local economy. Incentives should be considered as a provision for job creation when appropriate.

Objective 1.3

The City of Ludowici will encourage the conservation and enhancement of the natural and cultural resources of the City.

Policy 1.3.1

The City of Ludowici will pursue economic development without endangering the quality of life in the City.

Objective 1.4

A core downtown business district should be developed.

Policy 1.4.1

The City of Ludowici should concentrate on businesses that will attract and serve tourists. However, this should not preclude the placement of other businesses downtown.

Objective 1.5

Ludowici will cooperate with community organizations to formulate an economic development strategic plan.

Policy 1.5.1

Short-term and long-term economic development plans should be formulated.

- a. If possible, submit a list of projects, when feasible, that includes their relative priority, timing and cost.
- b. Each project should have an impact statement that takes into consideration the City of Ludowici's Comprehensive Plan.
- c. Businesses should be encouraged to locate in areas that maximize the use of existing public facilities.

Objective 1.6

The City of Ludowici will support organizations that enhance economic development/growth and/or develop implementation strategies.

Policy 1.6.1

Support economic development authorities.

Policy 1.6.2

Support the chamber of commerce

Objective 1.7

Encourage and support programs to attract businesses that are compatible with the city's goals, natural resources and unique geological features.

Policy 1.7.1

Support businesses that are compatible with Ludowici's goals, natural resources and unique features.

Policy 1.7.2

Support eco-tourism businesses

Chapter 4

Natural and Cultural Resources

The natural and cultural resources element provides the opportunity for Ludowici to examine and make an inventory of locally significant and unique natural and historic resources, to determine their vulnerability to the impacts of development and other human activities and to develop a strategy for managing the resources in accordance with community preferences.

4.1 Inventory of Existing Conditions

4.1.1 Natural Resources¹

To develop sound and workable alternatives for future land use in Ludowici, it is important to understand the existing conditions of the physical setting. Identification of existing resources is useful in determining the facilities and development of programs that will be needed in the future. This chapter presents information on the city's geology, natural water systems (aquifers, groundwater, surface water, wetlands, river corridors, and flood plains), soils, topography and slopes, agriculture and silviculture, ecological systems, parks and recreation areas, scenic views, and historic components.

Ludowici has passed all required Part V Environmental Ordinances. To ensure compliance, Ludowici must cooperate with the county, federal and state agencies until its code enforcement program is developed.

A. Public Water Supply

Ludowici is served by municipal wells. According to the 2004 Georgia County Guide, public water service supplied 100 percent of the water utilized in the city. In 2000, 3,868 individuals consumed 270,000 thousand gallons per day or 69.80 gallons per individual. To protect wellheads, the City of Ludowici has adopted a wellhead protection ordinance.

B. Water Supply Watershed

Long County has no water supply watersheds as defined by the Department of Natural Resources Rules for Environmental Planning Criteria.

C. Groundwater Recharge Areas

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 based on geologic conditions. Major ground water resources may develop where permeable aquifers underlie or are connected to extensive areas favorable for recharge.

¹ Information for the Natural Resources section was drawn from the Georgia Department of Community Affairs, the Georgia Department of Natural Resources, the University of Georgia, the U.S. Department of Agriculture, and the U.S. Fish and Wildlife Services.

Ludowici is located in the coastal plain area. Principal aquifers of the coastal plain include the Upper Brunswick and Lower Brunswick aquifers, the Floridan aquifer system, the Claiborne and Clayton aquifers and the Cretaceous aquifer system.

The Upper and Lower Brunswick aquifers are below the superficial aquifer. These two aquifers rest below Ludowici and consist mainly of phosphatic and dolomitic quartz. These aquifers are generally confined. Now, these aquifers are not a major source of ground water.

The main aquifer beneath Ludowici is the Floridan aquifer consisting of confined limestone, dolostone, and calcareous sand. This aquifer system is one of the most productive ground water reservoirs in the United States. This system supplies about 50 percent of the ground water used in Georgia. It is used as a major water source throughout most of south Georgia.

Wells in this aquifer are high yielding and are extensively used for irrigation, municipal supplies, industry and private domestic supply. For example, the City of Ludowici pumps on average 270,000 gallons daily from the Floridan aquifer.

The Claiborne aquifer is made up of sand and sandy limestone and is mostly confined.

The Clayton aquifer is another important source of water in south Georgia. It is made up of sand and limestone and is generally confined.

The Cretaceous aquifer system is the deepest of the principal aquifers in south Georgia. It serves as a major source of water in the northern one-third of the coastal plain. The aquifer system consists of sand and gravel that locally contain layers of clay and silt which function as confining beds. These confining beds locally separate the aquifer system into two or more aquifers.

The Floridan aquifer is principally recharged immediately south of the Fall Line that stretches across central Georgia from Columbus to Macon to Augusta. This is the point at which streams from harder rock formations of the piedmont cross into softer rock formations of the coastal plain. Most sedimentary rock formations of the coastal plain begin at the ground surface just south of the Fall Line. Most aquifer water originates here. Recharge can also occur at other points where the aquifer dips up to become closer to the surface allowing water from streams, sinkholes, and ponds to penetrate through more shallow ground into the aquifer.

All aquifer recharge areas are vulnerable to both urban and agricultural development. Pollutants from storm water runoff in urban areas and excess pesticides and fertilizers in agricultural areas can access a groundwater aquifer more easily through these recharge areas. Once in the aquifer, pollutants can spread uncontrollably to other parts of the aquifer thereby decreasing or endangering water quality for an entire region.

No recharge areas are located within the city limits of in Ludowici.

D. Wetlands

The City of Ludowici is nearly level. Most of the land on the western side is gently sloping and moderately well drained. The eastern side of Ludowici is nearly level and poorly drained. Due primarily to a high water table, most of the soils in the eastern part of the city have severe to very restrictive limitations for development.

For the most part, woodlands line the creeks draining the area and, consequently, act as buffer zones protecting contiguous water bodies from potential sources of non-point water pollution. Forest topsoil and debris reduce the speed of urban and rural runoff to creeks through absorption, adsorption and mere water flow deterrence. At the same time, absorbed and adsorbed runoff nutrients (dissolved as well as particulate detritus from such sources as fertilizers and farm animal wastes) are incorporated into the nutrient cycles of the forest fringe communities for production and maintenance.

These peripheral uncut strips of forest in the city, account in large part, for the generally good visual quality of surface waters. The city being located in a rural area does have an abundance of "farm game," such as squirrels, rabbits, raccoons, and opossums.

Because of the unusual ecological systems present in the area, it is likely that protected plant and animal habitats can occur anywhere in the city. Therefore, building officials and inspection personnel should be trained in their recognition, and all development projects should be investigated before site clearing and construction.

Wetlands within the city of Ludowici are depicted on Map 1. The majority of wetlands are comprised of marsh and swampland, small farm ponds, and the flood prone areas of the perennial creeks.

E. Protected Mountains

Ludowici has no areas that are over 2,200 feet or more above sea level; has as a percentage slope of 25 percent or greater for at least 500 feet horizontally; nor any ridges, summits, or ridge tops that lie at elevations higher than any such identified area.

F. Protected Rivers

Ludowici has no protected river corridors.

G. Coastal Resources

No parts of Ludowici are classified as "coastal areas".

H. Flood Plains

Flood plains are the channels and relatively flat areas adjoining the channel of a stream or river that has been or may be covered by floodwater. Rivers and streams that run through the south-central Georgia areas are bordered by wide flood plains. These flood plains consist mostly of swamps, pine and hardwood forests. Ludowici does have a limited amount of floodplains on its western border.

Flood plains provide favorable conditions for the growth of pine and hardwood forests. Pines and hardwoods dominate the western edge of the city. As part of the region's wetlands, it provides natural habitat necessary for the survival of endangered or threatened plants and animals.

Ludowici has a high water table, and some areas are susceptible to flooding. The risk of flooding is an important economic issue as well as a public safety concern in the area. Any

major increase in population density and industrial and economic development on the southwestern and western edges could negatively affect these flood plains. Foresight is needed to restore the natural function and preserve the capacity of the flood plains.

Flood hazards along streams typically occur in late winter and early spring. The flood maps for Long County were prepared in March 1978. According to Community-Panel Number 130127 0005 A, the municipality of Ludowici was not included in the development of the FIRM maps. Due to annexations and improved standards for flood mapping, these maps are in need of an update.

Any approach employed in addressing this important environmental concern should be a cooperative one of shared responsibility involving regulation at the state, county and municipal levels of government. The Georgia Department of Natural Resources has established the relative need for flood protection planning, and Ludowici should adhere to all applicable Minimum Environmental Planning Criteria. Through stream encroachment regulation, the state plays an important and direct role in managing activities in the "Floodway." Ludowici should manage "Flood Fringe" areas by applying standards established by federal insurance guidelines and administered by the Federal Emergency Management Agency (FEMA).

I. Soil Types

The primary soils in Ludowici are the Stilison-Pelham-Fuquay and Leefield-Pelham-Mascotte associations (see Map 2). All of these soils are suitable for development. The Stilison-Pelham-Fuquay association is not nearly as likely to be as damp as the Leefield-Pelham-Mascotte association.

Stilison-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 is located in western Ludowici on broad smooth areas, in depressions and drainage ways and on ridge tops, usually more than 70 feet above sea level, with gradients ranging from 0 to 4 percent. Natural vegetation is loblolly pine, waxmyrtle, gallberry and sawpalmetto. 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.

Leefield-Pelham-Mascotte. This mapped unit consists of somewhat poorly drained soils on low-lying ridges and poorly drained soils in broad areas and in depressions and drainage ways. This map unit is located on the eastern edge of Ludowici. Natural vegetation consists of longleaf pine, loblolly pine, sweetgum, water oak, waxmyrtle, gallberry and sawpalmetto. Due to wetness, most of the soils in this unit are moderately suited to pine woodland and pasture. However, these soils can be modified to provide favorable sites for development.

According to the information provided by the Natural Resources Conservation Service, mapping and publication are complete. If a detailed map or study is required it is suggested that a soil scientist be consulted or review maps 49, 50, 58 and 59, "Soil Survey of Liberty and Long Counties, Georgia."

J. Steep Slopes

There are no steep slopes in Ludowici.

K. Prime Agricultural and Forest Land

No prime agricultural or forested lands exist in the City of Ludowici.

L. Plant and Animal Habitats

Plant and animal habitats may exist in Ludowici that support threatened or endangered wildlife. Table 30 lists the endangered and threatened species within Long County. Ludowici must cooperate with the Department of Natural Resources (DNR) to identify areas where endangered or threatened species are present. Staff from the Coastal Resources Division of DNR will work with Ludowici to locate and map these areas.

**Table 30
Listed Species in Long County
(updated June 2002)**

Species	Federal Status	State Status	Habitat	Threats
Mammal				
Altamah spiny mussel <i>Elliptio spinosa</i>	Candidate Species			
Bird				
Bald eagle <i>Haliaeetus leucocephalus</i>	T	E	Inland waterways and estuarine areas in Georgia	Major factor in initial decline was lowered reproductive success following use of DDT. Current threats include habitat destruction, disturbance at the nest, illegal shooting, electrocution, impact injuries, and lead poisoning.
Red-cockaded woodpecker <i>Picoides borealis</i>	E	E	Nest in mature pine with low understory vegetation (<1.5m); forage in pine and pine hardwood stands > 30 years of age, preferably > 10" dbh	Reduction of older age pine stands and encroachment of hardwood midstory in older age pine stands due to fire suppression
Wood stork <i>Mycteria americana</i>	E	E	Primarily feed in fresh and brackish wetlands and nest in cypress or other wooded swamps. An active rookery was located in Long County in 1995. No active rookeries in 2000	Decline due primarily to loss of suitable feeding habitat, particularly in south Florida. Other factors include loss of nesting habitat, prolonged drought/flooding, raccoon predation on nests, and human disturbance of rookeries.
Bachman's warbler <i>Vermivora bachmanii</i>	E	E	Probably extinct; last seen in Georgia (Long County) in 1976	

Table 30 (continued)

Species	Federal Status	State Status	Habitat	Threats
Reptile				
Eastern indigo snake <i>Drymarchon corais couperi</i>	T	T	During winter, den in xeric sandridge habitat preferred by gopher tortoises; during warm months, forage in creek bottoms, upland forests, and agricultural fields	Habitat loss due to uses such as farming, construction, forestry, and pasture and to over collecting for the pet trade
Gopher tortoise <i>Gopherus polyphemus</i>	No Federal Status	T	Well-drained, sandy soils in forest and grassy areas; associated with pine overstory, open understory with grass and forb groundcover, and sunny areas for nesting	Habitat loss and conversion to closed canopy forests. Other threats include mortality on highways and the collection of tortoises for pets.
Amphibian				
Flatwoods salamander <i>Ambystoma cingulatum</i>	T	T	Adults and subadults are fossorial; found in open mesic pine/wiregrass flatwoods dominated by longleaf or slash pine and maintained by frequent fire. During breeding period, which coincides with heavy rains from Oct.-Dec., move to isolated, shallow, small, depressions (forested with emergent vegetation) that dry completely on a cyclic basis. Last breeding record for Long County was in the 1920's.	
Plant				
Dwarf witch-alder <i>Fothergilla gardenii</i>	No Federal Status	T	Low, flat, swampy areas, especially shrub-dominated margins of upland swamps (pocosins), Carolina bays, pitcherplant bogs, wet savannahs, and Atlantic white-cedar swamps	
Georgia plume <i>Elliottia racemosa</i>	No Federal Status	T	Sand ridges, dry oak ridges, evergreen hammocks, and sandstone outcrops in a variety of sandy soil conditions ranging from moist to very dry	
Pondspice <i>Litsea aestivalis</i>	No Federal Status	T	Margins of swamps, cypress ponds, and sandhill depression ponds and in hardwood swamps	
Fish				
Shortnose sturgeon <i>Acipenser brevirostrum</i>	T	T	Altamaha River from the confluence to the coast	Construction of dams and pollution, habitat alterations from discharges, dredging or disposal of material into rivers, and related development activities.

Mammals

The varied habitat of swamplands, wetlands, forests, and moist and dry uplands conducive to attracting a wide diversity of species of birds, also provides habitat for mammalian species known to the southeastern coastal plain. The following list describes a few common species that may be presently living in Ludowici.

- ③ Florida Opossum (*Didelphis marsupialis pigra*). Common in Georgia.
- ③ Evening Bat (*Nycticeius humeralis*). This and other bats are seen at dusk on warm nights searching for flying insects.
- ③ Georgian Bat (*Pipistrellus subflavus subflavus*). A common species in the area.
- ③ Seminole Red Bat (*Lasiurus borealis seminolus*). A common bat of the area.
- ③ Florida Raccoon (*Procyon lotor elucu*). The most abundant mammal in the area. It is found in wetland areas and near waterways.
- ③ Florida Striped Skunk (*Mephitis mephitis elongata*). This species is generally distributed on the upland surrounding the wet areas.
- ③ Red Fox (*Vu/pes fu/va fu/va*). This species is rare but occurs occasionally on the upland near waterways.
- ③ Southern Gray Squirrel (*Sciurus carolinensis carolonensis*). Abundant in the oak woodlands on the upland.
- ③ Florida Flying Squirrel (*Glaucomys volans querceti*). This species is rarely seen but is probably fairly common.
- ③ Georgia Pocket Gopher (*Geomys pinetis pinetis*). Sandy soils; fields; pine-oak woods.
- ③ Cotton Mouse (*Peromyscus gossypinus gossypinus*). Common throughout the area.
- ③ Swamp Rice Rat (*Oryzomys palustris palustris*). A fairly common mammal throughout the bays, swamp, and waterways.
- ③ Hispid Cotton Rat (*Sigmodon hispidus hispidus*). A common mammal in the pine woods and old fields on the upland around waterways.
- ③ House Mouse (*Mus musculus Linnaeus*). Where conditions permit, feral mice may be found in fields, along watercourses, and in other places where vegetation is dense enough to afford concealment.
- ③ Black Rat (*Rattus rattus rattus*) Common on farmstead.
- ③ Eastern Cottontail (*Sylvilagus palustris mallurus*). Commonly frequents brush-dotted pastures, the brushy edges of cultivated fields and clearings.
- ③ White Tailed Deer (*Odocoileus virginianus*). Prime areas are those that have a mix of forest, old fields and active croplands.
- ③ Armadillo (*Dasyopus novemcinctus mexicanus*). It inhabits forests, scrub, and brushlands, but is most abundant in moist, bottomland hardwood forests.

Plants

Plants & Trees Common to Ludowici/ Moist to Dry, Generally Flat Areas

a) Pinelands:

a. <i>Pinus palustris</i>	Longleaf Pine
b. <i>Pinus elliottii</i>	Slash Pine
c. <i>Pinus taeda</i>	Loblolly Pine
d. <i>Quercus falcate</i>	Southern Red Oak
e. <i>Quercus nigra</i>	Water Oak
f. <i>Flex glabra</i>	Gallberry
g. <i>Lyonia fruticosa</i>	Staggerbush
h. <i>Polycodium sp.</i>	Deerberry
i. <i>Vaccinium arboretum</i>	Tree Huckleberry
j. <i>Aristida stricta</i>	Wiregrass
k. <i>Serenoa repens</i>	Saw Palmetto

b) **Oaklands:** associated with pineland, often establishing after pine is removed.

a. <i>Quercus falcate</i>	Southern Red Oak
b. <i>Quercus Marylandica</i>	Blackjack Oak
c. <i>Carya tomentosa</i>	Mockernut Hickory
d. <i>Quercus margaretta</i>	Shrubby Post Oak

M. Major Parks, Recreation and Conservation Areas

There are no major parks, recreation or conservation areas located in Ludowici.

N. Scenic Views and Sites

The city has not designated any sites or views as scenic.

4.1.2 Cultural Resources

The National Historic Preservation Act of 1966² as amended provides the statutory basis for historic preservation in our country. This Act was cited as the “National Historic Preservation Act” and whose purpose contains six elements. Congress commented on the “spirit and direction of the Nation.... reflected in our collective historic heritage and that these foundations require preserving as a “living part of our community life and development.” This provides an orientation or a valuable “sense of place” to the American people. Furthermore, Congress declared that the preservation of this irreplaceable heritage was in the public interest. This interest served to honor and preserves certain American legacies—cultural, educational, aesthetic, inspirational, and economic—whose maintenance enriches the lives of present and future generations of Americans. Within this context, a brief overview of cultural resources within the city limits of Ludowici suggests a richness of history and heritage worth protecting and preserving for present and future citizens in Ludowici and Long County, Georgia.

² *United States Code, National Historic Preservation Act of 1966, as amended through 2000,* <http://www.cr.nps.gov/hps/laws/NHPA1966.htm>.

A. Residential Resources

This inventory of homes located within Ludowici is by no means an exhaustive listing due to time constraints. Images of a few homes suggest the richness of historic resources within a residential setting and reflect local significance or unique distinctive building styles. Currently, building permits are not required for construction within the city limits, and the city has no land use or zoning ordinances.

Clyde Chapman Place

When an initial visit was made in mid-March 2005 to do a cursory inventory of cultural and historic resources, the Price Chapman, Jr. family had plans to remove the Clyde Chapman Place to make way for a new *McDonald's* franchise. After the visit, the 100+-year-old building was partially demolished. In the early 20th century, Ludowici red roof tiles were used on a variety of architectural styles throughout the city including vernacular, Queen Anne and Bungalow styles.

McQueen House

The Neill McQueen House is surrounded by spreading great live oaks and old growth magnolias. This two-story wood frame plantation-style mansion features double porticos, and a hipped roof, and white picket fencing, which defines the landscape. Currently occupied by the Cahill family, this impressive mansion is uncharacteristic of residences within the city, and overlooks the public park area adjacent to the old Ludowici Well Pavilion and the historic train depot. The small side building serves as a garage. Characteristic of many older structures within the city, the garage features a peaked roof and the lovely red Ludowici tile.

McClelland House

Located at 42 South Main Street, the McClelland House is a wood frame, shingled bungalow featuring prominent gables and tin roofing. Defining characteristics include four double-hung windows separated by a central hallway and an offset front porch with a shed roof supported by four plain columns. Currently, the occupants and owners of this property are Ludowici City Councilman and Mrs. Frank McClelland, Jr.

O'Neill-Allen Johnston House³

The O'Neill-Allen Johnston House (ca. 1850) is the oldest standing occupied residence within the city limits of Ludowici. Its history dates from this small city's beginnings when as a railroad stop, it was known as "Johnston's Station". The name changed to Ludowici in honor of a German manufacturer and philanthropist who saw "white gold" in red clay. Located on Macon Street along the railroad tracks at what was formerly the center of town, this home takes its name from the postmaster, Allen Johnston. It is made of wood frame construction with distinctive double chimneys. This home features several alterations including a kitchen addition, once used as the post office as well as two-story Colonial Revival style porches. According to

³ Long County Resource Files, CGRDC Library

oral history traditions, the Johnston House was set fire by Union soldiers, but when General W.T. Sherman was informed of a displayed Masonic emblem, the flames were extinguished.

B. Commercial Resources

Regrettably, the “Vanishing Georgia” collection housed at the Georgia Archives in Morrow, Georgia contains only two images of Ludowici and Long County. One of the two images is of 1970s-era Ludowici when Lester Maddox served as Georgia governor. The second image is rich in detail and shows a horse and buggy era, ca. 1905 and a photograph of *Hack’s Drugstore*, owned by Dr. Fred Hack.

Many of the historic commercial structures have vanished from the Ludowici landscape whether due to fire, demolition by neglect or willful destruction. One of the commercial brick structures formerly a contributing business to the town’s prosperity was Rimes Brothers Department Store, ca. 1911. Old time Ludowicians recall that anything from caskets to groceries was purchased there. In today’s landscape, an oversized mural on the old department store depicts various historic scenes that recollect those days of yesteryear in Long County and Ludowici. Of particular interest is the space demonstrating log rafting on the great Altamaha River when the mills at Darien and on St. Simons Island buzzed with activity as hardy settlers braved the south Georgia piney woods and swamps to harvest ancient growth trees.

Ludowici Well Pavilion⁴

The Ludowici Well Pavilion was listed on the National Register of Historic Places on September 7, 1984. A tract of land “measuring forty feet wide by fifty feet long” was located in the center of town and selected for sinking an artesian well. Donated by the Neill McQueen family, the well pavilion site was to be “kept open and free of access to the public” in order to provide a community resource for clean pure drinking water. The merger and relocation of the Ludowici Celadon Company propelled this section of Long County into a fast growing town whose infrastructure required clean water. According to popular belief, the McQueens stipulated that a pavilion be raised over the water source when they deeded the well to the town of Ludowici. In a slower paced era, townspeople gathered near the pavilion to swap stories and share in community and social activities, as well as political stumping.

C. Industrial Resources⁵

An inventory of the remaining walls, quarters and associated outbuildings of the Ludowici-Celadon Tile Company (1904-1914) was not done; however, photographic documentation of any remaining relics of this era would embellish the history of this small city as well as efforts to provide literacy and educational opportunities for the town’s citizenry. In addition, the Ludowici-Celadon Company of New Lexington, Ohio likely holds institutional records within the company archives. Copies of this material for the use of future researchers and for the children and citizens of Ludowici and Long County should be acquired and placed in the Long County Public Library at Ludowici.

Clay Hole

⁴ Undated pamphlet “The Ludowici Well Pavilion” produced by Long County Public Library; and Georgia DNR/HPD National Register of Historic Places (NRHP) files

⁵ Long County Resource Files, CGRDC Library

Although not visited, one of the important historic resources located within the city limits is the source of Ludowici's former prosperity. The "Clay Hole", a presumed deep pit, is currently owned by Long County Commission Chairman, Randall T. "Randy" Wilson.

D. Institutional Resources

Long County Courthouse⁶

Dating from 1926, the Long County Courthouse at 49 South McDonald Street is typical of early 20th century courthouse architecture. Its Neo-Classical style features a columned portico, brick with limestone trim and no clock tower because "standard time" made traditional courthouse clocks obsolete. The Masonic Order, Grand Lodge of Georgia F & AM placed a marble cornerstone on the Long County Courthouse dating its dedication.

In addition, an impressive Georgia Historic Commission Marker (091-1) erected near the cornerstone on the courthouse lawn gives a brief overview and explains the derivation of the county's name. It reads:

This County, created by Act of the Legislature August 14, 1920 is named for Dr. Crawford W. Long who first used ether as an anesthetic in a surgical operation at Jefferson, Georgia, March 30, 1815. Dr. Long was a graduate of Franklin College (now University of Georgia). 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.

As citizens enter the courthouse foyer, there are three small historic exhibits: a plexi-glass encapsulated statue of Dr. Crawford W. Long donated on August 6, 1985 by former state senator Helen Williams Coxon; a large Ludowici Celadon Tile, ca. 1900-1912 and a handsome photograph of the Ludowici Well Pavilion. The Ludowici Tile inscription reads:

This town was named for the Karl Ludowici Family who owned the Ludowici Celadon Clay Tile Factory. The Ludowici Family provided funding to build the first school of higher education in Long County. Many of the homes in the area are still covered with tile of that era.

The photograph inscription notes that the historic well provided water for local citizens during the early 19th century. Roofing on the old community well is the hallmark of the small city—Ludowici red clay tile.

Masonic Lodge

Located near the Allen Johnston House, ca. 1850, the Masonic Lodge—Altamaha Lodge #227, F & AM, Ludowici, Georgia is a plain style, two story, wood frame structure with a tin roof.

Ludowici United Methodist Church

Located at Celadon and Main streets, the imposing Ludowici United Methodist Church stands as a testament to ingenuity. According to Ludowici Councilman Donald Combs, the original

⁶ Thematic National Register Nomination-Georgia Courthouses, January 1980; Jordan, Robert H & J. Gregg Puster, *Courthouses in Georgia*. Norcross, Georgia: Harrison and Company, 1984:140.

structure was rolled on logs from one side of town to the other. Later, exterior enhancements changed the church's appearance from wood frame construction to the red brick of today. This church clearly remains part of the community's oral traditions enriching the historic past, as well as spiritual life.

E. Transportation Resources

Ludowici Train Depot

During the mid 1840s, a railroad was built in Liberty/Long County where the village was known as "Four and a Half." Allen Johnston was a large property owner in the community and it is his name that history carried forward as "Johnston's Station"—a short stop on the railway system. Located near the Ludowici Well Pavilion, the old wood frame train depot stands today as a silent witness to Ludowici's growth and development as a small south Georgia town. In years past, the depot received funding for preservation needs when it served as the Ludowici City Hall. This is a key historic resource and every effort should be made to protect and preserve this important reminder of an earlier era, grounding the citizenry in a "sense of place" as a formerly prosperous railroad community. Interest in a museum for housing local artifacts and memorabilia of historic interest was expressed by the City Council. The old train depot would be an ideal spot and its setting conducive to community cohesiveness and interaction if the structure were restored and preserved as the "Ludowici/Long County Museum and Welcome Center."

F. Rural Resources

No farms, plantations or related agricultural sites are located within the city limits of Ludowici.

G. Other Historic, Archaeological and Cultural Resources

In general, the relics associated with the Ludowici Celadon Tile Roofing Company exist as a pre-World War I archaeological site ripe for preserving. For information on the various archaeological treasures located within the city limits of Ludowici, the reader should contact the Georgia Department of Natural Resources, Historic Preservation Division for technical reports generated due to the Section 106 Process of the National Historic Preservation Act of 1966 as amended. In addition, more complete information on archaeological resources is provided in the Georgia Archaeological Site Files at the University of Georgia.

4.2 Assessment of Current and Future Needs

4.2.1 Natural Resources

The City of Ludowici is served by municipal and individual wells. According to the 2003 Georgia County Guide, the public water service provider supplied approximately 270,000 gallons of water per day.

According to the U.S Environmental Protection Agency, all municipalities servicing more than 3,300 persons must comply with the Bioterrorism Preparedness and Response Act of 2002. The City of Ludowici has complied with this law. This process was completed before the deadline and the City of Ludowici is certified as having an adequate plan to respond to an emergency that involves its public water supply.

Ludowici has taken adequate measures to protect wellheads from contamination by placing buffer zones around them. All materials that can inflict or have the potential to cause injury to citizens have buffers and safeguards to prevent leakage and/or spillage.

All builders conducting construction operations in Ludowici are encouraged to use appliances that conserve water.

Ludowici has no Water Supply Watershed areas.

Ludowici has no Groundwater Recharge areas.

Ludowici has adopted the Wetlands Protection Ordinance. This Ordinance is intended to implement rules of the Georgia Department of Natural Resources' Environmental Protection Division known as the "Rules for Environmental Planning Criteria" as they specifically relate to wetlands (Rule 391-3-16). To ensure compliance with this ordinance Ludowici will utilize the Long County Code Enforcement Officer to ensure that the ordinance is enforced and work with the Long County Health Unit, USDA's Natural Resources Conservation Service and Department of Natural Resources to ensure that the wetlands are protected.

Ludowici has no Protected River Corridors.

No Coastal regions are located in Ludowici.

Flood maps covering Ludowici are in particular need of an update since some of the denoted flood hazard areas do not correspond with existing topography and known flood prone areas. Based on the city's topography, flood hazards do exist near Jones Creek which is located on the western border of Ludowici. Flood hazards must be considered when making development decisions.

The general soil map in this plan is useful to people who want a general idea of the soils in Long County. The map is not suitable for the management of farms, construction projects, or similar projects that require a detailed analysis of soil composition. For more detailed information reference "Soil Survey of Liberty and Long Counties, Georgia", United States Department of Agriculture, Soil Conservation Service, 1982.

To ensure coordination between soil types and usage, Ludowici must consider collaborating with the Long County Health Unit, Department of Natural Resources and the USDA's Natural Resources Conservation Service (NRCS) to ensure that a review process is developed to ensure reasonable compatibility with soil types. An ordinance adopted to maintain the soils integrity is the Soil Erosion and Sedimentation Control Ordinance (2001).

Ludowici has no areas that have a slope of 25 percent or greater for at least 500 feet horizontally; nor any ridges, summits, or ridge tops that lie at elevations higher than any such identified area.

No prime agricultural and forested lands exist in Ludowici.

It is important to protect fragile biological and ecological communities because the destruction of one species may lead to the loss of other species, as they are all interrelated. Ludowici will work

with all local, state and federal agencies to ensure that recognized endangered and/or threatened species are protected.

To reduce the impact of growth on these habitats, Ludowici will work with the Long County Code Enforcement officer, the Long County Health Unit, the USDA's Natural Resources Conservation Service to ensure that habitats are not threatened by land disruption activities and that the integrity of those habitats are maintained and protected.

Ludowici has no major parks, recreational areas and or conservation areas.

No scenic views or sites have been identified within Ludowici. Currently, no special management practices are needed.

Ludowici does have a major highway, US 84, running east-to-west. Ludowici does not have an ordinance to regulate the placement of signs or billboards along this route. Ludowici has no landscaping, buffer or setback requirements.

4.2.2 Cultural Resources

The preservation of cultural, historic, and archaeological resources is one of many factors that can have a positive impact on a community's quality of life, visual appeal, tourism potential, downtown and neighborhood revitalization and future economic development opportunities. The preservation and protection of historic buildings, districts, sites and landscapes play an important part in maintaining and developing an appealing sense of place and promoting a community's pride in its heritage.

Based on the windshield survey conducted for this plan, a detailed historic and archaeological resources inventory is needed. An assessment of the importance and potential of these resources needs to be conducted in terms of promoting tourism, improving community design, preserving the traditional atmosphere of the community, creating a healthy downtown economy and providing cost effective space for government functions and public activities. It should also be determined if further documentation of the resources is necessary and if any particular resources are endangered by rapid deterioration or conflicting land use patterns.

Approximately 10 percent of the homes in Long County were constructed before 1939. The majority of these homes are of wood frame construction, have gabled roofs, brick chimneys, and 1/1 windows.

Ludowici does have a historic preservation ordinance. The CGRDC Historic Preservation Planner is working with the city to establish a commission and to see if funds are available to conduct a historic survey to identify areas and structures that are in need of protection.

Inclusion on the National Register of Historic Places (NRHP) may help preserve an historic property. It provides recognition of a property's historical significance and ensures that any impacts on the property will be taken into account during the planning of state and federally licensed or permitted projects.

Owners of NRHP properties may qualify for federal historic preservation grants or tax benefits gained through the charitable contribution of preservation easements to nonprofit organizations. Owners of income producing properties listed on the NRHP are eligible for federal tax credits for rehabilitation work meeting preservation standards.

The Georgia Register of Historic Places is similar to the NRHP except that it is only a listing of important historic properties for the State of Georgia. The Historic Preservation Division (HPD) of the Georgia Department of Natural Resources administers this program. The Georgia Register qualifies a property for state tax incentives. These incentives provide an 8-year freeze on property tax assessments for an historic property that has undergone substantial rehabilitation.

Two federal tax incentive programs currently apply to preservation activities: the rehabilitation investment tax credit (RITC) and the charitable contribution deduction. The RITC effectively reduces the costs of rehabilitation to an owner of an income-producing historic property. The RITC is a 20 percent tax credit that goes toward rehabilitation costs. To be eligible for an RITC, a property and the rehabilitation done on it must meet specific requirements laid out by the Department of the Interior. A charitable contribution deduction is a one-time federal tax deduction that can be taken by an historic property owner who donates a facade easement on his/her building to a non-profit organization interested in preservation.

The Georgia Tax Incentive Program is designed to encourage rehabilitation of both residential and commercial historic buildings that might otherwise be neglected. The law provides an owner of a historic property that has undergone substantial rehabilitation an eight-year freeze on property tax assessments. The building is valued on its worth prior to the rehabilitation and that value is frozen for eight years. The program is carried out by the Office of Historic Preservation in the Georgia Department of Natural Resources and by your county tax assessor. To be eligible, a property and the rehabilitation to it must meet certain requirements including either the National Register listing or Georgia Register listing.

There are many other preservation tools besides the ones previously described. Many of these exist in the form of preservation technical assistance and grants. Technical assistance on preservation issues can be obtained from the Historic Preservation Planner at the CGRDC, HPD, the National Park Service, the Georgia Trust for Historic Preservation, and the National Trust for Historic Preservation.

In the area of grants, there are many available but all have certain criteria that must be met. Grants that are fairly common and are available to Long County include: the Local Development Fund administered by the Georgia Department of Community Affairs, the Preservation Services Fund administered by the National Trust for Historic Preservation, the Governor's Discretionary Fund administered by the Georgia Governor's Office, and Survey and Planning Grants administered by HPD.

To preserve and protect the cultural resources in Ludowici, education must be a key component. Outreach programs and citizen participation are necessary if these resources are to be protected for the enjoyment of future generations.

4.3 Goal and Implementation

Goal 1

Identify and protect the Natural and Cultural Resources of Ludowici.

Objective 1.1

Develop a program to identify the natural and cultural resources of Ludowici.

Policy 1.1.1

Develop a Historic Preservation Commission.

Objective 1.2

Achieve designation as a Certified Local Government (CLG)

Policy 1.2.1

Improve accessibility for handicapped persons to downtown with proper sidewalk ramps and parking areas.

Policy 1.2.2

Develop a driving tour of the City of Ludowici that enhances the appreciation of the cultural and natural resources.

Objective 1.3

Protect the 100-year flood plains of Ludowici from development that would negatively affect water quality.

Policy 1.3.1

Enforce the Georgia Department of Natural Resources Part V Ordinances.

Policy 1.3.2

Develop a Growth Management Plan to limit growth in potential flood areas and that recognizes the significant cultural and natural resources

Policy 1.3.3

Conduct an Historic Resources Survey

Objective 1.4

Identify and protect wetlands in Ludowici from development that would have a negative impact on water quality.

Policy 1.4.1

Restrict the density of development in areas not served by sewer or water facilities.

Objective 1.5

Protect fresh water including the water quality of the Altamaha River and tributary creeks by controlling erosion and sediment runoff.

Policy 1.5.1

Develop a program to stabilize and pave dirt roads that are a large source of runoff and produce large amounts of sediment.

Policy 1.5.2

Identify and protect Ludowici's wetland areas from developments that would have any adverse impact.

Policy 1.5.3

Encourage the NRCS to complete a soil survey for the City of Ludowici.

Objective 1.6

Prepare a downtown development plan for the City of Ludowici that promotes its uniqueness.

Policy 1.6.1

Promote the development of specialty shops in vacant buildings in downtown Ludowici.

Objective 1.7

Support programs and agencies that promote and protect the natural and cultural resources, and the unique character of the City of Ludowici.

Policy 1.7.1

Encourage owners of historic structures to rehabilitate them and nominate them for inclusion in the National Register of Historic Places.

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Chapter 5 Community Facilities & Services

Community facilities are public infrastructure, property, structures, and spaces that are owned, maintained and operated for the benefit of the public. Existing community facilities in Ludowici are shown on Map 3. This element provides an overview of the community facilities in Ludowici and identifies policies on the development and maintenance of community facilities and services for the next 20 years.

5.1 Inventory

Ludowici's Transportation Network

The City is responsible for the maintenance of 8.24 miles of paved and 3.24 miles of unpaved roads and approximately 4.5 miles of sidewalks. The State is responsible for maintenance of 2.89 miles of paved roads within the city limits. The Georgia Department of Transportation (GDOT) provides the following classification of roadways in Ludowici (See Table 31).

**Table 31
Transportation Level of Service**

Type of Road System	Function	Speed Limit (mph)
Rural Principal arterial: Stable Flow 0 Miles	a. Intercommunity connections b. Collects traffic from collector routes Access to property along main transportation routes	35-65
Rural Minor arterial: Stable Flow 0 Miles	a. Collects traffic from collector routes b. Access to property along main transportation routes c. Routes traffic to principal arterials	35-55
Rural Major Collector: mixture of stable flow and stop and go 0 Miles	a. Provides direct access to arterials b. Facilitates intra-Long county travel c. Allows access to local transportation routes	35-55
Rural Minor collector: mixture of stable flow and stop and go 0 Miles	a. Provides direct access to arterials b. Facilitates intra-Long county travel c. Allows access to local transportation routes	25-55
Rural Local: mixture of stable flow and stop and go 22.96 Miles	a. Collects traffic from residential areas b. Provides access from neighborhoods to collectors c. Provides direct access to arterials d. Facilitate intra-city travel e. Allows access to local transportation routes	25-55

Source: GDOT, Office of Transportation Data, Lane Miles by Route and Road System

The major state routes in Ludowici are:

- ③ SR 23/84 connects Ludowici to Jesup, Georgia to the west and Hinesville, Georgia to the east.
- ③ SR 38 links Ludowici to Glenville, Georgia
- ③ SR 57 links Ludowici to Darien, Georgia

Traffic counts conducted in July 2001 show the following average annual daily traffic (AADT):

- ③ SR 23/84 – Between Roberson and Main, Ludowici, 11,450
- ③ SR 23/84 – Between Wiregrass Trail and Thornton Drive, Ludowici, 4,900
- ③ SR 57 – Between Cypress Street and Caesar Drive, Ludowici, 5,250
- ③ CR 113 – Between Cypress Street and Hendrix Street, Ludowici, 2,330

Railway Systems

CSX railroad operates a east-west line parallel to US 84 thru the southern portion of the city.

Air Transportation Systems

The City of Ludowici does not have an airport. Wright Army Airfield will allow civilian general aviation use beginning in September 2006.

Public Transportation Systems

Long County has operated a rural public transportation system as part of GDOT's rural 5311 program for approximately 15 years. This rural public transportation system operates in conjunction with the Department of Human Resources (DHR) coordinated transportation program for the provision of transportation for eligible DHR consumers. These two programs work collaboratively to provide one seamless transportation system for the citizens of Long County and Ludowici.

Water Supply and Treatment¹

The city has two municipal wells. The main tank has a storage capacity of 100,000 gal and is 30 years old. An additional 250,000 gal tank built in 2005 is provided at the Correctional Facility.

Average consumption is 340,000 gallons per day, with service to 669 customers (605 residential and 64 commercial). System is permitted for withdrawal of 740,000 gallons per day. Water is treated with chlorine and fluorides at both well sites. The two wells are tied together. The system is in fair condition.

Sewerage System and Wastewater Treatment

Sewerage and wastewater are handled by a municipal waste water treatment facility in Ludowici. The City of Ludowici system currently serves 531 customers (472 residential and 59 commercial). The City of Ludowici sewage and wastewater treatment facility has been permitted for an average daily discharge of 240,000 gallons. The current average daily discharge rate is about 160,000 gallons.

¹ Public Water and Sewage Supervisor

The wastewater comes into the pre-treatment area of the oxidation pond and then to the secondary treatment area. The water is then discharged to the holding pond. The system has two discharge points 1) Land Application System and 2) a stream leading to Jones Creek. The Land Application System (spray fields) consists of approximately 35 acres. The system will allow for future development.

Solid Waste

City of Ludowici has submitted a Solid Waste Management Plan that complies with the Comprehensive Solid Waste Management Act and the rules for Solid Waste Management. Ludowici operates a municipal inert landfill. The estimated life of this landfill is 10 years. Long County also operates two service centers that collect white goods and metal for recycling. 951 tons of metal were collected in a two-year period-2003-2004.

The City provides weekly curbside service once weekly and collects household garage and yard debris as needed. Customers are charged \$14.00 monthly for collection of waste. Commercial customers are charged by container size monthly.

Household garbage is disposed at Broadhurst Environmental Landfill located in Wayne County, Georgia. Yard debris is taken to Ludowici Inert Landfill. There are 472 residential customers and 59 commercial customers. Over 7,700 tons of solid waste were taken to Broadhurst Environmental Landfill in 2003, and about 8,600 tons in 2004.

Table 32
Long County and Ludowici Projected MSW Short Tons 1995-2004

Category	2003	2004
Total Projected Population	11,171	11,460
Pounds Per Person	3.81	4.13
Annual Short Ton Per Person	0.70	0.75
Annual County Short Ton Total	7,773	8,628

The City of Ludowici does not operate a recycling center. Long County does operate collection centers for recyclables. All city residents have access to this facility.

Public Safety

The City of Ludowici employs 1 police chief and 5 certified patrol officers. The Ludowici Police Department provides a full range of services such as patrol, traffic, criminal investigations and accident investigations. Each officer works a twelve-hour shift. Level of service is one officer for every 1500 citizens. A fleet of six fully equipped patrol cars is maintained.

The city operates municipal court for disposal of traffic citations and ordinance violations.

The city works with schools and other agencies to provide educational materials to students, along with safety equipment (bike helmets, stickers, etc.). No animal control is in effect.

Georgia State Patrol

A Georgia State Patrol post is located 15 miles north of Ludowici on US 84 in Hinesville. The State Police patrol I-95, US 84, and state highways.

Fire Protection (Countywide)

The volunteer fire department (ISO Class 5) operates five stations:

- a. Station One – one Class A 1200 GPM, 1000 Gal Tank, 1995 E-1 and one Light Rescue 1976 Chevy
- b. Station Two – one Class A 750 GPM, 750 Gal. Tank, 1967 Maxin Ford and one 5000 Gal. Tanker, 1982 GMC
- c. Station Three – one Class A 1970 Ford, 750 GPM, 750 Gal. Tank
- d. Station Four – one Class A 1972 Ford, 750 GPM, 750 Gal. and one 1800 Gal 1978 GMC Tanker Truck
- e. Station Five – one Class A 1000 GPM, 1000 Gal 1978 International Tanker

Long County Emergency Management Agency (EMA)

Long County EMA operates on a strictly volunteer basis, with a director and an assistant director, who also serves the Red Cross. Long County's EMA is preparing their LEOP and has already completed their Georgia Homeland Security Plan. Emergency medical services are managed by Long County EMA.

Court System

The Long County State Court and the City of Ludowici Municipal Court are both located in the courthouse building on SR 57/US 25.

Hospitals and Other Public Health Facilities

Neither Long County nor Ludowici has a hospital. Individuals requiring hospitalization go to hospitals in neighboring Chatham, Glynn, Liberty and Wayne counties.

Long County has no dentist or physicians practicing within its jurisdictional borders. Excellent health care exists within 15 minutes of Ludowici

Long County Health Department

Personal health care is offered through cancer screening, mammograms, stroke and heart prevention programs, including low cost medications, immunizations, prevention education, family planning services, pregnancy testing, individual nutritional assessment and counseling, WIC for formula, milk and other foods for children is provided. Population based services are provided including regulation of septic tanks and sewage disposal, food service inspections, rabies control, swimming pool inspections and childhood lead poisoning prevention. Testing and treatment is provided for TB, HIV and STDs. Three school nurses are provided in the Long

County schools to educate students and promote healthy life choices including teen pregnancy prevention and reduction of childhood obesity.

Long County Department of Family and Children Services provides public assistance including food stamps, Medicaid, childcare services, energy assistance and child protective services such as foster care, adult and child protective services.

The Visiting Nurses Association provides home health care for shut-ins.

Recreation

Long County is responsible for all recreational activities and facilities. Recreational opportunities include beaches and rivers in coastal Georgia.

Government Facilities

Municipal facilities include:

- ③ City Hall is located at 47 N. Main Street. The facility houses the Mayor's Office, administrative staff, and the meeting room for the Mayor and City Council.
- ③ The public works shop is located on GA 301. The workshop includes office space for the public works superintendent.
- ③ The equipment shop is located behind the public works shop

Education Facilities

Three public schools and one private school are located in Long County:

- ③ Smiley Elementary School 649 students
- ③ Walker Middle School 615 students
- ③ Long County High School 914 students
- ③ Faith Baptist Christian Academy 161 students

Library

Long County public library has been at its current location for approximately 13 years. Currently the library has 12 computers available for public usage. The library has an average 400 patrons per month. Patron usage is higher during the summer months, with a large number of children participating in the summer reading program. The City of Ludowici pays all utility bills for the library. The library is currently considering an addition for the purpose of housing historical artifacts. This room would be approximately 400 sq. ft.

5.2 Assessment

Transportation Network

There are currently 574 tagged vehicles in Ludowici, which is about one vehicle per household. Within the next twenty-year planning period, that number will increase to 627. The projected

increase in population and vehicles is not expected to adversely affect the transportation system.

The current level of service (LOS) for Ludowici is adequate and is expected to meet future needs based on projections. The minimum LOS for Ludowici is C. The Georgia Department of Transportation (GDOT) classifies the transportation system in Ludowici as rural. The majority of traffic is concentrated on US 84.

Individuals living within the city limits have an excellent transportation system. The City of Ludowici has 3.24 miles of unpaved roads and 8.24 miles of paved roads.

The city encourages developers to make maximum use of the available infrastructure by use of cluster and infill development. Currently, the city has no tools to manage growth. The city does recognize the fact that tools to control growth are needed.

It will cost \$350,000 to pave the unimproved roads in the City of Ludowici. Currently, all paved segments and geographic sections have a LOS of C or better. The city will not allow the LOS for paved transportation systems to drop below "C" on city maintained roadways.

To prevent degradation of the LOS, the city requires a traffic impact study on projects that have the potential to degrade the "C" LOS.

Where the capacity exists to serve the proposed development as shown by comparing existing and proposed levels of service, the project should be found in compliance with the transportation level of service.

If the project is found to degrade the LOS, Ludowici will work with the developer to resolve the matter in the most sensible manner.

Currently the roadway system is the most effective and efficient mode of travel to and from locations. The transportation system allows quick access to intra-Long County points of travel and quick access to inter-community travel throughout the county and adjoining counties. No special measures are needed other than what has been covered to insure an LOS of "C" or better.

A study is underway by CGRDC that is looking at a regional system of coordinated human resources transportation and rural public transportation in the 10-county coastal region. The study, which is being funded by GDOT and DHR, may lead to a coordinated regional system that would increase efficiencies and provide users more options for inter-county trips. Depending on the outcome of the study, Long County may have the option of participating in a regional program for coordinated and rural transit.

Water Supply and Treatment

Ludowici has a public water system. In 2005, 531 customers consumed on average 340,000 gallons per day.

The city encourages and supports clustering and infill development. Annexations of property may only occur when the provision of public water and wastewater services are feasible. According to the SDS, the county must approve all public infrastructure extensions into the county.

The City of Ludowici has the capacity to pump 350,000 gallons per day, but is permitted to pump 740,000. Based on a projected 20 year population of 1633, the usage will increase to 354,000 gallons per day assuming that the current industrial makeup doesn't change. The City of Ludowici's public water system will be operating at or near capacity in 2009. The city will not be able to meet future needs if the ability to pump water is not addressed in the near future. Ludowici is utilizing only 46 percent of its permitted capacity. An impact statement must accompany each new development to determine the impact on infrastructure and an impact fee ordinance should be established to assist the city in developing and maintaining their infrastructure.

Currently, a few citizens in the city do not have access to public water. According to the Public Works Superintendent, the city is continuing to develop its infrastructure so that all citizens will have access to public water.

The level of service for public water supply is adequate based on population projections and the current niche industries. The current industrial types are likely to continue throughout the next twenty-year planning period. The City of Ludowici must be cautious and plan accordingly with the availability of water.

Sewerage System and Wastewater Treatment

The City of Ludowici's municipal wastewater facility serves 531 customers. Of the total customers, 471 reside within the city limits, one resides in the county and the remaining 59 are commercial customers.

The minimum densities to make public sewage and wastewater treatment facilities feasible are normally higher than what is needed to justify a public water system. Densities of 2,500 to 5,000 persons per square mile are normally required; that is, average lot-size of no more than ½ acre, and gross densities of a least two dwelling units per acre. At densities of fewer that a thousand persons per square mile, public sewage is rarely justified. Of course, public sewage treatment may be justified at lower densities to prevent a health hazard.

The average lot size in the City of Ludowici is 1.30 acres. The LOS for the City of Ludowici is 500 people per square mile. The LOS is a minimum. The City of Ludowici encourages clustering and infill development. Annexations only occur where it is feasible to provide public sewage and wastewater services. According to the SDS, the City of Ludowici cannot extend sewage and wastewater treatment services into the county without permission.

The City of Ludowici sewage and wastewater treatment facility has been permitted for an average daily discharge of 240,000 gallons. The current daily discharge rate is 160,000 gallons.

Based on a projected 20-year projected population of 1633 and if the current industrial makeup does not change, Ludowici will be able to meet all future needs.

As mentioned above the LOS for the city is adequate. Based on population projections and the current niche industries, assuming that the current industrial types are likely to continue throughout the next twenty-year planning period, the City of Ludowici can meet its future needs.

Solid Waste

The City of Ludowici disposes of MSW at the Broadhurst Environmental Landfill, located in Wayne County, Georgia. The useful life of the landfill site is an estimated 30 years. An inert landfill is available for disposal of debris that can deteriorate over a period of years on Hill Street within the city limits of Ludowici. The useful life of the inert landfill is estimated at 10 years.

Available to the public is a service center that recycles white and metal goods. The City of Ludowici uses a private contractor to collect and dispose of MSW. The service is funded by a user fee included on the property tax bill and collected annually.

Public Safety

Ludowici currently has a LOS of 1 Patrol Officer per 1500 citizens. The city is served by at least one patrol officer 24 hrs a day. A supervisor is always present during peak hours to supervise the Patrol Officers and lend assistance if needed. The City of Ludowici has 1 Chief and 1 Investigator and 4 Patrol Officers and two reserve officers.

The Georgia State Patrol (GSP) and the Georgia Bureau of Investigation assists Ludowici's law enforcement officers. The GSP patrols state highways, investigates accidents on state highways and assists local law enforcement with emergencies.

The judiciary system is adequate for Ludowici.

According to the SDS, fire protection is the responsibility of Long County. The equipment available to the fire fighters is up-to-date and in good working order. A LOS has not been established for Long County.

Volunteers staff Long County's Emergency Management Agency and Red Cross. The level of protection given to the citizens of Ludowici is adequate. Ludowici is rural and resources are limited. Ludowici will continue to upgrade its public safety elements as resources allow.

Hospitals and Other Public Health Facilities

Hospitals in Liberty and Wayne counties are within a 30-minute drive of Ludowici.

Coastal Manor Nursing Home is the only long-term care and rehabilitation facility in Long County. No dentist or physicians are located in the City of Ludowici because of its close proximity to Hinesville and Jesup.

Taxpayers fund the Long County Health Department. Many personal health care programs exist that benefit the citizens of Long County. Many of these programs are population based.

Emergency Medical Services are managed by Long County and are adequate.

The Long County Senior Citizens Center provides services for the elderly population of both Long County and Ludowici. The center provides educational and instructional classes and delivers meals daily through the Home Delivered Meal program and serves meals at the center to the elderly. From July 2004 through February 2005, the center has served 7,921 meals. The

senior center has served 3,986 meals in house and delivered 3,935 meals. It is projected that the center will serve 11,881 total meals in 2005.

Currently, health care is adequate. As the population gets older and the demand for health services increase, it may be economically feasible for a medical group to establish a satellite office in the city.

Federal, state and local governments fund the majority of health care in the City of Ludowici. Public services are community based, and delivered in the least restrictive environment possible. Clients are able to find culturally competent medical care in neighboring cities and counties.

Long County public health care providers distribute educational materials and instructions on preventative measures. The public health care unit in the city is stable. The majority of health care in the city is publicly funded.

The quality of public health care is sustainable and progressive. Private health care systems are not available in Ludowici. The public health care facility's rigid structure allows for better coordination and integration because of the availability of information. Public health care providers in Long County transcend the organizational barriers and cooperate among themselves. The Long County Public Health system delivers services in a cost effective manner.

Ludowici is a rural community with adequate medical services. The level of service provided by the medical community is adequate taking into account that Ludowici is near Hinesville and Jesup.

Ludowici will continue to grow at a slow and steady pace. If demand for health care services can not be met by public institutions, then for-profit health care providers will fill the gap of health care needs not given by public health care providers. The fact that Ludowici is near regional medical centers means that quality health care will always be available to meet the needs of its citizens. The city and its health care providers will continue to ensure that services are provided in the most effective and efficient manner, thus, making quality health available.

Recreation

According to the SDS, Long County is responsible for providing recreation facilities and equipment for all citizens in Long County. The City of Ludowici has no recreational facilities.

For more information on Long County's Recreational Department, refer to the Long County Comprehensive Plan.

General Government Facilities

All government services provided by City of Ludowici including City Hall and the Courthouse are within walking distance from the outermost areas of their urban boundaries. To make effective and efficient use of its resources the City of Ludowici has adopted the idea of one-stop service centers as standard organizational procedure.

The current government facilities meet the needs of citizens. The services are also projected to meet future needs.

Educational Facilities

According to the SDS, Long County is responsible for providing education services and facilities. The City of Ludowici provides no educational services.

For more information on Long County's Education System, refer to the Long County Comprehensive Plan.

Libraries

According to the SDS, Long County and the City of Ludowici support the Long County Library. The library is located in Ludowici. The Planning and Evaluation Committee for the Georgia Public Library System has established standards called Georgia Public Library Standards (GPLS). The GPLS are essential tools for library evaluation and measurement. The GPLS ensures that the public library serves the local community.

The GPLS standards assess the performance and effectiveness of a library and assist in establishing service improvement goals. The Long County Library System has used this document as a guide for setting its own goals and standards and as a means of evaluation and measuring services. The methodologies used in the GPLS have been adapted for use in the Long County Library System.

The Long County Library System is unique because it is a two-tier system serving local residents. The Three Rivers Regional Library System supports the Long County Library System. The Three Rivers Book Mobile reaches the outermost areas of Long County. All citizens of Long County have access to reading materials. Long County and Three River Library System meets current needs and will meet the future needs of the citizens of Long County.

5.3 Goals and Implementation

Goal 1

Ensure the delivery of cost effective services that will match the future needs of the residents, businesses and industries of Ludowici.

Objective 1.1

Ensure that the development of infrastructure systems supports desired growth patterns

Policy 1.1.1

The city council will restrict development that is not supported by infrastructure

Policy 1.1.2

The city council will encourage cluster and infill development.

Policy 1.1.3

Impact statements will be required for subdivisions, new commercial and industrial developments to determine impact on infrastructure.

Policy 1.1.4

Annually review and inventory government services and facilities.

Objective 1.2

Encourage and support efforts to plan and coordinate the development of infrastructure and public facilities within the city and county.

Policy 1.2.1

Develop and support a joint planning commission with Long County.

Policy 1.2.2

Support and develop a joint review process to ensure compatibility, cooperation and the implementation of joint strategies.

Objective 1.3

Continue to support the Long County Public Library and ensure appropriate, cost effective facilities for arts and cultural activities as Ludowici continues to grow.

Policy 1.3.1

Increase the public funding of library facilities when possible to reflect increasing demands for services.

Policy 1.3.2

Establish a cultural arts committee to organize and promote local artisans, coordinate with the local media and explore fund raising alternatives.

Objective 1.4

Ensure excellence in public safety, public works and health services as Ludowici continues to grow.

Policy 1.4.1

Develop a joint public service training facility for the training of volunteer fire fighters, police, and EMS and support the cross training of public safety officers.

Policy 1.4.2

Develop a joint hazardous materials public safety team.

Policy 1.4.3

Develop a joint public education program that focuses on the benefits and services of the public safety departments.

Policy 1.4.4

Continue to upgrade all emergency services equipment when possible.

Policy 1.4.5

Address and prepare the community for 911.

Policy 1.4.6

Purchase, repair or replace equipment and property as required.

Policy 1.4.7

Maintain or construct new facilities to improve or meet current LOS.

Policy 1.4.8

Encourage Long County and the City of Ludowici to jointly develop public safety facilities.

Objective 1.5

Work with Long County in providing adequate cost effective parks and recreation areas for all citizens of Ludowici and Long County. Use the natural environment and existing resources to the maximum extent.

Policy 1.5.1

Study the possibility of developing a Subdivision Ordinance to allow the development of High Density Subdivisions that would require recreation space.

Policy 1.5.2

Assist Long County when possible to ensure that special needs groups (elderly, children, physically impaired, etc.) have available to them those amenities, services and a safe environment that will provide the maximum quality of life possible.

Goal 2

A safe, convenient and efficient motorized and non-motorized transportation system should be available for all residents of Ludowici.

Objective 2.1

Provide for safe and efficient transportation systems that support desired growth patterns.

Policy 2.1.1

Encourage developers to connect roadways where appropriate.

Policy 2.1.2

Encourage developers to provide sidewalks and bicycle facilities and connect to existing facilities.

Policy 2.1.3

Maintain the current Level of Service for transportation routes.

Policy 2.1.4

Develop and enforce standards for the construction and maintenance of transportation systems and drainage systems.

Policy 2.1.5

Continue to support drainage projects and paving of unpaved roads as funding is available.

Policy 2.1.6

Support rural public transportation systems.

Goal 3

Provide for an efficient, economical and environmentally sound solid waste disposal system.

Objective 3.1

Support and encourage the development of strategies to manage waste.

Policy 3.1.1

Develop a Joint Solid Comprehensive Solid Waste Management Plan.

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Chapter 6 Land Use

This element provides an inventory and assessment of how land is used in Ludowici. The estimated acreage of each existing land use type has been calculated using information provided by the city, and future land use acreage has been projected. Existing land use problems and how these and future problem areas should be addressed are included in this element. The City's existing land use is shown on Map 4.

6. 1 Inventory of Existing Conditions

(a) Residential

The predominant use of land within the residential category is single-family housing. Approximately 17 percent of the housing units in Ludowici are multi-family. About 600 acres of land in the city is classified as residential.

(b) Commercial

The predominant use of land in the commercial category is retail sales, office, service and entertainment. About 25 acres of land in the city is classified as commercial.

(c) Industrial

The land in this category is dedicated to manufacturing facilities, processing plants, factories, warehousing and wholesale trade facilities, mining or mineral extraction activities, or other similar uses. No land in the city is classified as industrial.

(d) Public/Institutional

This category contains local, federal and state government land uses. Included in this category also is private prison that houses state inmates. About 50 acres of land in the city is classified as public/institutional.

(e) Transportation/Communication/Utilities

Land in this category is used mainly for transportation routes and railway systems. The City of Ludowici has no telecommunication sites that are more than one-tenth of an acre in size. About 100 acres of land in the city is classified as transportation, communications, and utilities.

(f) Park/Recreation/Conservation

Land in this category is used mainly for active and passive recreational activities. The City of Ludowici has one acre dedicated to recreationally activities. This is park owned by Long County but within the city limits of Ludowici.

(g) Agriculture/Forestry

Land in this category is dedicated to farming or other rural uses such as pasture and the production of trees for harvesting. About 50 acres of land in the city is classified as agriculture/forest.

(h) Undeveloped/Vacant

Land in this category is not developed. Currently, Ludowici has approximately 128 acres that are not developed.

6.2 Assessment of Current and Future Needs

6.2.1 Existing Land Use Assessment

Existing development outside the City of Ludowici has been generated by private development efforts at private development rates; within the city, development has been market driven, but at the private development pace.

The availability of water and sewer and quick access to a main highway has determined the whereabouts of development. Currently, U.S. 84 is being converted from mixed use to commercial use.

Within Ludowici, blighted areas include much of the southern parts of Factory and McDonald streets. These substandard developments are present because of low-income levels, lack of code enforcement, and the lack of adequate housing programs.

The city is making the most of available resources and is looking into housing programs available from the Georgia Department of Community Affairs.

There are currently a few areas in the southern part of Ludowici where residential development has outpaced available infrastructure. Although the commercial area of Ludowici is adjacent to residential areas, the impact of commercial development is mitigated by the CSX railroad line. The railroad forms an adequate barrier between commercial uses on the east side of US 84 and residential development on the west side.

Due to the nature of land ownership in Ludowici, the development decisions concerning new facilities and development strategies will deal with in-fill development, which will consolidate the use of existing infrastructure in a condensed manner. The result is a future land use pattern very similar to the existing land use pattern.

As the local economy improves, new development will be directed to the existing water and sewer service area, which will reinforce existing land use patterns and create more cohesive and distinct land use areas. In light of the ever increasing costs of infrastructure improvements, the city will need to examine very closely any proposed infrastructure expansions to serve developments outside the water and sewer service areas.

6.2.2 Projection of Future Land Use Needs

Projected land use needs by category are shown on Map 5.

No annexations are planned during the next twenty-year planning period.

The City of Ludowici does not intend to expand its jurisdictional boundaries, but will concentrate on infill and cluster development. The increase in growth will be slow, steady and at a controlled pace; thus, ensuring that adequate infrastructure is available before expansion. The city will need to annually check its growth rate to make sure that development is not outpacing the development and availability of water and sewer services.

For information on areas that are prone to flooding, refer to the USGS FIRM maps.

For information on archaeological, architectural, cultural and historically significant areas contact the Historic Preservation Planner at CGRDC at (912) 264-7363, or refer to the Department of Community Affairs maps located at www.georgiaplanning.com.

(a) Residential

The predominant use of land within the residential category is single-family housing. Over the next twenty-years, the residential land use must be increased in order to account for the growth in population. Currently, residential land use accounts for 370 acres of the city. The population of the city at this time is nearly 1,500. By the year 2025, the population is projected to increase to over 1,600, while residential land use is projected to increase to approximately 500 acres. This increased amount of land allocated for residential use will adequately provide for the increase in population.

The City of Ludowici will ensure that cluster and infill developments and multi-family units are encouraged. Ludowici should offer incentives and options to encourage developers to construct multi-family housing units.

(b) Commercial

The predominant use of land in the commercial category is retail sales, office and service. The City of Ludowici plans to increase commercial acreage to 100 acres.

The downtown commercial district is mainly single buildings. The western end of Ludowici, U.S. 84 is single building businesses. The eastern end of Ludowici, U.S. 84 is a mixture of single building businesses interrupted by a small strip mall site.

Currently, the city is not planning to annex outside of its jurisdictional boundaries.

(c) Industrial

Ludowici has no industrial site nor does it plan to have any industrial development within its jurisdictional boundaries during the next 20 years. Currently an industrial park is being developed in Long County.

(d) Public/Institutional

This category contains land that local, federal and state governments utilize. Fifty (50) acres of land in the city is currently classified as public/institutional. The acreage is adequate for the next twenty-year planning period. Only 60 percent of developable land is in use at this time. The only expansion known at this time is the expansion of the city hall.

(e) Transportation/Communication/Utilities

This category contains land occupied by public roads, railroads and utilities. No telecommunication sites greater than one-tenth of an acre are located in the city. Acreage in this category will increase slightly to 110 acres, because the city will encourage developers to make use of current infrastructure.

(f) Park/Recreation/Conservation

This category contains land utilized for active and passive recreational activities. The City of Ludowici has only one acre dedicated to recreational activities. According to the SDS Long County is responsible for recreation. The City of Ludowici does not intend to create recreation sites.

(g) Agriculture/Forestry

Land in this category is dedicated to farming or other rural uses such as pasture and the production of trees for harvesting. The City of Ludowici has 400 acres designated as agriculture/forestry.

(h) Undeveloped/Vacant

Land in this category is not developed. Currently, Ludowici has approximately 98 acres that are not developed. The next twenty-year planning period will see a 24 percent reduction in undeveloped land due to planned development.

Goal and Implementation

Goal 1

Promote Ludowici as an excellent place to live. Ensure the preservation and the improvement of the quality of life that currently exists through the expansion of economic development. Ensure the orderly and efficient development of land, water and other unique resources in and around Ludowici. Preserve our heritage and small town values.

Objective 1.1

The City should make available and schedule for availability public facilities and services for future growth and urban development.

Policy 1.1.1

The City of Ludowici will develop "Land Use Codes" to guide and regulate growth.

Policy 1.1.2

The City should examine the impact of residential, industrial and commercial developments and suggest locations that are appropriate for the intensity level.

Policy 1.1.3

The city should examine the possibility of developing policies to regulate density and intensity levels within the jurisdictional boundaries of Ludowici.

Policy 1.1.4

Ludowici will examine the feasibility of establishing and enforcing special development districts and regulations to promote infill development, for areas targeted for new development.

Policy 1.1.5

The City of Ludowici will maintain a balance between economic development and housing by monitoring and requesting impact statements when appropriate.

Objective 1.2

Ludowici will continue to support and encourage land uses that are supportive of the current and future land use patterns.

Policy 1.2.1

Ludowici will develop instruments to ensure coordination between population densities and land use patterns.

Policy 1.2.2

The City of Ludowici should regulate the location of land development consistent with topography and soil conditions and the availability of facilities and services.

Policy 1.2.3

Ludowici will restrict development within unsuitable areas prone to flooding, improper drainage or other areas as identified within the Part V ordinances.

Objective 1.3

Ludowici should continue to identify and designate blighted areas that are appropriate for redevelopment or renewal.

Policy 1.3.1

Ludowici should request federal and state funds to redevelop and renew any identified blighted areas, where the local government units find there is a competitive feasibility to receive such funding.

Objective 1.4

Ludowici should continue to coordinate, through established processes, with agencies responsible for the implementation of any regional or state resource planning and management plan.

Policy 1.4.1

Ludowici should require that all proposed developments subject to the provisions of any regional or state resource planning and management plan should be consistent with such plan.

Objective 1.5

Ludowici should protect all endangered flora and fauna from adverse impacts due to loss of critical habitat in accordance with state and federal regulations.

Objective 1.5.1

Ludowici should develop land use codes to ensure that development and growth benefits the citizens of Ludowici.

Chapter 7

Intergovernmental Coordination

Comprehensive planning in Georgia depends heavily on coordination among local governments and other local, regional and state agencies. Local governments are autonomous when it comes to planning and land use decisions; however, these decisions can have a great impact on neighboring jurisdictions. For this reason mechanisms are needed to assist in coordination among governments.

One formal coordination mechanism already in place statewide is the provision for review of local governments' comprehensive plans by their regional development center. The regional review function helps identify potential conflicts between the plans of neighboring jurisdictions.

Another formal coordination mechanism established as part of Georgia's Growth Strategies program is the provision for review of Developments of Regional Impact (DRIs).

Both of these mechanisms help identify potential conflicts between communities or adverse impacts of the decisions of one local government on another.

This element provides an opportunity not only to inventory coordination mechanisms that are already in place, like the two named above, but also to identify new mechanisms that may be needed to ensure the successful implementation of the comprehensive plan.

In addition to neighboring local governments, there are many other entities whose plans and programs may affect the implementation of the comprehensive plan. A number of local or regional "special districts" or authorities may be operating within a local government's jurisdiction, such as school boards or water and sewer authorities.

These quasi-public entities have their own plans and make their own decisions on matters very crucial to the implementation of portions of the local comprehensive plan. A prime example is locating facilities, such as schools or infrastructure, that serve the residents and businesses of the community.

Where these facilities are located has a profound impact on the development of the community, which is one of the main topics dealt with in the comprehensive plan, particularly in the Land Use and Community Facilities and Services elements.

The Intergovernmental Coordination element is intended to identify points where additional coordination may be needed in order to plan for more orderly development that is consistent with the desires of the community.

7.1 Inventory of Existing Conditions

This section describes existing coordination mechanisms relating to the local governments, boards and authorities as well as state programs and activities:

7.1.1 Local Governments, Boards and Authorities

(a) Adjacent Local Governments:

To ensure that continued cooperation exists and that a line of communication is always open, local governments and independent authorities have an appointee at each local government unit to attend meetings held by local agencies. Since Long County and Ludowici are close-knit, the sharing of information is common.

The majority of times it is through informal means of communication until an official action is taken and recommended. The informal means are phone calls, faxes, or e-mails and formal means of communications are usually resolutions.

The city and the county have no formal planning agreements. The city does have a city council member appointed to attend county and local authorities meetings. The sole purpose of the contact is to represent the city's interest and to provide information to other entities.

Intergovernmental coordination is required in the following categories:

- ③ The City of Ludowici and Long County each contribute monies to Fire Protection Service Delivery Service. The City of Ludowici contributes \$100 monthly to the fund. Communication is usually informal, but formal letters of support and resolutions are sometimes used.
- ③ The City of Ludowici and Long County have a Library Service Delivery Strategy. The City of Ludowici pays the utilities. Most of the communications are informal.
- ③ The City of Ludowici and Long County have a Courts Service Delivery Strategy. The City of Ludowici provides Municipal Court services to its citizens. The Long County Superior Court system handles all felonies within the county. Most of the communications are informal.

(b) School Boards

Ludowici has an appointee assigned to attend meetings held by the Long County Board of Education. Local government units share information by e-mail, fax and phone. The local school board and local government entities have an informal agreement that calls for coordinated planning to ensure proper use of allotted resources.

(c) Independent Special Districts

No independent special districts or authorities exist in Long County or its respective municipalities at this time.

(d) Independent Development Authorities

One development authority exists in Long County: the Long County Industrial Authority. Communication between the city and the industrial authority is informal but still allows for effective utilization of resources.

In addition, the local government must also inventory other applicable related state programs and activities that are interrelated with the provisions of the local government's comprehensive plan. The purpose of such an inventory is to identify existing agreements, policies, initiatives, etc. that may/will have an effect on the options a local government may want to exercise as part of its comprehensive plan.

7.1.2 State and Regional Programs and Activities

(a) Service Delivery Strategy Law

The “Adjacent Local Governments” section lists SDS elements that are coordinated between local government units. The section “Summary of Land Use Agreements” summarizes the process to resolve disputes when the county disagrees with actions of the Ludowici City Council. The County Commission or its representative will review expansion of water and sewer into new areas of the county. When appropriate, the City of Ludowici will prepare an impact statement for review by the local government units.

(b) Governor’s Greenspace Program

Ludowici has no green space program.

(c) Coastal Management Program

The City of Ludowici does not provide a member to the Coastal Management Program. In 2005, Ludowici had no planned major federal projects, no plans to receive grants or participate in coastal environmental projects. The Coastal Management Program does not affect the Ludowici Comprehensive Plan at this time.

(d) Water Supply and/or Water Quality Protection Plans

Ludowici has adopted the following Part V Environment Ordinance: 1) Wetlands. The city does not have a Soil and Erosion specialist and must rely on the Natural Resources and Conservation Service to review all Land Disturbing Activity Permits.

(e) NPDES Storm Water Program

Ludowici is not required to have a NPDES Permit.

(f) Watershed Protection Plans

No public water supply watersheds exist in Long County.

(g) River Basin Management Plans

No river basins exist within the jurisdictional boundaries of Ludowici.

7.2 Assessment of Current and Future Needs

Ludowici and Long County must address issues or problems with existing coordination mechanisms and/or agreements when discovered.

7.2.1 Issues arising from growth and development

(a) Land use conflicts at jurisdictional borders

Ludowici and Long County have a mechanism in place to resolve land use conflicts (see section 7.1).

(b) Lack of information about the plans, policies, etc. of adjacent communities

Ludowici has an informal working relationship with Long County and other local governments. Communications and cooperation between local government units are excellent. The demonstrated goodwill between local governments rules out a need for formal communication mechanisms.

(c) Service provision conflicts or overlaps

The City and Long County have no services that overlap.

(d) Annexation issues between Ludowici and Long County

Ludowici and Long County have a mechanism in place to resolve annexation issues (see section 7.1).

7.2.2 Adequacy of Intergovernmental Coordination

The assessment revealed no specific problems or needs that would benefit from improved or additional intergovernmental coordination. Currently, the City and Long County use all available information to address development and needs within their respective jurisdictions. The Long County Board of Education coordinates with both local governments to ensure adequate use of resources.

7.2.3 Adequacy of Coordination on State Programs

Ludowici participates in state programs as described in section 7.1. The control mechanisms are formal and ensure compliance with both prescribed and non-prescribed programs.

7.3 Goal and Implementation

Goal 1

Expand intergovernmental relationships with local municipalities, state and federal governmental units and other units of government.

Objective 1.1

Develop policies, cooperative agreements and working relationships promoting intergovernmental cooperation, sharing of information and sharing of services with other governmental units.

Policy 1.1.1

Pursue intergovernmental cooperation when it is cost effective.

Policy 1.1.2

When appropriate and cost effective, promote the sharing of services.

Policy 1.1.3

Participate in committees, groups and organizations promoting intergovernmental cooperation.

Chapter 8 Implementation

The purpose of this element is to provide direction and recommendations for implementation of the City of Ludowici's Comprehensive Plan and for continued planning.

Planning is a continuous process. Completion of the comprehensive plan is by no means an end in itself. The City of Ludowici's Comprehensive Plan is a living document and must be constantly scrutinized to ensure that its goals, objectives and policy statements continue to reflect changing community needs and attitudes. Above all, it must be used.

The comprehensive plan is the community's guide for government officials and citizens in making decisions about land use and development. The Comprehensive Plan is **comprehensive** in the manner that it identifies the myriad of factors related to future community growth; analyzes the relationships between these factors; proposes what needs to be done about them; and recommends **goals and objectives** for using the community's resources in the most efficient and effective ways.

An aggressive, yet realistic, program for implementing the comprehensive plan has been established by the city.

The comprehensive plan is a tool that should be reviewed and updated periodically so that the goals, objectives and policy statements of the Comprehensive Plan are put into action.

Successful implementation of this plan relies on many non-traditional resources. The many hours committed by citizens to shaping the comprehensive plan attest to their desire for attaining their vision for the City of Ludowici.

Perhaps the most important method of implementing the City of Ludowici's Comprehensive Plan comes from the day-to-day commitment by elected and appointed officials, staff members and citizens.

The City of Ludowici's Comprehensive Plan must be understood as a useful and capable tool to direct the city's future. Officials, staff and citizens display the comprehensive plan on the Georgia Department of Community Affairs web site for viewing and reference. The comprehensive plan should continually be referenced in planning studies and zoning case reports as well as informal discussions about the city's future.

High visibility will make the plan successful, dynamic and a powerful tool for guiding future growth. A series of proposed implementation actions were developed after reviewing the goals and objectives described in the plan elements.

These specific steps should be taken to better implement the plan. These actions were synthesized by analysis of the goals and objectives. Some proposals may call for the formation of a new committee, or identify the need for a specific study. In addition to such "new" initiatives, the continuation of ongoing local policies and programs is recommended in many instances.

The following implementation goal will guide the proposed objectives and actions.

- ③ *Encourage the use of the Ludowici Comprehensive Plan as the implementation tool for the City of Ludowici.*

Specific objectives and actions are described in each of the preceding chapters. While the proposed implementation actions are not legally binding like the zoning code and subdivision regulations, the proposals are tremendously important to the plan's successful implementation, and are a vital supplement to its goals, objectives and policies.

The long-range plan is based on planning objectives identified in each individual element.

The Short Term Work Program covers the next five years and is based on the policy statements found in the long-range planning policy statement.

The Short Term Work Program (STWP) update and Report of Accomplishments both deal with specific goals, policies and objectives within the confines of general categories of interest entitled: Housing, Economic Development, Public Facilities and Infrastructure, Natural and Historic Resources, and Land Use. These categories are set forth in the Georgia Planning Act and are the basic elements for all comprehensive planning efforts in the state. In the Report of Accomplishments, several projects not specifically mentioned in the original work program are included to show various unplanned accomplishments. Many of these additional accomplishments helped to set the stage for the new STWP.

The Long Range Work Program covers the years 2005-2014. It is organized by element like the STWP and based on planning objectives identified in each individual element of the comprehensive plan.

Ludowici: STWP Report of Accomplishments 2000-2004

Public Facilities and Infrastructure			
Project	Activity	Status	Explanation
1	Replace old sewer lines	Postponed	Postponed: This activity was continued through 2005. The 2000-2004 STWP was not amended to reflect this activity as being a continuous project. (2005-2009 STWP Projects # 9,10 & 14)
2	Begin local recycling program	Completed	This was a coordinated effort with Long County
3	Replace inadequate sized water lines	Postponed	Postponed: This activity was continued through 2005. The 2000-2004 STWP was not amended to reflect this activity as being a continuous project. (2005-2009 STWP Project # 14)
4	Construct large meeting facility	Not Accomplished	Not Accomplished: Funds were not available to start project.
5	Site & dig new well and install new well pump	Completed	
6	Expand sewer lines to serve all city residents	Not Accomplished	Not Accomplished: Funds were not available to start project.
7	Develop youth center	Not Accomplished	Not Accomplished: Funds were not available to start project.
8	Construct walking trail	Not Accomplished	Not Accomplished: Funds were not available to start project.
9	Pave all city streets	Not Accomplished	Not Accomplished: Funds were not available to start project.
10	Expand volunteer fire dept. facilities	Not Accomplished	Not Accomplished: Funds were not available to start project.
11	Upgrade facilities to meet ADA requirements	Not Accomplished	Not Accomplished: Funds were not available to start project.
12	Re-establish Long County Community Center	Not Accomplished	Not Accomplished: Funds were not available to start project.
13	Build another active recreation park in city	Not Accomplished	Property not available.
14	Support development of nursing home facility	Completed	
15	Improve signage of community structure	Not Accomplished	Along state routes GDOT will enforce state rules and regulations.
16	Expand police dept. facilities	Completed	
17	Construct basketball court at city park	Not Accomplished	Property not available
18	Renovate city hall	Postponed	Postponed: This project was not complete due to lack of funds. This project will be placed on the 2005-2009 STWP Project # 15)

Short Term Work Program 2005-2009

Housing				
Project Number/Policy	Annual Estimated Cost	Funding Source	Implementation Year	Responsibility
1. Policy 1.3.1, 1.3.2 & 1.3.3 Aggressively pursue grants for housing rehabilitation and renewal.	\$100,000	CHIP/CDBG, USDA and HUD grants	2005-2009	City of Ludowici
2. Policy 1.2.1 Provide funding for the building and code enforcement program.	\$3,000	\$1,000 Fees \$2,000 General Funds	2005-2009	City of Ludowici
3. Policy 1.1.1 Develop a Keep Ludowici Beautiful Program.	\$500	General Funds	2005-2009	City of Ludowici
4. Policy 1.1.1 Study the feasibility of a Weed and Seed Program to benefit low-income neighborhoods.	\$500	Federal Grants & General Funds	2005-2009	City of Ludowici
5. Policy 1.3.4(a) Develop an ordinance requiring all homes to be placed on a fixed foundation.	\$2,000	Quality Growth Grant	2007-2008	City of Ludowici

Economic Development				
Project Number/Policy	Annual Estimated Cost	Funding Source	Implementation Year	Responsibility
6. Policy 1.6.1 Provide funding for the Long County/Ludowici Development Authority.	\$500	General Funds	2005-2009	City of Ludowici
7. Policy 1.7.1 Provide funding for programs that attract businesses that are compatible with our goals, natural resources and unique geological features.	\$500	General Funds	2005-2009	City of Ludowici
8. Policy 1.4.2 Provide funding for initiatives that promote the revitalization of the City of Ludowici to support economic growth.	\$1,000	General Funding and Quality Growth Grants	2005-2009	City of Ludowici

Short Term Work Program 2005-2009 (continued)

Community Facilities				
Project Number/Policy	Annual Estimated Cost	Funding Source	Implementation Year	Responsibility
9. Policy 1.4.7 Replace lift station on Bratcher Street	\$50,000	CDBG	2005-2006	City of Ludowici
10. Policy 1.4.7 Replace sewer line in Pecan Park	\$50,000	CDBG	2005-2006	City of Ludowici
11. Policy 1.4.6 Replace two patrol cars	\$42,000	Federal Law Enforcement Grants	2006-2007	City of Ludowici
12. Policy 1.4.8 Develop a joint committee to study the feasibility of a shared Public Safety Center	\$1,000	General Funds	2007-2009	City of Ludowici
13. Policy 1.4.6 Automatic finger print scanner	\$30,000	Federal Law Enforcement Grants	2008-2009	City of Ludowici
14. Policy 1.4.7 Construct new water and sewage lines from the east side of Ludowici to the intersection of US 84 and 57	\$400,000	USDA Grants and Loans, DCA Grants, GEFA Loans and EDA Funds	2007-2009	City of Ludowici
15. Policy 1.4.6 Renovate city hall	\$25,000	General Funds	2007-2009	City of Ludowici

Natural and Historic Resources Element				
Project Number/Activity	Annual Estimated Cost	Funding Source	Implementation Year	Responsibility
16. Policy 1.8.1 Add 4-6 additional properties to existing historic resources. Provide or participate in the placement of such properties on the National Register of Historic Places. Provide or assist with the restoration and productive use (continued or returned) of these properties.	\$1000	General Funds	2005-2007	City of Ludowici

Land Use Element				
Project Number/Activity	Annual Estimated Cost	Funding Source	Implementation Year	Responsibility
17. Policy 1.1.1 Develop Land Use Codes to guide and regulate growth	\$7,500	Quality Growth Grant	2007-2009	City of Ludowici

Short Term Work Program 2005-2009 (continued)

Intergovernmental Coordination				
Project Number/Activity	Annual Estimated Cost	Funding Source	Implementation Year	Responsibility
18. Policy 1.1.1 Purse intergovernmental cooperation when cost effective.	N/A	N/A	2005-2009	City of Ludowici
19. Policy 1.1.2 When appropriate and cost effective promote the sharing of services.	N/A	N/A	2005-2009	City of Ludowici
20. Policy 1.1.3 Participate in committees, groups and organizations promoting intergovernmental cooperation.	N/A	N/A	2005-2009	City of Ludowici

City of Ludowici's 2005-2014 Long Range Work Program

Housing				
Project Number/Policy	Total Estimated Cost	Funding Source	Implementation Year	Responsibility
1. Policy 1.3.1, 1.3.2 & 1.3.3 Aggressively pursue grants for housing rehabilitation and renewal.	\$500,000	CHIP/CDBG, USDA and HUD grants	2005-2014	City of Ludowici
2. Policy 1.2.1 Provide funding for the building and code enforcement program.	\$30,000	\$1,000 Fees \$2,000 General Funds	2005-2014	City of Ludowici
3. Policy 1.1.1 Develop a Keep Ludowici Beautiful Program.	\$5,000	General Funds	2005-2014	City of Ludowici
4. Policy 1.1.1 Study the feasibility of a Weed and Seed Program to benefit low-income neighborhoods.	\$500	Federal Grants & General Funds	2005-2009	City of Ludowici
5. Policy 1.3.4(a) Develop an ordinance requiring all homes to be placed on a fixed foundation.	\$2,000	Quality Growth Grant	2007-2008	City of Ludowici

Economic Development				
Project Number/Policy	Total Estimated Cost	Funding Source	Implementation Year	Responsibility
6. Policy 1.6.1 Provide funding for the Long County/Ludowici Development Authority.	\$5,000	General Funds	2005-2014	City of Ludowici
7. Policy 1.7.1 Provide funding for programs that attract businesses that are compatible with our goals, natural resources and unique geological features.	\$5,000	General Funds	2005-2014	City of Ludowici
8. Policy 1.4.2 Provide funding for initiatives that promote the revitalization of the City of Ludowici to support economic growth.	\$10,000	General Funding and Quality Growth Grants	2005-2014	City of Ludowici

City of Ludowici's 2005-2014 Long Range Work Program (continued)

Community Facilities				
Project Number/Policy	Estimated Cost	Funding Source	Implementation Year	Responsibility
9. Policy 1.4.7 Replace lift station on Bratcher Street	\$50,000	CDBG	2005-2006	City of Ludowici
10. Policy 1.4.7 Replace sewer line in Pecan Park	\$50,000	CDBG	2005-2006	City of Ludowici
11. Policy 1.4.6 Purchase six patrol cars	\$126,000	Federal Law Enforcement Grants	2006-2007, 2010-2011 & 2013-2014	City of Ludowici
112. Policy 1.4.8 Develop a joint committee to study the feasibility of a shared Public Safety Center	\$1,000	General Funds	2007-2009	City of Ludowici
13. Policy 1.4.6 Automatic finger print scanner	\$30,000	Federal Law Enforcement Grants	2008-2009	City of Ludowici
14. Policy 1.4.7 Construct new water and sewage lines from the east side of Ludowici to the intersection of US 84 and 57	\$400,000	USDA Grants and Loans, DCA Grants, GEFA Loans and EDA Funds	2007-2009	City of Ludowici
15. Policy 1.4.7 Construct new water and sewage lines from the west side of Ludowici to the intersection of US 84 and 57	\$400,000	USDA Grants and Loans, DCA Grants, GEFA Loans and EDA Funds	2010-2012	City of Ludowici
16. Policy 1.4.7 Engineering study on the most cost means of increasing pumping capacity	\$50,000	EDA Grant and USDA Grants	2006-2008	City of Ludowici
17. Policy 1.4.6 Renovate city hall	\$25,000	General Funds	2007-2009	City of Ludowici

Natural and Historic Resources Element				
Project Number/Activity	Estimated Cost	Funding Source	Implementation Year	Responsibility
18. Policy 1.8.1 Add 4-6 additional properties to existing historic resources. Provide or participate in the placement of such properties on the National Register of Historic Places. Provide or assist with the restoration and productive use (continued or returned) of these properties.	\$1000	General Funds	2005-2007	City of Ludowici

City of Ludowici's 2005-2014 Long Range Work Program (continued)

Land Use Element				
Project Number/Activity	Estimated Cost	Funding Source	Implementation Year	Responsibility
19. Policy 1.1.1 Develop Land Use Codes to guide and regulate growth	\$7,500	Quality Growth Grant	2007-2009	City of Ludowici

Intergovernmental Coordination				
Project Number/Activity	Estimated Cost	Funding Source	Implementation Year	Responsibility
20. Policy 1.1.1 Purse intergovernmental cooperation when cost effective.	N/A	N/A	2005-2009	City of Ludowici
21. Policy 1.1.2 When appropriate and cost effective promote the sharing of services.	N/A	N/A	2005-2009	City of Ludowici
22. Policy 1.1.3 Participate in committees, groups and organizations promoting intergovernmental cooperation.	N/A	N/A	2005-2009	City of Ludowici