

Joint Warren County Comprehensive Plan

2005 – 2025



Values
Visions
Warren County



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Introduction

Warren County and its incorporated areas of Warrenton, Camak, and Norwood are a mosaic of distinctive places. It is the character of these distinctive places that defines the community’s identity. This identity includes places like Warrenton’s town center, which has long been a major focal point of community interaction and commerce and the community of Jewel, which was once a prosperous mill town. There are also places for those who want a more peaceful and quiet experience, including the Ogeechee Wildlife Management Area as well as numerous cultural landmarks throughout the county.

Plan Setting

Warren County, Georgia’s sixteenth county, was created on December 19, 1793, from portions of Burke, Columbia, Washington and Wilkes counties. Warren County was named in honor of General Joseph Warren. General Warren was a Patriot leader who died during the battle of Bunker Hill. Warren is one of fourteen counties that comprise the Central Savannah River Area and the county is a member of the Central Savannah River Area Regional Development Center (CSRA RDC) located in Augusta. Covering 284 square miles, Warren County is in east central Georgia between Augusta and Atlanta (Fig. 1).

Figure I-1: Warren County Location Map



In 1857, Glascock County was created entirely from Warren County (Ga. Laws 1857, p. 35). Also, portions of Warren County were used to create Jefferson County (1796), Taliaferro County (1825), and McDuffie County (1870).

Warrenton, the governmental seat and commercial center of Warren County, is located in central Warren County. It also was named for General Warren and grew up around a seven-acre plot of land given to the county for a permanent courthouse and jail. Warrenton was incorporated in 1810.

Why Plan?

Successful communities don't just happen; they must be continually shaped and guided. A community must actively manage its land use, infrastructure and resources, and respond to changing circumstances if it is to continue to meet the needs of its residents. Warren County residents value the character and diversity of their jurisdictions, both incorporated and unincorporated, the strong



sense of community, and the breadth of cultural and recreational opportunities available to them. Concern about economic development and jobs, public services, and education are issues that the cities and county have been working on for years. Comprehensive planning, based on good data and public consultation, can help the community address each of these concerns.

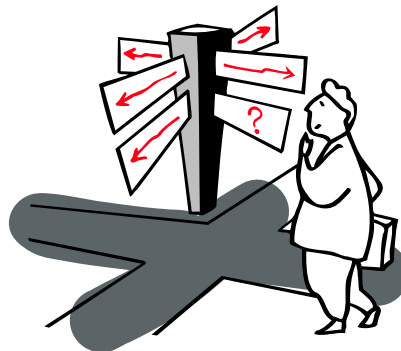
WHAT IS THE COMPREHENSIVE PLAN?

The comprehensive plan is the official guiding document for the future of Warren County. It is designed to formulate a coordinated, long-term planning program for the cities and county. It lays out a desired future, and guides how that future is to be achieved. It serves as a guide to both the public and private sector by providing a picture of how land will develop, how housing will be made available, how jobs will be attracted and retained, how open space and the environment will be protected, how public services and facilities will be provided, and how transportation facilities will be improved. Further, the Plan guides elected and appointed officials as they deliberate community development issues; and conveys policy and intended programs of action to residents. In short, the comprehensive plan is a unified document providing consistent policy direction.

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

How to Use the Comprehensive Plan

The Comprehensive Plan is not, in itself, an implementation tool, but rather a guide to action. It is intended to serve as a reference point for potential users. For example, the Planning Commission or City Council may use the Plan's policies to decide whether to approve a proposed rezoning of land. The Board of Education may use the plan to determine future student enrollment and corresponding facilities expansion. The Tax Assessors' Office may use the plan to estimate future digests.



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



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

Planning Development Process

The comprehensive plan is in the product of extensive local government and citizen involvement through structured workshops and unstructured discussion sessions (Fig. 2).

Advisory Committee

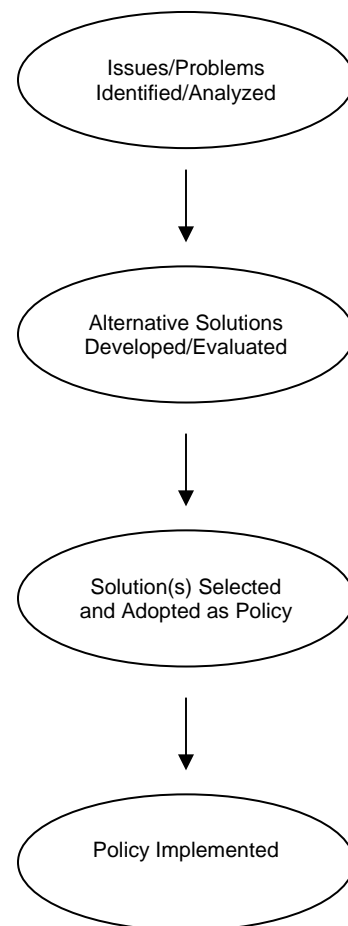
Preparations for the comprehensive plan began with the creation of an Advisory Committee. The primary purpose of the committee was to oversee and assist in the process of drafting the comprehensive plan. The committee was composed of elected and appointed officials and residents from Warren County, Warrenton, Camak and Norwood. The committee’s roles included communicating the concerns of interested groups regarding the development of the cities and county, providing a forum for discussion of differing views; developing statements of the community’s vision and goals, and recommending goals, policies and implementation measures.

During spring of 2003, staff from the CSRA RDC collected background information about the planning area through historical research, site visits, and information gathered from local officials. The Advisory Committee then provided direction and guidance when discussing the various issues raised at public hearings and workshops. Specific plan chapters were then prepared for the various functional elements of the Plan.

Public Consultation

The plan’s development was subject to a comprehensive public involvement process. Public involvement serves to educate community leaders about planning issues and build constituency support, both necessary ingredients for any successful comprehensive plan. Each person at the table represents many others and offers insight on something overlooked by planners. By involving the public as a partner throughout the planning process, the message sent is that people’s ideas matter. And if a known and quantifiable effect on the plan is seen and people feel the plan is theirs, not just something imposed by a regional planning agency, they are likely to become advocates for its implementation.

Figure I-2: Plan Development Process



To kick off the public consultation process, the CSRA RDC sent notices to community groups inviting area residents to a planning workshop held on August 29, 2002. The workshop was also promoted through the area with flyers, public service announcements and in the local newspaper. Over thirty (30) residents responded to this outreach effort and attended the workshops. All workshops were open to the public and participants were encouraged to take part in the discussion and policy formulations.

During the public workshop, participants used the background information gathered by CSRA RDC staff in addition to their personal knowledge and experience of existing conditions to outline areas of concern and future goals for Warren County. Approximately thirty (30) citizens spent the evening examining issues relating to population, economic development, community facilities, housing, and natural resource.

The CSRA RDC staff also facilitated a visioning exercise with members of Leadership Warrenton. This is a group of community leaders, current and future, that participate in a series of workshops learning about various resources available to their community. The Visioning exercise took place over one class period and culminated with the following vision for Warren County:

To promote a community that maintains its small town values with businesses and institutions that enhance the historic aspects and enriches the quality of life of its citizens.

It is with this vision in mind, that this Comprehensive Plan Update has been developed.



Introduction

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

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

The methodology used in population projections greatly affects their outcome. The most simple and least time-consuming method is trend analysis of population change. This method utilized past tendencies to make projections about the future. Cohort component analysis makes estimates based on three (3) main factors affecting population change: birth rate, death rate, and migration. Neither method considers more comprehensive factors affecting population changes.

The Woods & Poole Economics, Inc. method is based on a large computer aggregation that contains historic census data and models population growth on natural increase and migration based on job creation. The model balances projections across the state and the nation so that changes in one region are reflected in another. The planning process requires that one population projection method be consistently used to determine plan requirements. Woods & Poole Economics (2002) projections will be used throughout the comprehensive plan. Where municipal population projections are unavailable, the county growth or decline rate will be used to determine trends.

Plan Setting

Warren County is a rural county covering 284 square miles in eastern Georgia and is located thirty-six (36) miles west of Augusta and one hundred thirteen (113) miles east of Atlanta. Warren County is one of fourteen (14) counties that comprise the Central Savannah River Area (CSRA). The county is a member of the Central Savannah River Area Regional Development Center (RDC) located in Augusta. There are three (3) incorporated cities in Warren County: Warrenton, Norwood and Camak.



POPULATION

The entire southern half of Warren County is an Enterprise Community. Based on census tract analysis and a designation by the federal government, the Enterprise Community classification deems these areas in the county as some of the poorest in the region and thus warranting special attention. Enterprise Communities receive federal funding government to implement new and innovative projects to spur development. Other Enterprise Communities in the area include the northeastern portion of Hancock County and the western portion of Taliaferro County.

Population Growth, 1800s to 1980

Warren County was created on December 19, 1793 by an act of the General Assembly. The new county was formed from portions of Columbia, Washington and Wilkes Counties. Between 1800 and 1850 Warren County's population increased from 10,630 to 12,425, or 16.8%. Railroad expansion had a significant influence on population growth during these years. Like other communities, however, the Civil War brought growth and prosperity to a halt, and by 1940, Warren County's population began a continual decline.

Population since 1980

The 1980s was a period of heavy migration to Georgia from other states. Between 1980 and 2000, Georgia's population grew by 50%, an increase of 2,728,887 new residents. Warren County and the municipalities enjoyed little of the unprecedented state growth. Between 1980 and 1990 total population in Warren County declined from 6,587 to 6,070 or 8.5%. (Table P-1).

Since 1990, the county has seen a mild recovery in population, increasing by about two percent every five years. By 1995, the county regained 2.16% of the population lost during the 1980's. The period of 1990 to 1995 saw Georgia's peak population growth at 11.16%. Likewise, the national population grew by 6.25% during that era. Thus, Warren County's 2.16% increase was relatively low.

Warrenton's population has declined continually in the past two decades, decreasing from 2,374 in 1980 to 2,013 in 2000 (Table P-1). Norwood's population increased from 275 in 1980 to 299 in 2000. Population growth in Norwood has averaged 5% every five-year period (Table P-1). Camak's population increased from 118 in 1980 to 165 in 2000 and is the only jurisdiction in Warren County to record continuous increases in population (Table P-1).



POPULATION

Table P-1

Warren County and Cities Total Population, 1980-2025

	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
Warren Co.	6,587	6,431	6,070	6,201	6,340	6,422	6,539	6,614	6,731	6,901
Warrenton	2,347	2,316	2,257	2,135	2,013	2,039	2,076	2,100	2,137	2,191
Norwood	275	257	238	269	299	304	309	313	319	327
Camak	118	157	196	181	165	167	170	172	175	179

Source: Woods & Poole, 2002 and CSRA RDC

Table P-2

Warren County and Cities Population Change, 1985-2025

	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
Warren Co.	N/A	-2.3%	-5.6%	2.1%	2.2%	1.3%	1.8%	1.1%	1.7%	2.5%
Warrenton	N/A	-2.4%	-2.5%	-5.4%	-2.2%	1.3%	1.8%	1.1%	1.7%	2.5%
Norwood	N/A	-6.5%	-7.3%	13.0%	11.1%	1.3%	1.8%	1.1%	1.7%	2.5%
Camak	N/A	33.0%	24.8%	-7.6%	-8.8%	1.3%	1.8%	1.1%	1.7%	2.5%

* N/A = Not Available

Source: Woods & Poole, 2002 and CSRA RDC

Total population in Warren County and the municipalities is projected to increase 8.8% through 2025 (Table P-2), in line with the rural CSRA growth rate of 10.5% but significantly lower than the state (+35.9%) and national (+27%) averages.

Households

Household growth change varies from jurisdiction to jurisdiction in Warren County. The total number of households in Warren County has increased by 315 from 2,127 in 1980 to 2,442 in 2000 (Table P-3). Total number of households is projected to increase by an additional 218 to 2,660 by 2025. Average household size in Warren County has declined through in the past two decades, from 3.05 in 1980 to 2.55 in 2000, and is projected to decline to 2.53 by 2025 (Table P-4).

The number of households in Warrenton increased from 730 in 1980 to 816 in 2000 (Table P-3). An additional 73 households is projected through 2025. Average household size declined from 3.0 in 1980 to 2.45 in 2000, and is projected to decline to 2.43 by 2025. (Table P-4).

The number of households in Norwood increased from 119 in 1980 to 126 in 2000 (Table P-3). An additional 12 households is projected through 2025. Average household size declined from 2.9 in 1980 to 2.37 in 2000, and is projected to decline to 2.43 by 2025. (Table P-4).

The number of households in Camak decreased from 91 in 1980 to 71 in 2000 (Table P-3).). An additional 6 households is projected through 2025. Average household size declined from 3.1 in 1980 to 2.32 in 2000, and is projected to decline to 2.43 by 2025. (Table P-4).



POPULATION

Table P-3

Warren County and Municipalities Total Households, 1980-2025

	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
Warren Co.	2,127	1,987	2,143	2,270	2,442	2,505	2,562	2,610	2,641	2,660
Warrenton	730	733	736	776	816	838	856	872	882	889
Norwood	119	103	87	107	126	129	132	135	137	138
Camak	91	84	76	74	71	73	75	77	78	79

Source: U.S. Bureau of the Census, Woods & Poole (2002) and CSRA RDC

Table P-4

Warren County and Municipalities Average Household Size, 1980-2025

	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
Warren Co.	3.05	3.18	2.78	2.68	2.55	2.51	2.50	2.48	2.49	2.53
Warrenton	3.00	2.83	2.65	2.55	2.45	2.41	2.40	2.38	2.39	2.43
Norwood	2.90	2.82	2.74	2.56	2.37	2.33	2.32	2.30	2.31	2.35
Camak	3.10	3.00	2.89	2.60	2.32	2.28	2.28	2.26	2.27	2.31

Source: U.S. Bureau of the Census, Woods & Poole (2002) and CSRA RDC

Age

Table P-5 presents historical trends and projections in the age distribution of Warren County and municipalities residents. Overall, there are no significant differences in the distribution of ages between the county and cities. Across jurisdictions, there has been a continual decline of residents in different age groupings from 0 to 34 years old (-21.2%). A decline in the 25 to 34 years old group is almost always correlated with a decline in lower age groups since they account for most of the children residents. Through 2025, the same age groups will account for most of the population growth in Warren County and the municipalities (+15.9%).

Table P-5

Warren County and Municipalities Age Distribution, 1980-2025

	Warren County									
	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
Age 0-4	514	517	507	495	433	512	520	517	522	541
Age 5-14	1158	1045	960	986	940	884	947	1022	1029	1050
Age 15-24	1143	1008	934	784	850	916	903	842	899	989
Age 25-34	903	936	875	792	704	735	832	478	854	813
Age 35-44	597	701	790	910	913	775	682	716	801	862
Age 45-54	640	584	463	685	865	935	885	750	662	695
Age 55-64	657	634	549	533	616	696	786	853	814	693
Age 65+	1083	1121	1105	1178	1182	1150	1182	1245	1365	1481



POPULATION

Warrenton

	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
Age 0-4	219	204	189	174	159	188	185	184	186	193
Age 5-14	331	325	319	293	267	252	270	301	304	337
Age 15-24	468	411	354	340	326	351	345	317	337	371
Age 25-34	324	325	325	266	207	216	242	138	246	234
Age 35-44	215	250	286	286	286	243	218	229	255	274
Age 45-54	230	216	201	219	236	254	241	205	183	192
Age 55-64	236	200	165	177	189	213	238	217	206	176
Age 65+	351	385	418	384	350	341	351	369	406	440

Norwood

Age 0-4	25	13	0	16	31	37	38	38	38	39
Age 5-14	38	20	0	18	34	32	35	38	38	39
Age 15-24	54	28	0	30	60	65	64	59	63	69
Age 25-34	37	15	0	8	16	17	19	11	19	18
Age 35-44	25	20	15	43	71	60	53	56	62	67
Age 45-54	27	14	0	21	42	45	42	35	31	33
Age 55-64	28	15	0	7	14	16	18	20	19	16
Age 65+	41	44	46	55	63	61	64	67	73	79

Camak

Age 0-4	11	13	14	12	7	8	8	8	8	8
Age 5-14	16	27	38	27	16	13	14	15	15	16
Age 15-24	23	29	34	28	21	23	22	20	21	23
Age 25-34	16	20	23	30	36	38	42	19	33	32
Age 35-44	11	16	21	14	6	5	4	4	4	5
Age 45-54	11	10	8	28	48	52	49	41	37	39
Age 55-64	12	17	21	12	2	3	4	4	4	3
Age 65+	18	28	37	34	40	38	39	44	48	52

Source: U.S. Bureau of the Census, Woods & Poole (2002) and CSRA RDC

Race

In 2000, the population of Warren County was comprised of 39.5% white, 59.5% black, 0.8% Hispanic, 0.1% Asian or Pacific Islander, and 0.3% Native American (Table P-6). Between 1980 and 2000, the proportional population of all racial groups has remained relatively constant. Through 2025, however, the black population will increase by 22.3% while the white population will decline by 14.3%.

In Warrenton, the black population has increased from 59.5% to 69.4% between 1980 and 2000 while the white population has declined from 40.1% to 29.4%. The city's Hispanic population has declined from 1.6% to 0.7% between 1980 and 2000. While no race projections are available for Warrenton, this trend is expected to continue through 2025.



POPULATION

The percentage of non-white residents in Norwood increased from 59.6% of the population in 1990 to 62.5% of the population in 2000. In Camak, the black and white populations have increased 25.7% and 89.5% respectively between 1980 and 2000.

Table P-6

Warren County and Municipalities Racial Composition, 1980-2000

Warren County										
	1980	%	1985	%	1990	%	1995	%	2000	
Black	3,923	59.5%	3,790	59.8%	3,657	60.2%	3,742	59.8%	3,783	59.4%
White	2,646	40.1%	2,524	39.8%	2,402	39.5%	2,395	39.5%	2,487	39.4%
Hispanic	105	1.5%	54	0.7%	2	0.0%	38	0.4%	51	0.8%
Native	6	0.0%	4	0.0%	2	0.0%	10	0.1%	11	0.2%
Asian & Pacific Isl.	0	0.0%	4	0.1%	7	0.2%	16	0.2%	8	0.2%

Warrenton										
	1980	%	1985	%	1990	%	1995	%	2000	
Black	1,413	59.5%	1,434	61.9%	1,455	64.4%	1,426	66.9%	1,397	69.4%
White	954	40.1%	730	37.5%	791	35.0%	692	32.2%	592	29.4%
Hispanic	38	1.6%	19	0.8%	0	0.0%	7	0.4%	14	0.7%
Native	2	0.0%	1	0.0%	0	0.0%	3	0.1%	5	0.2%
Asian & Pacific Isl.	0	0.0%	6	0.2%	11	0.5%	7	0.3%	3	0.2%

Norwood										
	1980	%	1985	%	1990	%	1995	%	2000	
Black	164	59.6%	145	59.9%	117	60.2%	152	61.3%	187	62.5%
White	111	40.3%	116	39.9%	121	39.6%	117	38.5%	112	37.4%
Hispanic	4	1.4%	2	0.7%	0	0.0%	1	0.3%	2	0.6%
Native	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Asian & Pacific Isl.	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%

Camak										
	1980	%	1985	%	1990	%	1995	%	2000	
Black	70	59.3%	92	46.4%	114	33.6%	101	43.4%	88	53.3%
White	48	40.6%	77	53.4%	106	66.3%	91	56.1%	76	46.0%
Hispanic	2	1.6%	1	0.8%	0	0.0%	0	0.0%	0	0.0%
Native	2	0.0%	1	0.0%	0	0.0%	0	0.0%	1	0.6%
Asian & Pacific Isl.	2	0.0%	1	0.0%	0	0.0%	0	0.0%	0	0.0%

Source: U.S. Bureau of the Census, and CSRA RDC



EDUCATION

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

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

Educational Attainment

Educational attainment in Warren County has continually improved since the 1980’s. In 1980, 68% of Warren County residents over the age of 25 had not completed high school (Table P-7). By 2000, this percentage had dropped to 42%. The number of citizens aged 25 or higher completing high school or some college has risen from 23% in 1980 to 47% in 2000. The percentage of residents completing four or more years of college reached 8% in 2000. The level of education in the county, however, is still far below the state average, with nearly 25% of Georgians over the age of 25 completing four or more years of college in 2000 (Fig. P-1).

The figures for the cities in Warren County are comparable to county figures (Table P-7, Fig P-2). All the incorporated cities in Warren County show a higher percentage of population not completing high school than the state average. Likewise, the percentage of population completing four or more years of college is lower in Warrenton, Camak, and Norwood than the state average. Camak shows no percentage of population over the age of 25 as having completed four or more years of college.

Table P-7
Warren County and Municipalities Educational Attainment, 1980-2000

	1980			
	Warren Co	Warrenton	Norwood	Camak
Less than 9th grade	45.93%	N/A	N/A	N/A
9th to 12th grade (no diploma)	22.86%	N/A	N/A	N/A
High School graduate	19.75%	N/A	N/A	N/A
Some college (no degree)	3.91%	N/A	N/A	N/A
Associate degree	N/A	N/A	N/A	N/A



POPULATION

Bachelor's degree	7.55%	N/A	N/A	N/A
Graduate or Professional Degree	N/A	N/A	N/A	N/A

1990

Less than 9th grade	31.33%	37.60%	36.39%	37.08%
9th to 12th grade (no diploma)	25.90%	31.02%	32.22%	31.46%
High School graduate	30.30%	35.71%	N/A	48.31%
Some college (no degree)	6.67%	10.91%	N/A	3.37%
Associate degree	1.61%	1.98%	N/A	3.37%
Bachelor's degree	3.01%	6.94%	N/A	0.00%
Graduate or Professional Degree	1.19%	1.62%	N/A	0.00%

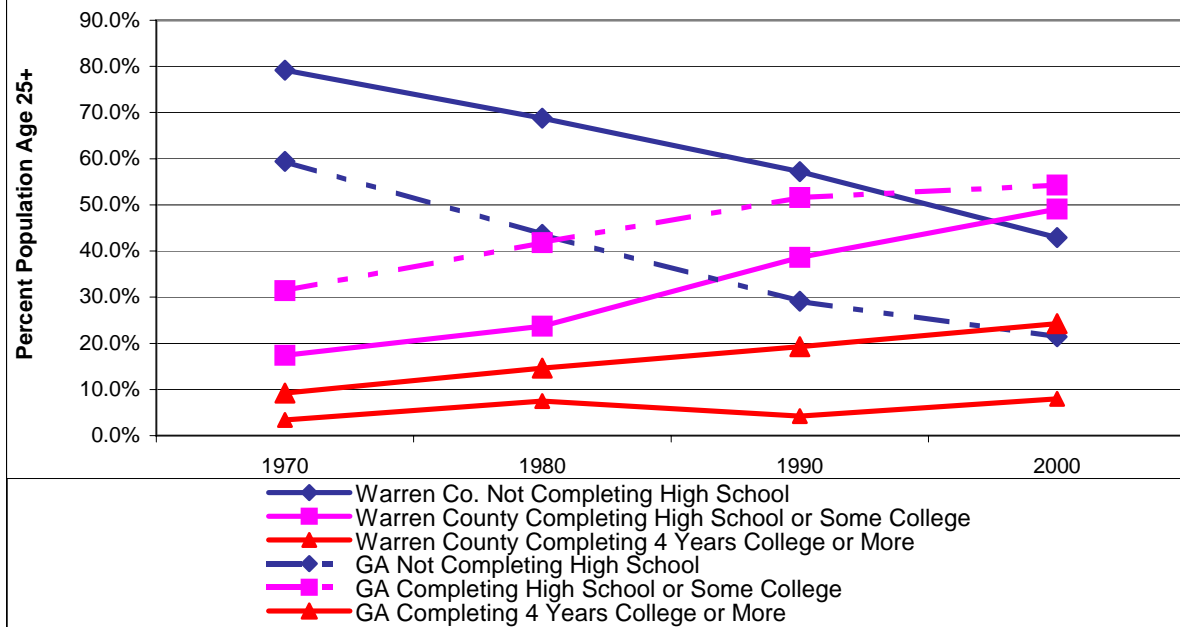
2000

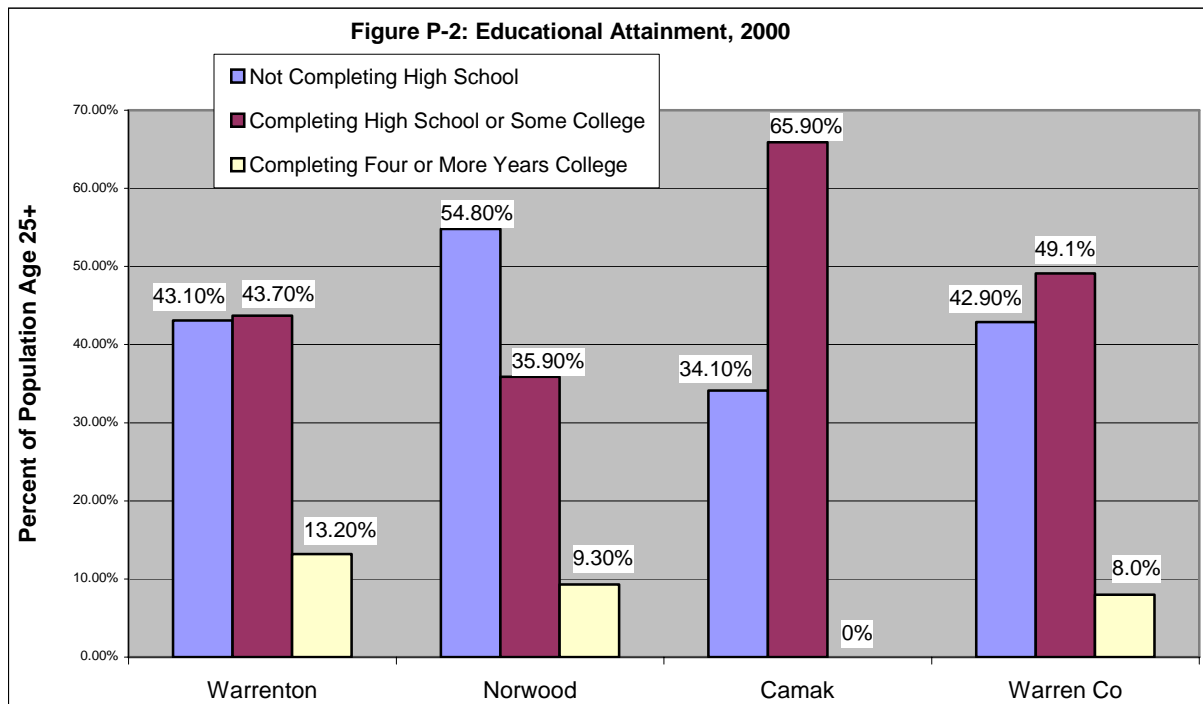
Less than 9th grade	20.02%	19.48%	28.64%	17.42%
9th to 12th grade (no diploma)	22.90%	23.58%	26.21%	16.67%
High School graduate	34.70%	29.81%	29.61%	56.06%
Some college (no degree)	12.41%	12.07%	2.91%	9.85%
Associate degree	2.02%	1.81%	3.40%	0.00%
Bachelor's degree	5.57%	9.78%	4.85%	0.00%
Graduate or Professional Degree	2.39%	3.47%	4.37%	0.00%

* N/A = Not Available

Source: U.S. Bureau of the Census

Figure P-1: Educational Attainment, 1970-2000





The education level of the Warren County population is more comparable to that of other rural counties in the CSRA than it is with statewide figures (Fig. P-3). At 42%, it is the second-highest county in the region in percentage of population aged 25 or higher that has less than a 9th grade education. This is significantly higher than the state average of 7.6%. For the population percentage with a high school degree or higher, Warren County is at 57.1%, which is slightly lower than the CSRA average of 66.49%, and lower than the Georgia state average of 78.6%. The percentage of population with a Bachelor’s degree or more in Warren County is 8%, while the CSRA average is 11.95%, and the state average is 24.3%.

There has been a continual decline in the percentage of Warren County high school graduates attending Georgia public colleges and technical schools since 1995 (Table P-8).



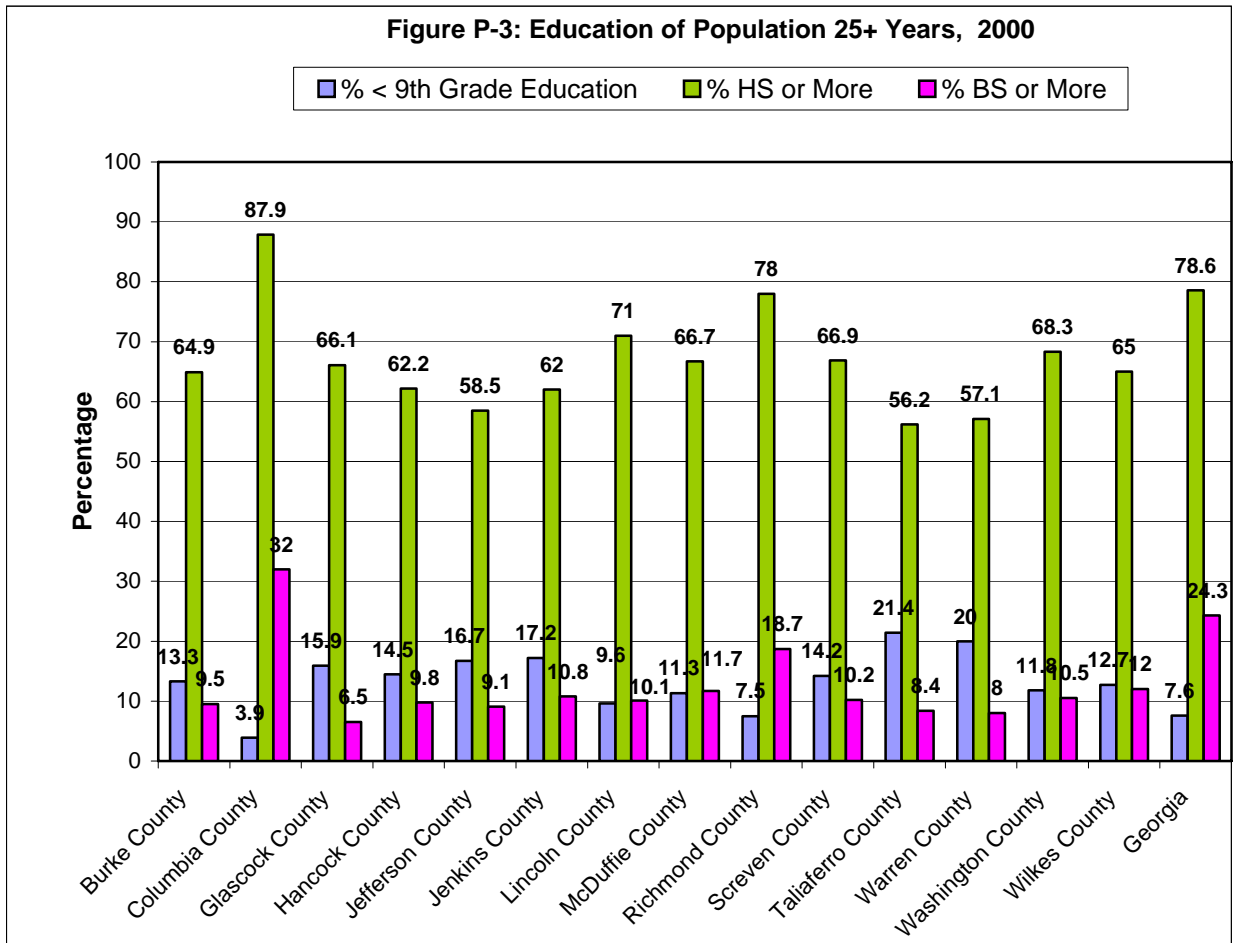


Table P-8

High School Grads Attending Post-Secondary Education

	Georgia Public Colleges						
	1995	1996	1997	1998	1999	2000	2001
Warren County	N/A	25.4%	18.8%	16.1%	19.6%	N/A	N/A
Georgia	35.0%	30.0%	30.2%	38.8%	37.5%	37.3%	36.1%

	Georgia Public Tech Schools						
	1995	1996	1997	1998	1999	2000	2001
Warren County	26.9%	22.2%	12.5%	17.9%	16.1%	14.3%	N/A
Georgia	5.4%	6.2%	7.1%	6.5%	6.4%	7.4%	8.8%

* N/A = Not Available

Source: Georgia Department of Education

High School Graduation Test Scores

High School graduation test scores decreased slightly in Warren County from 1995 to 2001, mirroring trends elsewhere in the state (Figure P-4, P-5). Overall, test scores



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have stayed about 25% lower in Warren County than the state average. In 2001, however, test scores were only 12% behind the state average. Warren County scores have remained consistently lower than neighboring counties. Within the CSRA, only Hancock County has scores consistently below those of Warren County.

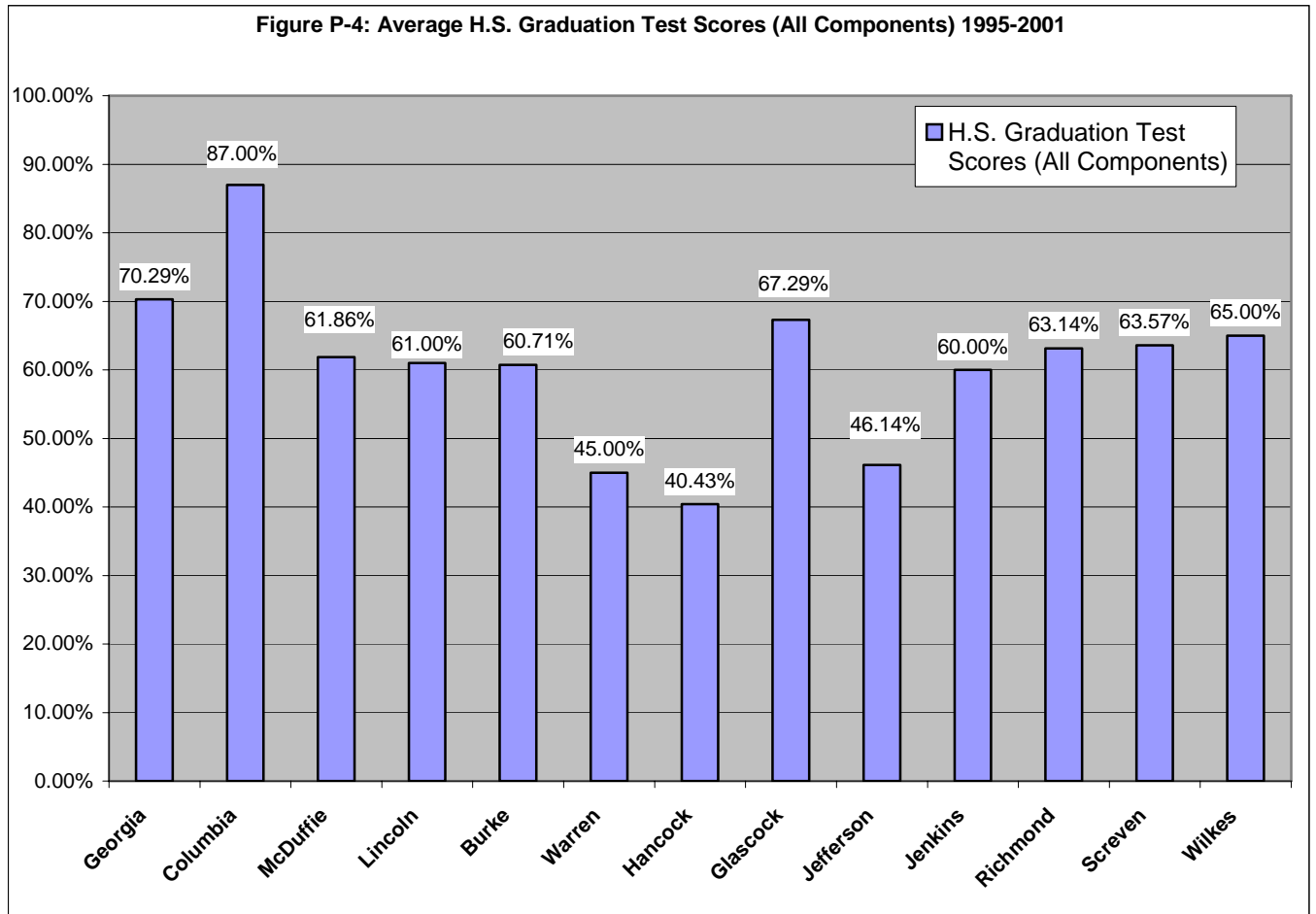
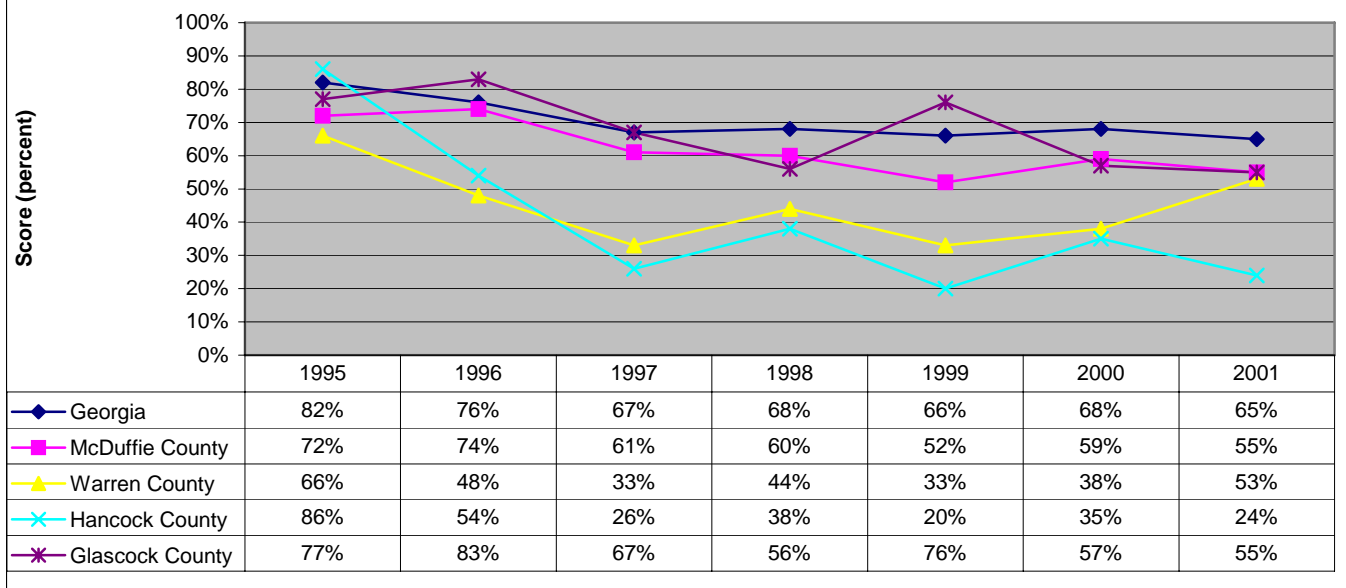


Figure P-5: HS Graduation Test Scores from Selected CSRA Counties and Georgia, 1995-2001



High School Dropout Rate

The high school dropout rate in Warren County declined from 1995 to 2001 (Fig. P-6). This trend was seen in Georgia as a whole, as well as in McDuffie County and Glascock County. Hancock County's dropout rate has fluctuated between two (2) and eight (8) percent from 1995 to 2001 (Fig. P-7). Warren County's dropout rate is lower than that of McDuffie County, and higher than those of Glascock County and Hancock County. The overall average of the dropout rates from 1995 to 2001 for Warren County was 7.61%, only slightly higher than the state average of 7.29%. The overall average dropout rate for the CSRA from 1995 to 2001 was 7.08%.



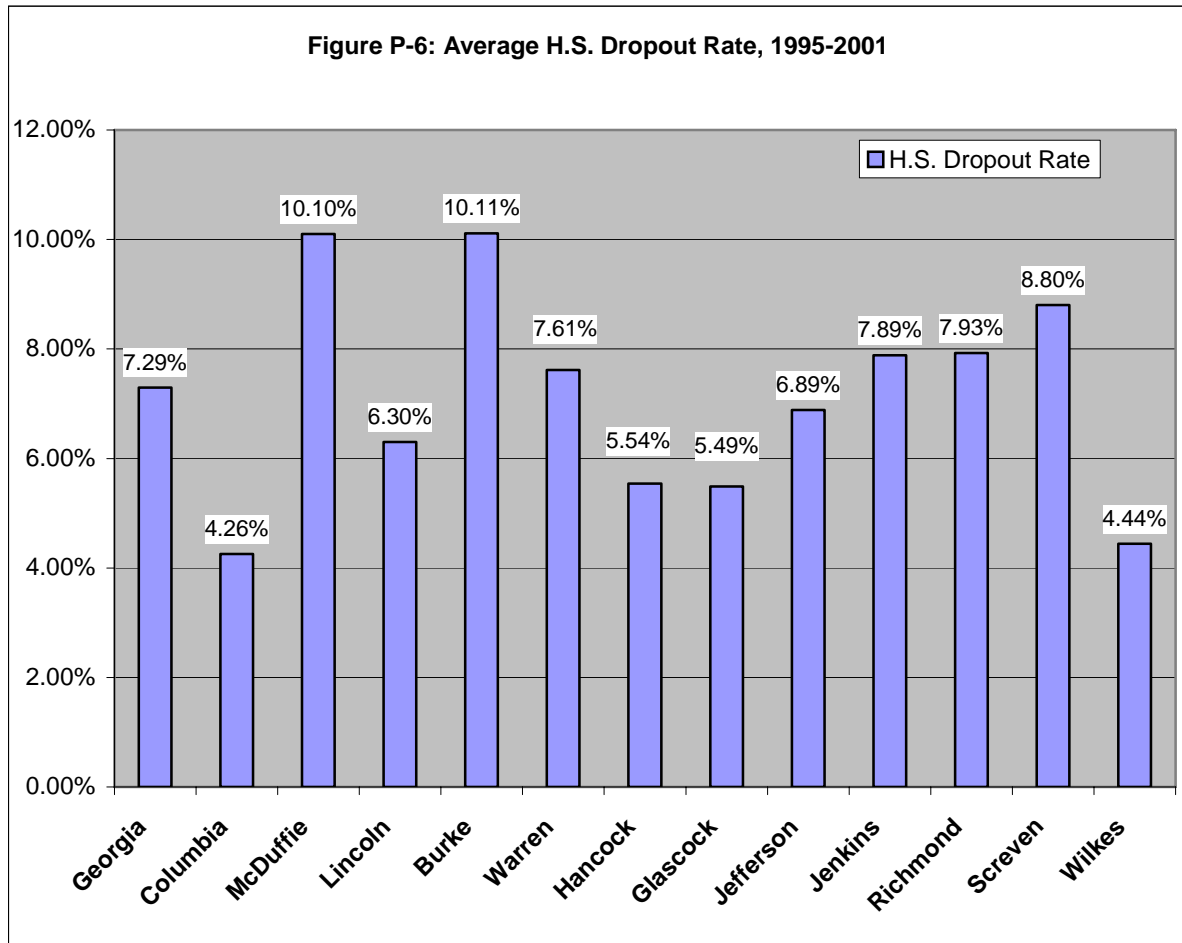
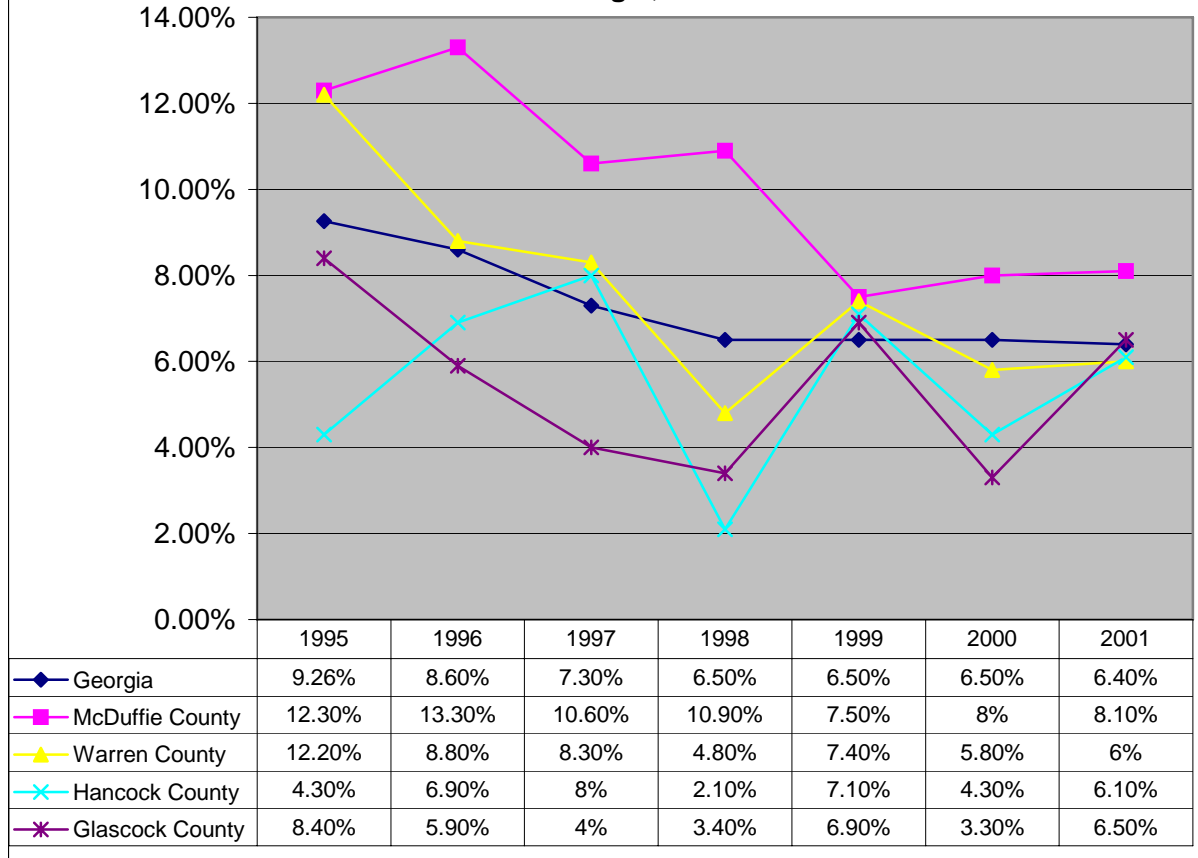


Figure P-7: High School Dropout Rate for Selected CSRA Counties and Georgia, 1995-2001



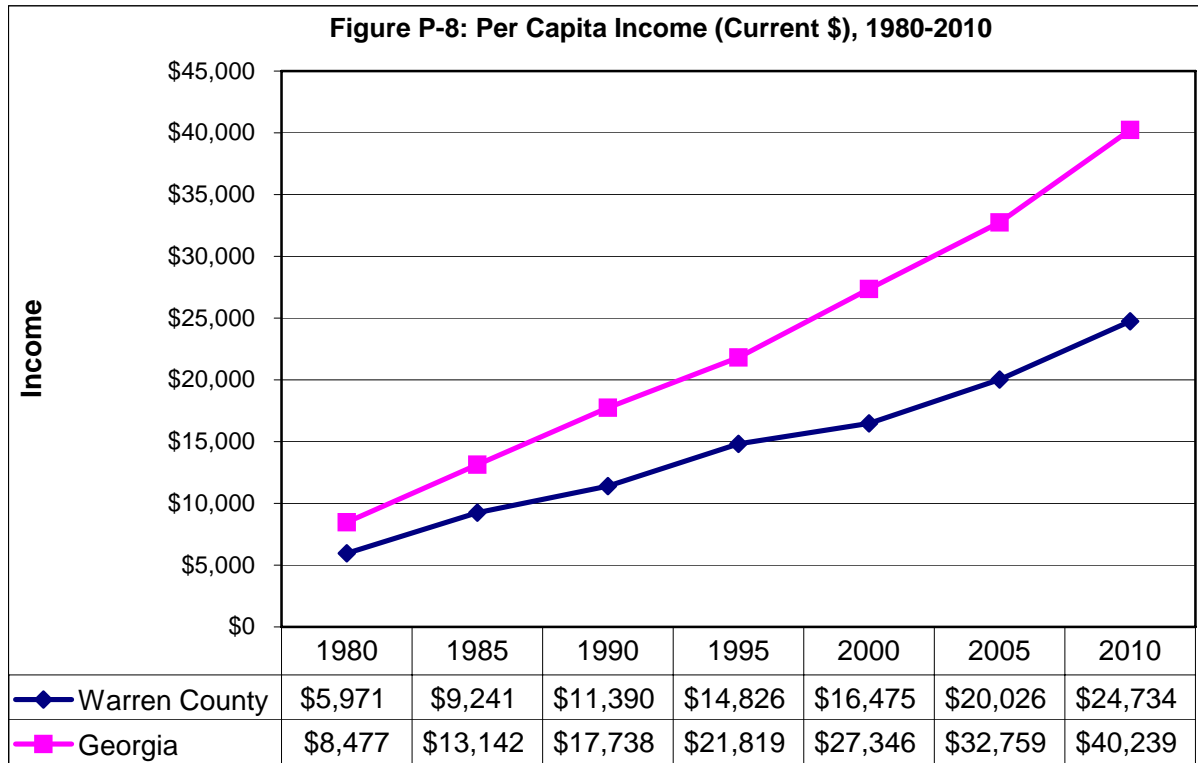
INCOME

Per Capita and Median Household

The per capita income in Warren County has risen slightly since 1980, from \$5,971 to \$16,475 in 2000 (current dollars) (Fig. P-8). It is expected to increase further to \$24,734 by 2010. This is in contrast to the state per capita income, which was \$8,477 in 1980 and increased to \$27,346 by 2000, and is expected to increase to \$40,239 by 2010. Although both the county and the state per capita incomes are expected to rise, the state income will rise much more dramatically than the county income. Only \$3,000 higher than the Warren County per capita income in 1980, the Georgia per capita income is expected to be \$16,000 higher than the Warren County per capita income by 2010.

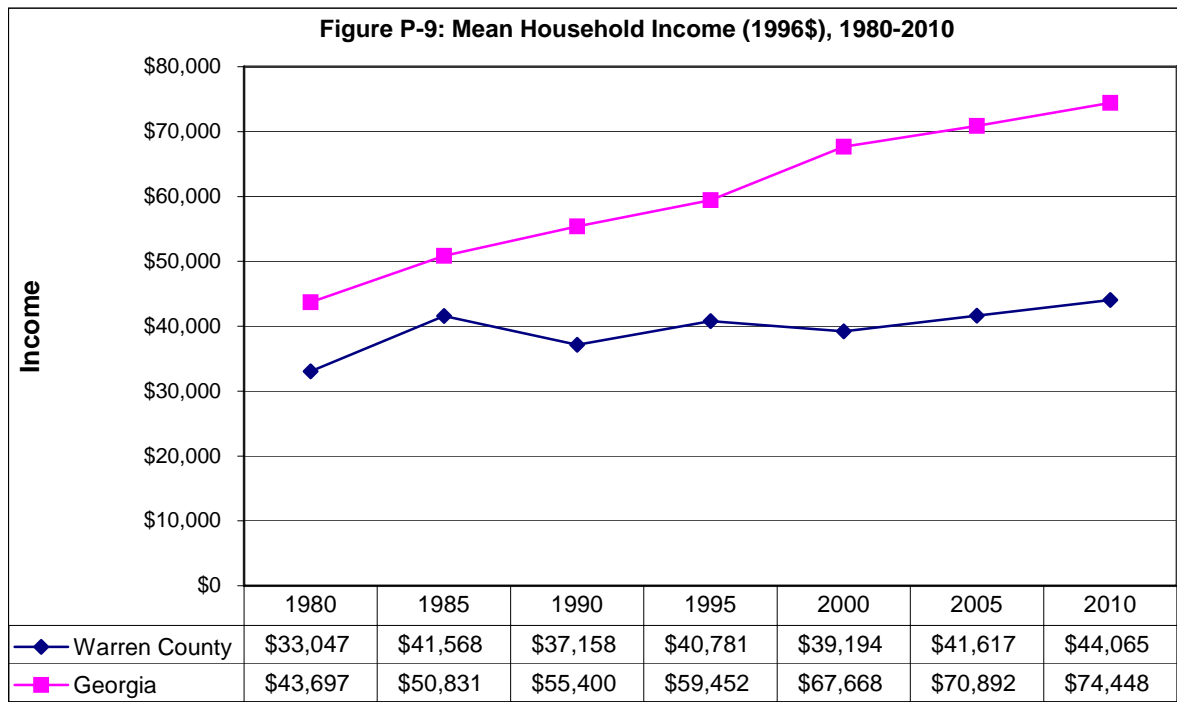
The County has a higher per capita and median household income than Warrenton, Camak, and Norwood for 2000. In 1990, however, both Warrenton and Camak had a higher per capita income than Warren County. Norwood has maintained its status as the lowest in per capita income and median household income since 1990. For the county and the three cities, however, the per capita income and median household income have remained far below the state average.





The same trend can be seen with the mean household income: both the county and state mean household incomes rose from 1980 to 2010, but the state mean rose much more rapidly than the county mean (Fig. P-9). In 1980, the Warren County mean household income was \$33,047 (in 1996 dollars), and the Georgia mean household income was \$43,697, over \$10,000 higher. By 2000, the Warren County mean was \$39,194 and the Georgia mean was \$67,668, a difference of close of \$28,000.



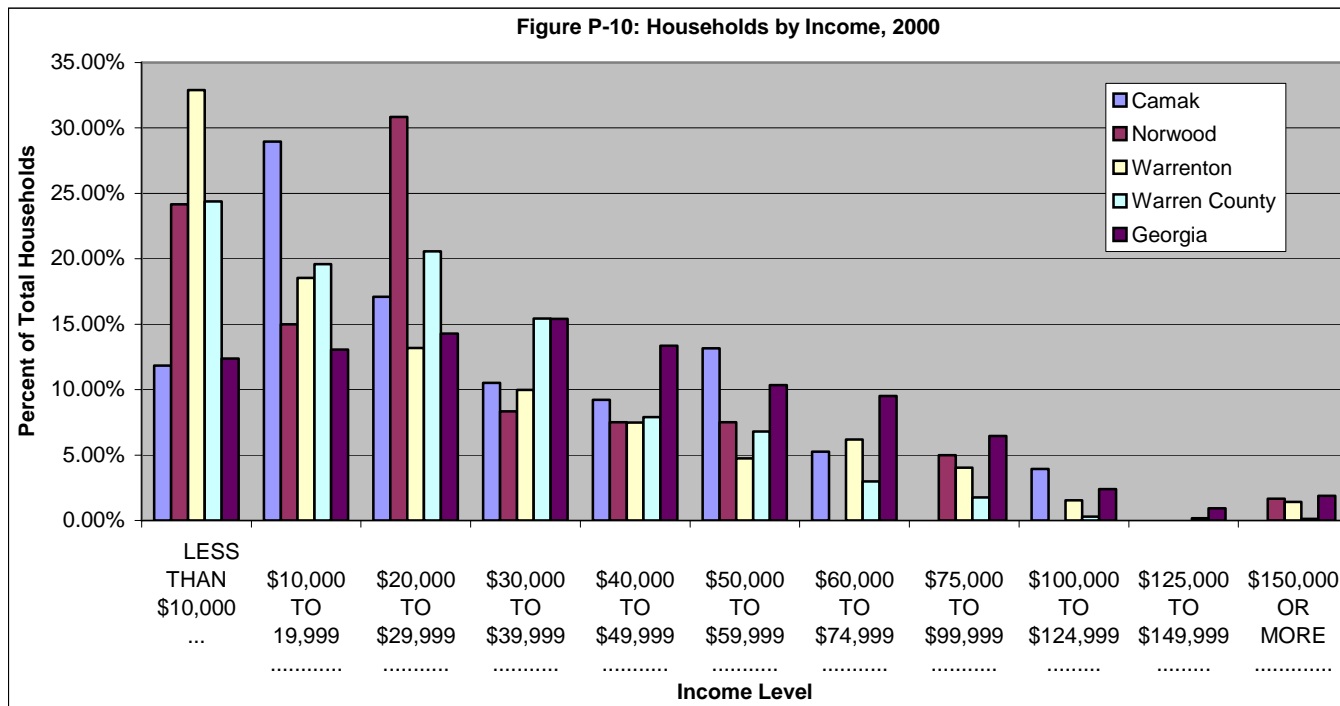


Distribution of Households By Income

The distribution of households in Warren County is predicted to see a move from the majority of households earning less than \$10,000 per year in 1990 to the majority of households earning between \$30,000 and \$39,999 by 2010. This coincides with the predicted increase in education levels of the citizens in Warren County.

In 2000, the state’s largest income bracket was \$30,000 to \$39,999 (Fig. P-10). This is higher than Warren County, Warrenton, Camak, and Norwood. Both Warrenton and Warren County had the largest population in the less than \$10,000 bracket, while Camak had more households in the \$10,000 to \$19,999 bracket. Norwood had the largest proportion of households in the \$20,000 to \$29,999 bracket.





In 2000, 24.1% of Warren County families fell below the poverty level, and 32.9% of those had children under the age of 18. These are alarming figures, considering that statewide, only 9.9% of families fell below the poverty level, and only 13.9% of those had children under 18. The percentage of people in poverty has decreased overall for Warren County, Camak, and Warrenton, but the percentage of families with children in poverty has increased throughout the county except Camak. In Norwood in the 1990 census, no families were reported as being below the poverty line, but 49% of the individuals in the city were listed as such.

Assessment

Population

Warren County and Warrenton have undergone gradual population decline since 1980, dropping 3.7% and 14.2% respectively. This contrasts with significant population growth rates for the CSRA region, the state and the nation. Between 1980 and 2000, the CSRA population increased by 21.5% while the non-urbanized portions of the CSRA (excludes Richmond and Columbia Counties) increased by 7.2%. The state and national population increased by 50% and 25.1% respectively during that same period.

Population loss often mirrors a general decline in total employment. In Warren County, however, the local economy as a whole strengthened during phases of population loss. Between 1980 and 1990, the period of the most significant population loss in Warren County (-6.6%), total employment increased 5.9%. Statewide employment increased



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34.3% during that same period. Furthermore, the unemployment rate declined significantly between 1980 and 1990, and commuting patterns remained relatively unchanged.

Explaining population loss requires examining specific segments of the Warren County population. Population loss since 1980 occurred primarily in the 15 to 24 age group. The number of residents in this age group declined 25.6% in Warren County and 30.3% in Warrenton, a net loss of hundreds of residents in an already small rural community. The past and current structure of the Warren County economy, largely dominated by manufacturing and lower paying service jobs, explains the exodus of younger people. In 1999, the last year for which complete Georgia Department of Education data for Warren County is available, over 35.7% of high school graduates attended Georgia public colleges and technical colleges. This figure does not include out-of-state or private Georgia colleges. For younger residents entering the workforce after college, there is a mismatch between their education and the type of jobs available in the community. In short, there is little incentive for younger residents to return to Warren County and the municipalities after completing post-secondary education.

Total population in Warren County and the municipalities is projected to increase 8.8% through 2025, in line with the rural CSRA growth rate of 10.5% but significantly lower than the state (+35.9%) and national (+27%) averages. A significant portion of that growth will come from the 15-24 years old group (+16.3%). Again, the structure of the economy explains the trend. The fastest growing employment sectors in Warren County are projected in high technology sectors such as transportation, communications & public utilities (+121.7%) and financial services & real-estate (+26.3%). Projected growth in these employment sectors correlated with the growth of the 15-24 years old age group. Should this projection hold true, it will provide college and technical school graduates an opportunity to return and work in Warren County.

Negative or small population growth rates in Warren County and the municipalities since 1980 reflects the challenges many rural areas face. Statewide population growth rates disproportionately reflect Georgia's large metro areas. In the absence of bordering one of the state's large metro areas to serve as a bedroom community, rural counties such as Warren cannot keep up with statewide population growth rates. This holds true for future population growth rates as well. Job opportunities, services, and convenience offered by large metro areas will continue to attract new residents and be reflected in statewide figures.

Households

The number of households in Warren County and the municipalities has increased an average 14% since 1980. This rate is above at the CSRA rate of 9.9% but well below household growth rates for the state (60.2%) and the nation (30.9%). Through 2025, the number of households in Warren County and the municipalities will increase by 8%, a relatively low growth rate compared to state (35.9%) and national (27.3%) averages.



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Household growth in Warren County and the municipalities has increased at substantially higher rates than the total population. Growth in total households necessitates a corresponding increase in the housing supply to ensure housing meets the community's needs. Between 1980 and 2000, the housing supply in Warren County and Warrenton increased by 31.3% and 18.8% respectively. Housing growth has thus outpaced growth in total households, ensuring a sufficient supply of housing.

The increase of total households relative to a stagnate population in Warren County and the municipalities can be viewed through the lens of declining average household size. Average household size has declined by .50 between 1980 and 2000, highlighting an increasing trend towards smaller family sizes. By contrast the state and national average household size declined by .18 and .15 respectively. Given the smaller overall population of Warren County, the Warren-state/national household size differential is not significant. Through 2025, average household size throughout Warren County and the municipalities will stabilize and approach state and national levels.

Age

Throughout Warren County and the municipalities, middle age and senior population groups accounted for most of the population growth since 1980, in line with CSRA, state, and national trends. This growth was not high enough, however, to compensate for the loss of younger age groups in Warren County. In other parts of the CSRA, the state and the nation, younger age groups are growing in proportion to senior age groups, ensuring population growth across all age groups.

Through 2025, 0 to 34 years old age groups will increase by 16.3% while the 65+ age groups will account for 25.2% of the growth. The 35-54 age groups, the backbone of the Warren County economy, will decline by 12.4%. While the workforce will become younger, local governments will have to support an aging population that will increasingly be dependent on non-wage sources of income. From a housing and community facilities perspective, future projects and planning will need to take these demographic shifts into account.

Race

In Warren County, Norwood, and Camak, the percentage of residents by race has remained relatively constant since 1980. In Warrenton, however, the black population has increased by 10% while the white population has decreased by an equivalent rate. In absolute numbers, neither population is growing: white residents are leaving Warrenton at a faster rate. The exodus of younger age groups has been more pronounced among the white population and has shifted the city's racial balance. Over the next twenty years, however, the black population will grow at a faster rate than all other racial groups. Through 2025, the countywide black population will rise to 67% while the white population will decline to 30.8%.



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Past, current and future race demographics in Warren County and the municipalities run contrary to state and national trends, which project, as a share of total population, a declining white population, an unchanged black population and a growing Hispanic population. Whereas the Hispanic population will account for 8.9% of total population in Georgia and 19.2% nationally by 2025, in Warren County and the municipalities, the Hispanic population will not exceed 2%.

Education

Education Attainment

Education attainment in Warren County and the municipalities has continually improved in the past twenty years but lags behind neighboring jurisdictions and the state. In 2000, 42.9% of Warren County residents did not graduate from high school, higher than Camak (34%) but lower than Warrenton (43%) and Norwood (54.8%). In neighboring Hancock and McDuffie counties, the percentage of residents without a high school diploma is 37.6% and 33.2% respectively while the state average is 21.4%. This significant education attainment differential is also seen in post secondary education. In 2000, less than 10% of Warren County residents obtained a college degree or higher. By contrast, over 12% of Hancock County residents, 15% of McDuffie County residents, and 29.5% of residents statewide obtained a college degree.

The County and municipalities have gained ground over the last twenty years. The number of students not completing high school has declined an average 12% every 10-year period since 1980. While Warren County's current high school completion rate is half the state average, it is increasing at a faster rate. Should historic trends continue into the future, the high school completion rate in Warren County should approach the state average by 2025.

A similar pattern is seen in post secondary education. Since 1980, the number in Warren County residents with some college or more has more than doubled to 22.3%. While Warren County's college or more rate is less than half the state average 49.9%, the gap is narrowing.

That Warren County and the municipalities are catching up to the state average in educational attainment is no surprise and reflects gains in education attainment made region-wide. Some advisory committee members noted that the baseline in Warren County was so low that improvement was inevitable. The "we can only go up from here" explanation ignores the important role of state and local policy in education over the years. State education policy, in an attempt to increase statewide test scores and improve its national rating, has increased school resources and facilitated teacher development. As a result, Warren County schools have had, since 1980, unprecedented resources devoted to improving educational attainment. On the local level, there is an acknowledgment in the community that today's economy requires education and training. Even in a



manufacturing and lower skill service-dominated economy, a high school diploma has become indispensable.

While Warren County's economy is still primarily a manufacturing and lower skill service economy, the CSRA economy is more diverse and requires more educated graduates. Currently 42.9% of Warren County students do not complete high school. A substantial number of residents will therefore not be able to participate in the regional economy.

Based on these local education attainment levels, the community will need to attract two different types of employment sectors. On the one hand, manufacturing and construction, will allow residents with a high school diploma or less to participate in the local economy. On the other hand, projected employment growth in public utilities, communications, and finance will provide employment opportunities for residents with college education. Current education attainment levels suggest the need to aggressively pursue these sectors.

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

Achievement test scores have declined 13% in Warren County between 1995 and 2001. This mirrors declines in neighboring counties and the state average. Test scores in Hancock and McDuffie Counties have declined 62% and 17% respectively in that same period. State test scores have declined 17%. Current scores in Warren are similar to McDuffie County and other rural areas in the CSRA but are 12% point below the state average. If historic state and local trends are an indication, test scores in Warren County will reach the state average by 2010.

School drop out rates in Warren County have declined from 12.2% to 6% between 1995 and 2001. This places Warren County ahead of all other neighboring counties and the state average of 6.4%. The low dropout rate is consistent with higher high school completion rates.

Public college attendance in Warren County is cyclical and has varied from year to year, from a high of 25.4 in 1996 to a low 16.1% in 1998. A similar trend is seen at the state level since 1995, although statewide rates hover in the 30% range. Public tech school attendance has gradually declined from 26.9% in 1995 to 14.3% in 2000. Attendance was high in 1995 because of proximity to Technical colleges in McDuffie and Washington Counties. However, graduates soon realized that the supply of technical college training far exceeded the demand for Warren County's economy.

The local school system is enhancing Warren County's economic development potential. The school dropout rate has consistently declined and is below the state average, translating into higher educational attainment across all education levels. For economic development purposes, the important school system issue is



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adequate education through high school. Education attainment improvement, as we have seen since 1980, makes Warren County's school system an asset.

Income

Per capita and mean household incomes have consistently risen. Since 1980, per capita income has risen 175.9% in Warren County versus 222.5% for the state as a whole. Current per capita income is \$10,871 higher in Georgia. A similar discrepancy is found in mean household income. Since 1980, it has risen 18.6% in Warren and 54.8% in the state. Current household income is \$29,275 higher in the state.

Income differentials are generally explained by the lower cost of living in Warren County. The average weekly wage paid in Warren County is \$483, compared to the statewide average of \$629. Furthermore, median property values and rent in Warren are less than half the state average. Given the local cost of living, it is unlikely that income will approach the state average by 2025.



Vision Statement

Warren County and the municipalities recognize that economic development is the foundation for providing good jobs, a stable taxation base, and desired public services. Sustainable, well-balanced and quality development meets the needs of all citizens and ensures long-term prosperity. Warren County will continue to create a positive business climate, retain existing businesses and industries, and improve the economic well-being and quality of life of its citizens.

Introduction

The economic development chapter provides an inventory and assessment of the economic engine driving Warren County and the cities of Norwood, Camak, and Warrenton. This section takes a close look at the economic base, occupational trends, labor force, and local and regional opportunities of the county and cities. In combination with information from other chapters of this Comprehensive Plan, this examination will provide a base for economic development planning and policymaking within Warren County and the municipalities.

The County and municipalities would like to expand their tax base by creating opportunities for economic development, including targeting clean industry and tourism. Collectively, they are striving for an appropriate balance between maintaining their rural character and the need to provide employment opportunities and necessary services.

Setting – The County

Transportation accessibility and the availability of water and sewer are the engines that drive economic growth in Warren County. The county's location along I-20, midway between two state capitals, and connections to Interstates 75 and 85 in Atlanta, Charlotte, Raleigh and other large cities via Interstates 26, 77 and 95 allow businesses and residents convenient and efficient transportation connections. Bush Field Airport in Augusta offers direct flights to Columbia, South Carolina and Charlotte, North Carolina, and Hartsfield International Airport in Atlanta is within a 2-hour drive. Other transportation related opportunities include rail service provided by CSX, and access to international ports in Charleston and Savannah.

Warren County contains three municipalities: Warrenton, Norwood and Camak, and is 88% unincorporated. The current population of Warren County is 6,336 but is only projected to increase by 9% through 2025. Household size is



projected to decline, representing smaller family size and a growing single population.

The educational system is an important resource in Warren County. The K-12 system is relatively small, serving approximately 931 students in 2000-2001. The dropout rate is relatively low at 6%, which is below the state average of 6.4%. Warren County also has a lower dropout rate and than surrounding counties and education attainment rates continue to rise, allowing the county to remain competitive in recruiting industry.

The Region

As all local economies, Warren County must be viewed within a larger regional context. During the past several decades, the Augusta and Atlanta Metropolitan regions experienced a boom in population and job growth. An excellent transportation system, a positive housing market and continued corporate relocation and immigration will continue to fuel the both regions' growth through 2025. Warren County's proximity to both of these rapidly growing areas provides ample opportunity to benefit from regional growth.

The CSRA region has a diverse and expanding industry base that keeps the regional economy growing. Services, manufacturing and retail trade are the leading employers in the area. The CSRA contains two high-demand natural assets – wood and kaolin. The area is one of the world's largest suppliers of kaolin for ceramics and fillers and forestry companies produce wood products ranging from paper and pulpwood to fine furniture and flooring. Textile firms across the region manufacture apparel of all types. Medical companies produce pharmaceuticals, medical supplies and diagnostic equipment. Firms in emerging technologies, such as telecommunications and environmental remediation, are offered support through the CSRA's Southeast Technology Center.

ECONOMIC BASE INVENTORY

The 2002 Woods and Poole Georgia State Profile lists the following industries in Warren County:

- Agricultural services, forestry, fishing and hunting
- Mining
- Utilities
- Construction
- Manufacturing
- Wholesale Trade
- Retail Trade
- Transportation and Warehousing
- Information



- Finance and Insurance
- Real Estate and Rental and Leasing
- Professional, Scientific and Technical Services
- Administrative and Support and Waste Mgmt and Remediation Services
- Educational Services
- Health Care and Social Assistance
- Accommodation and Food Services
- Other Services (except Public Administration)
- Auxiliaries (Except Corporate, Subsidiary and Regional Mgmt)

In 2002, there were approximately 81 businesses located in Warren County. Of these, 23% are classified as retail trade establishments, 19% are classified as services, and 10% are classified as health care & social assistance.

Employment by Sector

Employment encompasses the total number of people employed by local businesses and industries, sole proprietors and the self-employed. This includes non-residents in surrounding areas who work in Warren County to work but excludes Warren County residents commuting to jobs outside the county limits.

Table E-1 examines historic sector employment trends in Warren County. Overall, total employment increased by 46 or 2% between 1990 and 2000. Manufacturing, the largest employment sector, declined by 17.4% while farming declined by 27.5% in that same period. The construction and services sectors grew by 190.9% and 55.4% respectively between 1990 and 2000. Total employment is projected to increase by 286 or 12.3% through 2025. Transportation, communications & public utilities (121.7%) and manufacturing (19.5%) will account for most of the employment growth.

Table E-2 highlights the relative growth of each sector. The three largest sectors, manufacturing, services and state & local government, currently account for 68.2% of total employment in Warren County. Historically, manufacturing has been the dominant employment sector. Between 1990 and 2000, manufacturing declined from 42.4% to 34.3% of total employment, a drop of 8.1%. By 2025 manufacturing will account for 30.3% of total employment. The services and state & local government sectors are projected to remain relatively flat through 2025. The only significant sector loss in farm employment. Between 1990 and 2000 farm employment declined by 3.2% and is projected to drop an additional 2.1% through 2025.

Major employment differences become apparent when comparing Warren County to the state average (Table E-3). The Georgia economy is clearly more diversified with no single dominant sector and less dependence on



manufacturing and government employment. Warren County is nearly three times more dependent on manufacturing than the state average. Significant discrepancies are also found in farm, retail trade, and service sectors.

Table E-1

Warren County Employment by Sector, 1990-2025

	1990	1995	2000	2005	2010	2015	2020	2025
Farm	258	204	187	185	176	168	160	154
Agricultural Services, Other	35	56	43	51	56	60	63	66
Mining	16	16	17	18	19	20	21	22
Construction	22	40	64	64	64	64	64	65
Manufacturing	967	890	798	786	783	782	785	791
Trans, Comm, & Pub. Utilities	88	110	124	170	204	231	255	275
Wholesale Trade	4	13	23	24	26	27	29	31
Retail Trade	190	175	166	167	168	170	172	174
Finance, Insur., & Real Estate	53	38	72	77	79	83	87	91
Services	312	467	485	500	518	537	558	580
Federal Civilian Government	20	16	19	19	19	19	20	20
Federal Military Government	27	25	23	23	24	24	24	24
State & Local Government	286	290	303	305	308	311	314	317
Total	2,278	2,340	2,324	2,389	2,444	2,496	2,552	2,610

Source: Woods & Poole Economics, 2002

Table E-2

Warren County Percent of Sector Employment, 1990-2025

	1990	1995	2000	2005	2010	2015	2020	2025
Farm	11.33%	8.72%	8.05%	7.74%	7.20%	6.73%	6.27%	5.90%
Agricultural Services, Other	1.54%	2.39%	1.85%	2.13%	2.29%	2.40%	2.47%	2.53%
Mining	0.70%	0.68%	0.73%	0.75%	0.78%	0.80%	0.82%	0.84%
Construction	0.97%	1.71%	2.75%	2.68%	2.62%	2.56%	2.51%	2.49%
Manufacturing	42.45%	38.03%	34.34%	32.90%	32.04%	31.33%	30.76%	30.31%
Trans, Comm, & Pub. Utilities	3.86%	4.70%	5.34%	7.12%	8.35%	9.25%	9.99%	10.54%
Wholesale Trade	0.18%	0.56%	0.99%	1.00%	1.06%	1.08%	1.14%	1.19%
Retail Trade	8.34%	7.48%	7.14%	6.99%	6.87%	6.81%	6.74%	6.67%
Finance, Insur., & Real Estate	2.33%	1.62%	3.10%	3.22%	3.23%	3.33%	3.41%	3.49%
Services	13.70%	19.96%	20.87%	20.93%	21.19%	21.51%	21.87%	22.22%
Federal Civilian Government	0.88%	0.68%	0.82%	0.80%	0.78%	0.76%	0.78%	0.77%
Federal Military Government	1.19%	1.07%	0.99%	0.96%	0.98%	0.96%	0.94%	0.92%
State & Local Government	12.55%	12.39%	13.04%	12.77%	12.60%	12.46%	12.30%	12.15%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Source: Woods & Poole Economics, 2002

Table E-3

Georgia Percent of Sector Employment, 1990-2025



	1990	1995	2000	2005	2010	2015	2020	2025
Farm	2.01%	1.63%	1.39%	1.24%	1.11%	1.00%	0.90%	0.82%
Agricultural Services, Other	0.85%	1.06%	1.13%	1.15%	1.16%	1.17%	1.17%	1.16%
Mining	0.29%	0.22%	0.20%	0.18%	0.17%	0.17%	0.16%	0.15%
Construction	5.75%	5.58%	6.10%	6.05%	5.94%	5.80%	5.66%	5.52%
Manufacturing	15.51%	14.27%	12.63%	12.07%	11.56%	11.03%	10.50%	9.97%
Trans, Comm, & Pub. Utilities	5.86%	5.72%	6.10%	6.17%	6.19%	6.16%	6.09%	5.97%
Wholesale Trade	6.18%	5.73%	5.69%	5.74%	5.73%	5.71%	5.69%	5.66%
Retail Trade	16.44%	17.14%	16.80%	17.08%	17.32%	17.51%	17.65%	17.76%
Finance, Insur., & Real Estate	6.64%	6.36%	7.12%	7.05%	6.98%	6.91%	6.83%	6.76%
Services	23.75%	26.61%	28.63%	29.27%	30.10%	31.07%	32.16%	33.35%
Federal Civilian Government	2.79%	2.33%	1.90%	1.76%	1.63%	1.53%	1.43%	1.35%
Federal Military Government	2.46%	2.24%	1.93%	1.82%	1.71%	1.61%	1.51%	1.42%
State & Local Government	11.46%	11.11%	10.39%	10.44%	10.40%	10.33%	10.22%	10.10%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Source: Woods & Poole Economics, 2002

Sector Earnings

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

Since 1990, total earnings in Warren County have risen 18.8%. Not surprisingly, manufacturing accounted for the largest share of sector earnings, with residents earning \$19.7 million or 39.1% of total earnings (Table E-4). This represents a \$1.9 million increase over the 1990 rate and is projected to reach \$25.2 million by 2025. Services employment is second with \$7.3 million, a rate expected to grow by 61% to \$12.1 million in 2025. Though farm employment is projected to decline through 2025, sector earnings are projected to increase by 54.2% over that same period. A similar trend is seen in state & local government, where earnings account a higher percentage than the sector's share of total employment. This reflects traditionally higher salaries paid in these sectors and suggests a slowdown in manufacturing or state & local government employment will result in a disproportionate decline in earnings.

Table E-5 provides percentage figures for sector earnings, allowing a comparison of the relative growth of each sector. The relative share of farm, manufacturing, and retail trade earnings has continually declined while construction and service earnings have risen steadily. The relative share of construction, retail trade and state & local government earnings is projected to decline, while services, and TCP are projected to increase through 2025.



Table E-4

Warren County Earnings by Sector, 1990-2025

	1990	1995	2000	2005	2010	2015	2020	2025
Farm	\$3,865,000	\$3,082,000	\$3,153,000	\$3,562,000	\$3,864,000	\$4,159,000	\$4,487,000	\$4,863,000
Agricultural Serv.	\$641,000	\$673,000	\$566,000	\$694,000	\$788,000	\$870,000	\$952,000	\$1,039,000
Mining	\$550,000	\$872,000	\$986,000	\$1,057,000	\$1,122,000	\$1,187,000	\$1,256,000	\$1,328,000
Construction	\$293,000	\$503,000	\$908,000	\$933,000	\$957,000	\$980,000	\$1,003,000	\$1,026,000
Manufacturing	\$17,831,000	\$19,882,000	\$19,740,000	\$20,618,000	\$21,671,000	\$22,801,000	\$23,988,000	\$25,240,000
Trans, Comm, & Utilities	\$3,195,000	\$4,681,000	\$5,125,000	\$7,240,000	\$8,955,000	\$10,455,000	\$11,833,000	\$13,138,000
Wholesale Trade	\$130,000	\$319,000	\$444,000	\$491,000	\$534,000	\$579,000	\$628,000	\$681,000
Retail Trade	\$2,835,000	\$2,702,000	\$2,820,000	\$2,900,000	\$2,992,000	\$3,093,000	\$3,202,000	\$3,320,000
Fin., Insur., & Real Estate	\$883,000	\$509,000	\$1,131,000	\$1,291,000	\$1,417,000	\$1,555,000	\$1,712,000	\$1,893,000
Services	\$3,661,000	\$5,607,000	\$7,386,000	\$8,130,000	\$8,980,000	\$9,922,000	\$10,959,000	\$12,100,000
Fed Civilian Govt	\$669,000	\$664,000	\$769,000	\$802,000	\$838,000	\$871,000	\$901,000	\$930,000
Fed Military Govt	\$295,000	\$281,000	\$294,000	\$313,000	\$331,000	\$349,000	\$367,000	\$384,000
State & Local Govt	\$5,933,000	\$5,890,000	\$7,123,000	\$7,420,000	\$7,726,000	\$8,044,000	\$8,374,000	\$8,718,000

Source: Woods & Poole Economics, 2002

Table E-5

Warren County Earnings by Sector (1996\$) %, 1990-2025

	1990	1995	2000	2005	2010	2015	2020	2025
Farm	9.48%	6.75%	6.25%	6.42%	6.42%	6.41%	6.44%	6.51%
Agricultural Serv.	1.57%	1.47%	1.12%	1.25%	1.31%	1.34%	1.37%	1.39%
Mining	1.35%	1.91%	1.95%	1.91%	1.86%	1.83%	1.80%	1.78%
Construction	0.72%	1.10%	1.80%	1.68%	1.59%	1.51%	1.44%	1.37%
Manufacturing	43.72%	43.54%	39.13%	37.18%	36.01%	35.15%	34.43%	33.81%
Trans, Comm, & Utilities	7.83%	10.25%	10.16%	13.06%	14.88%	16.12%	16.99%	17.60%
Wholesale Trade	0.32%	0.70%	0.88%	0.89%	0.89%	0.89%	0.90%	0.91%
Retail Trade	6.95%	5.92%	5.59%	5.23%	4.97%	4.77%	4.60%	4.45%
Fin., Insur., & Real Estate	2.17%	1.11%	2.24%	2.33%	2.35%	2.40%	2.46%	2.54%
Services	8.98%	12.28%	14.64%	14.66%	14.92%	15.30%	15.73%	16.21%
Fed Civilian Govt	1.64%	1.45%	1.52%	1.45%	1.39%	1.34%	1.29%	1.25%
Fed Military Govt	0.72%	0.62%	0.58%	0.56%	0.55%	0.54%	0.53%	0.51%
State & Local Govt	14.55%	12.90%	14.12%	13.38%	12.84%	12.40%	12.02%	11.68%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Source: Woods & Poole Economics, 2002

Table E-6 highlights current statewide sector earnings. Similar to sector employment rates, the Georgia economy is much more diverse than that of Warren County and no sector accounts for more than a quarter of total earnings. The widest gap is found in manufacturing, where sector earnings account for 24.2% more in Warren County than the state average. The service sector, on the other hand, contributes a higher share of earnings statewide. Whereas the



service sector accounts for 26.7% of earnings in Georgia, it accounts for less than 14.6% in Warren County.

Table E-6

Georgia Earnings by Sector (1996\$) %, 1990-2025

	1990	1995	2000	2005	2010	2015	2020	2025
Farm	1.36%	1.40%	0.98%	0.93%	0.89%	0.85%	0.82%	0.79%
Agricultural Serv.	0.46%	0.53%	0.59%	0.60%	0.61%	0.62%	0.62%	0.62%
Mining	0.36%	0.29%	0.27%	0.25%	0.22%	0.21%	0.19%	0.18%
Construction	5.82%	5.39%	6.00%	5.86%	5.67%	5.46%	5.26%	5.06%
Manufacturing	17.51%	16.84%	14.86%	14.45%	14.05%	13.59%	13.08%	12.53%
Trans, Comm, & Utilities	8.75%	9.43%	9.89%	9.99%	10.01%	9.96%	9.84%	9.63%
Wholesale Trade	8.86%	8.17%	8.44%	8.36%	8.21%	8.05%	7.88%	7.71%
Retail Trade	9.17%	9.08%	8.99%	8.97%	8.93%	8.87%	8.80%	8.71%
Fin., Insur., & Real Estate	6.43%	6.86%	7.57%	7.66%	7.73%	7.78%	7.81%	7.82%
Services	21.95%	24.33%	26.77%	27.78%	29.02%	30.44%	32.02%	33.73%
Fed Civilian Govt	4.66%	4.17%	3.39%	3.11%	2.87%	2.67%	2.49%	2.33%
Fed Military Govt	2.69%	2.49%	2.06%	1.94%	1.83%	1.72%	1.62%	1.53%
State & Local Govt	11.97%	11.01%	10.18%	10.10%	9.95%	9.78%	9.58%	9.37%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Source: Woods & Poole Economics, 2002

Wages

In 1999, the average weekly wage paid in Warren County was \$483. Between 1990 and 1999, average weekly wages have increased 75.6%. Current average weekly wages paid by sector range from a low of \$289 in services to a high of \$647 in TCP (Table E-7). Historically, these sectors have always been at the higher and lower ends of the wage scale. The highest wage growth rates between 1990 and 1999 were in manufacturing (111.7%), services (66%), retail trade (61%), and TCP (35.9%).

The overall 1990 to 1999 increases in Warren County wages were below the state average (Table E-7) and local wages remain significantly lower than elsewhere in Georgia. The only sector comparable in actual wages was retail trade where county wages exceeded the state average. The largest local-statewide wage gaps are found in wholesale trade and FIRE.

Table E-7

Warren County and Georgia Average Weekly Wages, 1990-1999

	Warren County			Georgia		
	1990	1995	1999	1990	1995	1999
Agri, Forestry, Fishing	N/A	\$408	\$397	\$276	\$322	\$390



Mining	\$467	N/A	N/A	\$276	\$734	\$866
Construction	\$197	N/A	N/A	\$589	\$508	\$623
Manufacturing	\$272	\$364	\$576	\$434	\$555	\$684
Trans, Comm, & Utilities	\$476	\$581	\$647	\$450	\$737	\$895
Wholesale Trade	N/A	\$232	\$333	\$603	\$729	\$932
Retail Trade	\$236	\$303	\$380	\$603	\$275	\$335
Fin., Insur., & Real Estate	\$409	\$365	\$428	\$236	\$693	\$900
Services	\$174	\$246	\$289	\$544	\$501	\$611
Federal Govt	N/A	N/A	N/A	\$414	\$666	\$808
State Govt	\$386	N/A	N/A	\$543	\$493	\$579
Local Govt	N/A	\$207	\$276	\$451	\$440	\$523
All Industries	\$275	\$350	\$483	\$424	\$509	\$629

* N/A = Not Available

U.S. Bureau of Labor Statistics

Sources of Personal Income

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

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

Between 1990 and 2000, overall personal income in Warren County rose by \$16.4 million or 20.3%. (Table E-8, E-9). This is far below the state average increase of 55.2%. Wages & salaries account for the largest source of personal income at \$43.8 million or 41.3%, followed by transfer payments at \$31.8 million (30%) and dividends, interest & rent at \$16.2 million (15.3%). On the lower end of the scale, social insurance contributions and other labor income account for \$3.1 million (3.2%) and \$4.4 million (4.5%) respectively.



The most dramatic difference between Warren County and the state average is in transfer payments (Table E-10). Warren County residents are three times more dependent on transfer payments than the state as a whole, reflecting the county’s aging population and high poverty rate, which stands at 27% versus the state average of 13%.

On average, all sources of personal income are projected to rise, with some outpacing others. Between 2000 and 2025, overall personal income will increase by 48.7%, significantly lower than the state average of 78.5%. At 62.8% and 51.9% respectively, wages & salaries and transfer payments will account for the largest increase in Warren County sources of income through 2025.

Associated with these figures is a Residence Adjustment Category, which measures the net amount of Warren County residents’ personal income earned outside the county. When the number is positive, as in Warren County (Table E-8), the amount of income earned outside the county by Warren residents is greater than the amount of income earned in the county by nonresidents. Warren County’s residence adjustment has declined from 14% in 1990 to 5.75% in 2000. The State residence adjustment has remained steady since 1990 and that trend is projected to continue through 2025. Warren County residents’ increasing level of personal income earned outside the county highlights a weak local economy and possible skills mismatch between residents and local businesses.

Table E-8

Warren County Sources of Personal Income (1996 \$) (in Millions \$), 1990-2025

	1990	1995	2000	2005	2010	2015	2020	2025
Total	80.73	93.90	97.14	105.90	114.74	124.00	133.87	144.53
Wages & Salaries	30.66	35.19	39.70	43.80	47.67	51.51	55.45	59.55
Other Labor Income	4.45	5.37	4.42	4.81	5.17	5.51	5.86	6.21
Proprietors Income	5.57	5.09	6.32	6.83	7.33	7.83	8.34	8.88
Dividends, Interest, & Rent	12.44	12.44	15.24	16.25	17.29	18.38	19.49	20.63
Transfer Payments to Persons	18.61	26.98	29.06	31.82	34.97	38.53	42.57	47.15
Less: Social Ins. Contributions	2.44	3.04	3.19	3.65	4.13	4.61	5.10	5.61
Residence Adjustment	11.34	11.85	5.58	6.02	6.43	6.83	7.25	7.70

Source: Woods & Poole Economics, 2002

Table E-9

Warren County Sources of Personal Income by Type %

	1990	1995	2000	2005	2010	2015	2020	2025
Wages & Salaries	37.98%	37.48%	40.87%	41.36%	41.54%	41.54%	41.42%	41.21%
Other Labor Income	5.63%	5.72%	4.55%	4.55%	4.51%	4.45%	4.38%	4.30%
Proprietors Income	6.91%	5.43%	6.51%	6.45%	6.39%	6.31%	6.23%	6.15%
Dividends, Interest, & Rent	15.41%	13.25%	15.69%	15.34%	15.07%	14.82%	14.56%	14.27%



ECONOMIC DEVELOPMENT

Transfer Pay. to Persons	23.06%	28.74%	29.92%	30.05%	30.48%	31.08%	31.80%	32.63%
Less Social Ins. Contrib.	3.03%	3.24%	3.29%	3.45%	3.60%	3.72%	3.82%	3.88%
Residence Adjustment	14.05%	12.62%	5.75%	5.69%	5.61%	5.51%	5.42%	5.33%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Source: Woods & Poole Economics, 2002

Table E-10

Georgia Sources of Personal Income by Type %

	1990	1995	2000	2005	2010	2015	2020	2025
Wages & Salaries	60.36%	59.07%	61.18%	61.09%	61.00%	60.94%	60.92%	60.92%
Other Labor Income	8.68%	8.63%	6.84%	6.71%	6.60%	6.48%	6.38%	6.28%
Proprietors Income	7.11%	7.96%	8.65%	8.52%	8.43%	8.34%	8.26%	8.19%
Dividends, Interest, & Rent	17.34%	16.31%	16.80%	16.76%	16.70%	16.61%	16.49%	16.34%
Transfer Pay. to Persons	10.94%	12.62%	11.13%	11.25%	11.43%	11.66%	11.93%	12.25%
Less Social Ins. Contrib.	4.33%	4.45%	4.49%	4.67%	4.86%	5.04%	5.19%	5.33%
Residence Adjustment	-0.10%	-0.15%	-0.11%	0.33%	0.70%	1.00%	1.21%	1.35%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Source: Woods & Poole Economics, 2002

Major Community-Level Economic Activities

The Warren County area has seen an increase in economic activity since 1970. The county's transportation infrastructure and proximity to Interstate 20 and large metro areas provides economic development opportunities.

The county has been proactive in the areas of planning and providing the necessary infrastructure to attract industry, such as in the development of the East Central Georgia Industrial Park.

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



The City of Warrenton is a Better Hometown Community, an organization that works closely with the Chamber of Commerce to revitalize and refurbish downtown area structures. The organization also works with business owners to renovate existing buildings, and operates a website in conjunction with the Chamber of Commerce to promote the area to visitors and potential business owners.

Manufacturing

Manufacturing employment in Warren County declined from 967 in 1990 to 798 in 2000, a loss of 169 jobs. Manufacturing establishments accounted for 6% of the total number of establishments in Warren County in 2000. Infrastructure improvements meeting specific needs (water and sewer) and readily available industrial land, such as the East Central Georgia Industrial Park and the Warren County Industrial Park, will make Warren County attractive for industrial development.

Small and medium size firms manufacture a variety of products represent the manufacturing sector in Warren County. Key manufacturers include:

J.M. Huber	Georgia Pacific Corp.
Wheland Foundry	Martin Marietta Aggregates
Zorlu Manufacturing, Inc.	Thiele Kaolin
The Timbermen	JEBCO

Services

Service employment in Warren County increased steadily from 1990 to 2000. In 1990 service employment accounted for 312 jobs, or 14% of total employment. By 2000, the number of service jobs had increased 55% to 485. The service sector is the only sector in the Warren County economy showing continual and robust growth.

Major Development Trends and Unique Economic Opportunities

Understanding that tourism can stimulant the local economy, Warren County and the municipalities are in the process of pursuing various strategies aimed at promoting tourism. These efforts include working with other community in



establishing a Civil War Heritage Trail and participating in the Georgia Scenic Byways program. The purpose of both of these programs is to capitalize on unique historical and scenic qualities that offer Warren County regional, state and national exposure.

Warren County is well positioned to capitalize on tourism. In addition to the Ogeechee River, a Wildlife Management Area and numerous historical and recreation qualities provide good tourism opportunities. The county has applied for numerous state and federal grants aimed at enhancing potential tourist areas such as the Warrenton downtown historic district.

LABOR FORCE ANALYSIS

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

Employment by Occupation

Precision production, craft & repair, and transportation & material moving account for the highest share of occupational groupings in Warren County (35.9%) and the municipalities (36% in Warrenton, 50% in Norwood and 50% in Camak) and increased substantially between 1990 and 2000 (Table E-11). These occupational groupings account for less than 15.6% statewide and 14.6% nationwide occupations (Table E-12). By contrast, professional and technical occupations, which account for 18.6% statewide and 20.20% nationwide occupations, account for 12.7% in Warren County, 14.1% in Warrenton, 12.9% in Norwood, and 3.9% in Camak. These occupation trends highlight the more labor-intensive nature of the local economy in contrast to the state’s more knowledge-based orientation.

Table E-11

Employment by Occupation, 1990-2000

	1990				2000			
	Warren Co.	Warrenton	Norwood	Camak	Warren Co.	Warrenton	Norwood	Camak
Exec, Admin and Managerial	134	50	0	8	180	46	2	3
Professional and Technical	145	80	0	3	297	96	14	3
Technicians & Related Support	53	21	0	0	N/A	N/A	N/A	N/A
Sales	176	45	0	5	158	39	7	4
Clerical and Admin Support	240	85	0	5	239	86	15	11
Private Household Services	12	3	0	0	N/A	N/A	N/A	N/A
Protective Services	36	16	0	0	N/A	N/A	N/A	N/A
Service Occupations	211	79	0	10	160	46	5	0
Farming, Fishing and Forestry	150	34	0	4	39	16	0	0



E C O N O M I C D E V E L O P M E N T

Precision Prod, Craft, and Repair	333	93	0	19	567	187	21	25
Machine Ops, Ass. & Inspectors	567	208	0	9	272	53	7	8
Transportation & Material Moving	167	72	15	3	274	57	33	13
Handlers, Helpers & Laborers	185	75	0	7	N/A	N/A	N/A	N/A
Total	2409	861	15	73	2339	677	108	76

* N/A = Not Available

Source: U.S. Bureau of the Census

Table E-12

Employment by Occupation, 2000

	Warren Co.	Warrenton	Norwood	Camak	Georgia	U.S.A
Exec, Admin and Managerial	7.70%	6.79%	1.85%	3.95%	14.03%	13.45%
Professional and Technical	12.70%	14.18%	12.96%	3.95%	18.68%	20.20%
Technicians & Related Support	N/A	N/A	N/A	N/A	N/A	N/A
Sales	6.76%	5.76%	6.48%	5.26%	11.64%	11.25%
Clerical and Admin Support	1.22%	12.70%	13.89%	14.47%	15.14%	15.44%
Private Household Services	N/A	N/A	N/A	N/A	N/A	N/A
Protective Services	N/A	N/A	N/A	N/A	N/A	N/A
Service Occupations	6.84%	6.79%	4.63%	0.00%	11.57%	12.01%
Farming, Fishing and Forestry	1.67%	2.36%	0.00%	0.00%	0.64%	0.73%
Precision Prod, Craft, and Repair	24.24%	27.62%	19.44%	32.89%	9.02%	8.49%
Machine Ops, Ass. & Inspectors	11.63%	7.83%	6.48%	10.53%	10.83%	9.45%
Transportation & Material Moving	11.71%	8.42%	30.56%	17.11%	6.63%	6.14%
Handlers, Helpers & Laborers	N/A	N/A	N/A	N/A	N/A	N/A
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

* N/A = Not Available

Source: U.S. Bureau of the Census

Labor Force Participation and Employment Status

Companies locating within Warren County have an ample workforce to choose from. With an average commute time of approximately 30 minutes, people are willing to travel to a good job. The civilian workforce of the Augusta Metro area is 204,041. It is estimated that an additional 69,951 persons from the non-traditional labor force (students, post secondary, military dependents, military retirees, and civilian retirees) are available for employment.

Table E-13 identifies labor force participation rates for Warren County and the municipalities. In 2000, total labor force participation in Warren County was 52.9%, slightly higher than Warrenton and Norwood but lower than Camak (Table E-13). Between 1990 and 2000, the total number of residents in the labor force declined by 5.6% in Warren County and 7.6% in Warrenton, while increasing slightly in both Norwood and Camak (Table E-13). On average, the county's various labor force participation rates are ten percentage points below that of neighboring counties and the state and national averages (Table E-14).



Table E-13

Labor Force Participation, 1990-2000

	1990				2000			
	Warren Co.	Warrenton	Norwood	Camak	Warren Co.	Warrenton	Norwood	Camak
Total in labor force	58.5%	57.7%	24.5%	54.8%	52.9%	50.1%	50.9%	56.7%
Civilian labor force	58.2%	57.7%	24.5%	53.4%	52.9%	50.1%	50.9%	56.7%
Military labor force	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	0.0%	0.0%
Males in labor force	27.4%	28.4%	24.6%	27.7%	26.6%	23.5%	22.7%	27.3%
Females in labor force	29.1%	29.2%	24.5%	27.0%	26.2%	26.6%	28.1%	29.7%

Source: U.S. Bureau of the Census

Table E-14

Labor Force Participation, 2000

	Warren	Glascok	McDuffie	Georgia	U.S.A
Total in Labor Force	52.9%	60.8%	61.1%	66.1%	63.9%
Civilian Labor Force	52.9%	60.6%	60.8%	65%	63.3%
Military Labor Force	N/A	0.2%	0.3%	1.1%	0.5%
Males in Labor Force	60%	67%	68%	73%	70.7%
Females in Labor Force	47.5%	55.8%	55.1%	59.4%	57.5%

Source: US Bureau of the Census, Census, 2000

* N/A = Not Available

Unemployment

Table E-15 highlights unemployment rates in Warren County, the state and the nation. Despite a 5.3% improvement from 1997, unemployment in Warren County remains high at 7% when compared to neighboring Glascock and McDuffie counties (Table E-15). The higher unemployment rate reflects the impact of a major plant closing in a small rural county. Unemployment spikes correlate with layoffs at the Healthtex facility in 1991 and 1997, and its closing in 1998. Unemployment rate patterns in Warren County and neighboring jurisdictions highlight the regional aspect of the CSRA economy. Since 1990, unemployment rate spikes in Warren County were mirrored in neighboring Glascock and McDuffie Counties (Table E-15). By contrast, state and national unemployment rates remained relatively stable and gradually declined since 1990.

Table E-15

Unemployment Rates for Selected Jurisdictions



	Warren	Glascock	McDuffie	Georgia	U.S.A.
1990	8.6%	6.0%	5.6%	5.5%	5.6%
1991	10.7%	5.6%	6.1%	5.0%	6.8%
1992	9.9%	6.1%	7.6%	7.0%	7.5%
1993	8.2%	6.2%	6.8%	5.8%	6.9%
1994	7.5%	5.4%	6.9%	5.2%	6.1%
1995	6.8%	4.6%	6.3%	4.9%	5.6%
1996	9.9%	8.8%	9.5%	4.6%	5.4%
1997	12.3%	12.8%	9.8%	4.5%	4.9%
1998	16.5%	12.4%	7.9%	4.2%	4.5%
1999	10.4%	6.9%	6.8%	4.0%	4.2%
2000	7.0%	4.5%	5.7%	3.7%	4.0%

Source: U.S. Bureau of Labor Statistics

Commuting to Work

Tables E-16 and E-17 provide commute-to-work data for Warren County. In 2000, 43.1% of Warren County residents worked in the county, a decline from 45.5% in 1990. The number of Warren County residents working in neighboring McDuffie and Richmond Counties has increased an average one-percentage point from 1990 rates. Close to 40% of Warren County jobs are held by non-residents. This demonstrates a skills mismatch between residents and local employers.

Table E-16

Warren County Commuting to Work, 1990-2000

	1990	2000
Number of residents employed in Warren County	2,353	2,298
% of residents working in Warren County	45.5%	43.1%
% of residents working outside Warren County	54.5%	56.9%

Source: U.S. Bureau of the Census

Table E-17

Warren County Residents Place of Work, 2000

	1990	2000
Warren County	45.5%	43.1%
McDuffie County	26.8%	27.7%
Richmond County	8.8%	9.3%
Other	18.9%	19.9%

Source: U.S. Bureau of the Census



Local Economic Development Agencies and Resources

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

- **The CSRA Unified Development Council**

The CSRA UDC is a voluntary organization of concerned local and regional economic development groups, community service associations, and educational institutions whose purpose is to continuously improve the area's economic development and quality of life. The mission of the CSRA UDC is to provide planning, management and information services to its members, and to serve as a forum for addressing economic development issues. The CSRA UDC provides its members with such services as city/county/regional planning, state and federal grant support, historic preservation, small business loans, data services and strategic planning. The CSRA UDC also sponsors education seminars, industrial prospect tours, and strategic planning meetings.

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

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

- **Better Hometown Committee**

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



- **Education and Training Opportunities**

Augusta Technical College has opened the area's first high-tech "incubator," a facility that offers engineers, scientists, researchers and others free or low-cost technical support as well as office and research space. The Center for Advanced Technology (CADTEC) is the Consortium for Manufacturing Competitiveness demonstration site for the state of Georgia. The facility houses the Quick Start Program which works through the Sandersville Regional Technical Institute. The Quick Start program provides high-quality training services at no cost to new or expanding businesses in Georgia. The program's goal is to eliminate the need for weeks or months of on-the-job training by producing graduates who can support their employer's program from day one.

In addition to Augusta Tech, Swainsboro Technical Institute and an extension of the Georgia Institute of Technology provide technical training and support. Skill specific training is offered through the CSRA Employment and Training Consortium, a public-private partnership.

Warren County also has access to Vocational and Technical training programs in McDuffie, Washington and Richmond Counties. Sandersville Technical College, located in Washington County, provides dual enrollment programs such as Certified Nurses Aid as well as other programs at Warren County High School.

Warren County has an attractive labor force. The Warren County school system graduates 73% of enrolled students and drop out rates are among the lowest in Georgia. Warren County residents have access to several institutions that provide advanced vocational and academic diplomas, such as Augusta Technical College, Sandersville Technical College, College and Paine College, Augusta State University, Medical College of Georgia, and Georgia College and State University.

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

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



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

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

Resources—Programs and Tools

- **Georgia Business Expansion Support Act**

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

- *Job Tax Credit.* Applies to business or headquarters of a business engaged in manufacturing, warehousing and distribution, processing, tourism, and research and development industries. Does not include retail businesses.
- *Investment Tax Credit.* Allows a corporation, which has operated an existing manufacturing facility in the state for the previous three years, to obtain a credit against income tax liability.
- *Retraining Tax Credit.* Any employer in Warren County that provides retraining for employees is eligible for a tax credit equal to 25% of the costs of retraining per full-time student up to \$500.
- *Child Care Credit.* Any employer in Warren County that provides or sponsors childcare for employees is eligible for a tax credit of up to 50% of the direct cost of operation to the employer. The credit cannot exceed more than 50% of the taxpayer's total state income tax liability for that taxable year.
- *Manufacturing Machinery Sales Tax Exemption.* Provides for exemption from sales and use tax for manufacturing equipment.



- *Primary Material Handling Sales Tax Exemption.* Provides for exemption from sales and use tax on purchases of primary material handling equipment which is used directly for the handling and movement of tangible personal property in a new or expanding warehouse or distribution facility when such new facility or expansion is worth \$10 million or more.
- *Electricity Exemption.* Electricity purchased for the direct use in manufacturing a product is exempt from sales taxes when the total cost of the electricity accounts for over 50% or more of all the materials used in making the product. It allows full exemption on the sales tax and is available for new and existing firms.

- **Financing Mechanisms**

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

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

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



carefully controlled revitalization effort for a deteriorating area, where future renovations and development can be reasonably anticipated but are dependent on a general improvement to the area.

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

Assessment

Current and Historic Employment

Total employment in Warren County increased by no more than 2% in the past decade. The local economy is driven by manufacturing and services, which account for over 55% of total employment. Since 1990, the manufacturing sector declined from 42.4% of total employment to 34.3%, while the service sector increased from 23.7% to 28.6%. The decline in the relative importance of manufacturing and corresponding increase in services mirrors a statewide trend underway since 1990. Over 28.6% of the Georgia population is employed in the service sector, up from 23.7% in 1990, and less than 13% of the statewide economy is manufacturing-based.

In addition to manufacturing, farm employment and retail trade in Warren County have continually declined in the past decade with the loss of over 40.1% of those sector jobs. Employment growth since 1990 includes construction (190%), services (55.4%), TCP (40.9%), FIRE (35.8), and other agricultural services (22.8%). However, not all sector growth is equally important. Despite high percentage growth rates, construction and FIRE combined to account for a little over 3% of total employment.

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

To understand why some sectors of the Warren County economy are growing while others are declining, we need to examine broader trends in the local, regional, and state economy. For a sector like retail trade, there is a direct one-to-one relationship. In the absence of tourism or significant through traffic, the sector is solely dependent on the resident population. As Warren County experienced population decline in the past two decades, so too has the retail



trade sector. The retail sector statewide has increased roughly in proportion to population growth.

The decline of the manufacturing sector in Warren County is subject to broader dynamics and mirrors the decline of manufacturing in the region. Since 1990, the CSRA region lost over 5,000 jobs, a decline of over 17.6%. Overseas outsourcing, plant consolidation, and competition from other states aggressively pursuing manufacturing explains the trend. Traditionally, the manufacturing sector in Warren County and the CSRA was lower skilled. The jobs are more easily consolidated or outsourced than the more skilled manufacturing jobs the region lacks. Similarly, the Warren County farm sector has declined in proportion to statewide figures. The cyclical nature of the sector and unwillingness of younger residents to farm has resulted in lower interest in the employment sector.

Projected Employment

Trends highlighted in past employment trends are projected through 2025. Warren County will experience most of its job growth in services and TCP. Together, these sectors will account for 246 of the 286 net new jobs through 2025. This is in line with significant statewide growth rates across those sectors. The continuing projected decline in manufacturing (from 34.3% of total employment in 2000 to 30.3% in 2025) an increase in services (from 20.8% in 2000 to 22.2% in 2025) in Warren County highlights slow but steady convergence with the statewide economy. Less than 13% of the Georgia population is employed in manufacturing, a sector that will account for no more than 10% of statewide employment in 2025.

Earnings

Sector earnings paint a different picture of the Warren County economy. Unlike sector employment, earnings across most sectors have increased since 1990 even though total employment numbers have dropped, in some case significantly. In 2000, manufacturing earnings accounted for 39.1% of total earnings, 5% more than the sector's share of total employment. Services earnings, on the other hand, accounted for 14.6%, 6.23% below its share of total employment. The most dramatic difference is seen in TCM where the sector accounts for 5.3% of total employment but 10.1% of total earnings.

Current statewide averages, by contrast, show earnings that are more in line with employment rates. Manufacturing, for example, accounted for 14.6% of earnings and 12.6% of total employment. Similarly, services accounted for 26.7% of earnings and 28.6% of total employment.



The earnings-employment imbalance occurring in Warren County suggests that the job losses in some sectors are not adequately balanced by jobs created in others. That is, the county is losing higher-paying manufacturing jobs while gaining lower-paying service jobs. Given that the service sector is projected to grow faster than all other sectors combined, total employment growth rates are masking a potential downside in Warren County's overall economic health.

Wages

In 1999, the average weekly wage paid in Warren County was \$483, higher than neighboring McDuffie (\$446) and Glascock (\$460) Counties but lower than the state average of \$629. Since 1990, wages in Warren County have risen at a faster pace than neighboring McDuffie (37.2%) and Glascock (43.7%), and the statewide average (48.3%). Within sectors, wages are rising at different paces within the Warren County and state economies. In Warren, manufacturing wages have increased by 111.7% since 1990 while statewide the increase was less than 57.6%. In retail trade, Warren County wages rose 61% while statewide wages declined. In services, Warren County wages increased 66% while the statewide wages increased a more modest 12.3%. By contrast, statewide wages in TCU and services increased by 98.8% and 281% while in Warren County those wages increases 36% and 66%. The largest local-statewide wage gaps are found in wholesale trade and FIRE, where statewide wages are significantly above Warren County averages.

Assuming that projected wage earnings mirror per capita and average household income projections, wages will continue to remain significantly below the state average. The lower cost of living in Warren County is always a factor. Current median property values and rents are 116.9% and 142.8% less in Warren County and the municipalities than the state average. Since 1990, housing median property values have slightly outpaced wage increases. The median property of a home rose 42.3% while wages rose 38%. Rents actually declined in Warren County between 1990 and 2000. Warren County wages across sectors are 76.7% below the state average. Within Warren County's economic base, manufacturing and service, the wage differential with statewide figures is 18.7% and 111.4% respectively.

Various types of training are required for higher paying positions. State government employment, associated almost exclusively with the Warren County school system, requires college education. All teaching and most administrative staff require an appropriate degree prior to commencing employment and continuing education to meet state licensing requirements. Augusta State University and Georgia College and State University are the primary avenues for this type of training. Certain government jobs, as well as some manufacturing positions, require vocational or technical school training, available from technical colleges in neighboring McDuffie, Washington, and Richmond Counties. Some



Sandersville Technical College programs are offered at Warren County High School, providing residents convenient and timely access to training and education.

Personal Income

Approximately 30% of personal income in Warren County is transfer payments, a rate nearly three times the state average. Since 1990, transfer payments have outpaced all other sources of personal income. In 2000, wages accounted for 40.8% of all income, significantly below the state average of 61.1%. This reflects two key demographics in the county. First, Warren County has an above-average older population. In 2000, 20.4% of the Warren County population was 60+ years old, significantly higher than the state average of 13%. By 2025, 23.8% of Warren County residents will be over the age of 60. Second, the poverty for Warren County households is 14.2% above the state average.

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

Dependence on transfer payment will increase by 2.77% through 2025 and close to a third of Warren County residents will be dependent on transfer payments. Furthermore, household size is projected to increase while the county's total population will remain stable, indicating that demand for new units will increase. The next section will examine housing more closely but unless housing unit increases keep pace with these demographic shifts, residents dependent on transfer payments will be more vulnerable should the demand for housing increase.

The residence adjustment factor has declined from 14% in 1990 to 5.75% in 2000, indicating that a higher relative share of Warren County residents work in the county. During that same time, commuting patterns show a slight increase in Warren County residents commuting to work in neighboring jurisdictions. There is no clear reason why these trends have gone in opposite directions.

Major Economic Activities

Warren County has lost a significant number of manufacturing jobs in the past decade. The initial layoffs and subsequent closure of Healthtex and other smaller manufacturing plants resulted in massive layoffs and highlights the impact of a single plant closure in a small rural county like Warren. The manufacturing



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

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

Warren County and the municipalities recognize the need to diversify the local economy but also understand the need to match employment opportunities with the skill level of the population. Skills and education data highlight two extremes found in Warren County. On the one hand, over 42% of Warren County residents have not completed high school. On the other, county residents attend Georgia public technical colleges at a rate of twice the state average. Future economic development policy will therefore need to adhere to a 2-prong strategy: continue to recruit and expand the local economy's manufacturing base while nurturing sectors that are higher wage and higher skilled.

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

Diversifying the economic base will require focusing on sectors that are growing and the ability to match required skills with the local population. TCP and FIRE are projected to double in employment growth through 2025. There are primarily two reasons why these sectors should be encouraged to grow. First, is the disproportionately high wages and sector earnings they provide the local community. TCP, for example, accounts for less than 5% of total employment but over 10% of earnings. Second, the skill level of the population matches the sector. As noted, Warren County high school graduates attend Georgia public and technical colleges at a rate nearly 10% higher than the state average. The supply of graduates is therefore available for these jobs. Warren County should nourish these sectors by working with existing businesses to expand to the base and promoting Warren as a viable location for TCP and FIRE.



The Warren County economy, of course, is not isolated from its surroundings but part of a larger regional economy. Commuting patterns indicate that close to 40% of county residents work in the Augusta Metro area economies in McDuffie, Richmond and Columbia counties, slightly more than in 1990. The metro Augusta economies are much more diverse than the Warren County economy. In McDuffie County, the predominant industries are retail trade (18.4%), services (19.4%) and manufacturing (17.4%). In Richmond County, services (26.9), retail trade (18.3%) and state/local government (16.1%) account for most of the employment base. The diversity of employment opportunities provides Warren County residents the opportunity to work near their place of residence and possible supplier opportunities through the manufacturing sector in surrounding counties.

The East Georgia Regional Park is an example of regional cooperation and support. Neighboring counties, including McDuffie County, have contributed financially to the project. Given that Warren County is incapable of funding projects of this size alone, such regional projects should be encouraged.

Special and Unique Opportunities

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

Aggressive marketing campaigns have succeeded in small communities throughout the state. Warren County and the municipalities are well positioned to capitalize on tourism. In addition to the Ogeechee River, a Wildlife Management Area and numerous historical and recreation qualities provide good tourism opportunities. The county has applied for numerous state and federal grants aimed at enhancing potential tourist areas such as the Warrenton downtown historic district.

Warren County and Warrenton need to facilitate coordination among business groups to facilitate the opening of a motel or bed & breakfast. Advisory committee members identified that goal during the last comprehensive plan update but no progress has been reached. Movie productions are becoming a lucrative industry in certain parts of the state. The Atlanta area is one of the most actively used movie settings outside Hollywood, California. With its spectacular vistas and scenic areas, Warren County can capture some of those movie



shoots. A motel or bed & breakfast, providing accommodations to tourists and movie production crews, will need to be provided.

LABOR FORCE ASSESSMENT

Employment by Occupation

Employment occupation in Warren County highlights variations with the state and national economy. The state and national economies are similar in their distribution of occupations and diverse. Occupational groupings in Warren County demonstrate the dominant role of manufacturing in the local economy. Over 24.2% county occupations are in precision production, craft & repair (PPR), a percentage three times higher than the state and national average. Similarly, other manufacturing-related occupations such as machine operators, assembly & inspectors (MOAI), and transportation & material moving (TMM) account for over 23% of occupations in Warren County, 27.6% in Camak and 36.9% in Norwood. State and nationwide, the occupations account for less than 17.4% and 15.5% respectively. By contrast, occupational groups associated with the a knowledge-based economy such executive, administration, professional and technical (EAPT), make up over a third of state and national employment but less than 20% in Warren County and the municipalities.

PPR and TMM have become even more important to the Warren County economy, more than doubling the number of workers since 1990. By contrast, the state and national economy has shifted too less labor-intensive occupations. Statewide, EAPT occupations increased 8% since 1990 while nationally these same occupations increased 7%. As noted, the Warren County economy is slowly converging with the state and national economies. Between 1990 and 2000, the number of Warren County jobs in EAPT increased by 58.4%. Should these occupations keep growing at this pace locally, Warren County and the municipalities should approximate state and national occupation percentages by 2025.

There are two education attainment statistics that are important in determining whether occupation requirements can be met: overall education attainment and higher education rates. The overall education attainment in Warren County has continually improved in the past two decades. In 1980, 67.8% of residents did not have a high school diploma. By 2000, this rate dropped to 42.9% but will need to continue declining for residents to access these occupations. Current higher education attainments rates appear sufficient to accommodate the increase in higher skilled occupation groups. Over 35.7% of Warren County high school graduates attend Georgia public and technical colleges. Historically, this supply was far greater than the demand for high skilled occupations. As noted in the population element, the lack of appropriate opportunities is directly related to exodus of younger age groups. Should higher skilled occupations continue to



increase at historic paces, the supply of skilled employees will be sufficient to meet the needs to higher skilled occupations.

In the past two decades, there has been a trend among higher paying occupations to require certification and continuing education. Currently, Warren County residents in these occupations need to attend Augusta State University, Georgia College & State University, and the University of Georgia to meet these needs. This includes workers ranging from teachers to public administrators. Traditionally, local governments and private employers in these occupation groups have provided flexible work schedules to accommodate certification and continuing education. Given the small pool of such workers, this training is sufficient to meet local needs.

Employment Status

Labor force participation in Warren County and the municipalities is below the state average. In 2000, labor force participation in the county was 52.9%, slightly higher than Warrenton (50.1%) and Norwood (50.9%) but lower than Camak (56.7%). By contrast, state and national labor force participation rates are 66.1% and 63.9% respectively. Since 1990, the total number of residents in the labor force declined by 5.6% in Warren County and 7.6% in Warrenton, while increasing slightly in both Norwood and Camak. State and national rates declined by less than 2% in that same period. On average, the county's various labor force participation indicators are ten percentage points below that of neighboring counties and the state and national averages. Low labor participation rates in Warren County and the municipalities are not surprising given the relatively high dependence on transfer payments noted in the previous section.

Unemployment Rates

Unemployment rates in Warren County have been consistently higher than neighboring counties and the state and national averages. Over 7% of county residents are unemployed, compared to 4.5% in Glascock County, 5.7% in McDuffie County, 3.7% statewide, and 4% nationwide. However, the unemployment rate has improved by historic standards. As recently as 1998, 16.5% of Warren County residents were unemployed. The closing of the Healthtex facility resulted in that increase. Total employment increased 2% since 1990, an insufficient level to offset the plant closing.

Trends in Warren County unemployment reveal similar patterns in neighboring jurisdictions. Between 1990 and 2000, unemployment rate spikes in Warren County were reflected in Glascock and McDuffie Counties. By contrast, state and national unemployment rates declined continually in that same period. This highlights the regional nature of the economy. Plant closings in one county affect employment patterns in another.



Commuting Patterns

A significant 54.5% of county residents commute to neighboring counties to work. The weak local economy has already been noted. There are simply not enough jobs for residents in the county. Furthermore, non-residents hold over one third Warren County jobs, indicating a skills mismatch. While it is difficult to which population group is staying or leaving the county for work, a qualitative assessment supports the assertion that many higher skilled workers found in the county schools and board are non-residents.

Commuting pattern data from neighboring jurisdictions highlights how integrated the regional economy is. Over 21.3% of Warren County residents work in McDuffie County while close to 17% of Warren County jobs are held by McDuffie County residents. Just under 7.4% of Glascock County residents are employed in Warren County. These commuting patterns demonstrate the importance of planning regionally for economic development and why regional support of a project like the East Georgia Regional Park is important.

ECONOMIC DEVELOPMENT RESOURCES

Economic Development Agencies

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

Warren County residents have unprecedented access to education, job training and workforce development opportunities. In a rapidly changing economy where the opening or closing of a single plant can drastically change the community's economic base, local officials will need to monitor these programs more closely and coordinate extensively with area schools and technical colleges, as well as appropriate workforce development authorities.

In economic development planning, an important question is how much growth is desired. Not all residents agree on the definition of growth or even whether



growth is a good idea. For some, Warren County should strive to become the major trade center it was during the peak of the railroad in the 19th century. For others, keeping the small town charm is why they live in Warren County and development should be limited. However, most agree that the Warren economy is under performing and needs to expand. Those who argue in favor of keeping Warren County a small rural community acknowledge that the continued exodus of population and jobs will only hurt the county and themselves in the long run.

Warren County's projected employment growth rate of 12.3% through 2025 is well below the state average of 41.7%. At this pace, the county will not be able to stem the tide of population loss. It is important to recognize that Woods & Poole population projections are tied to projected employment. If the county manages to outperform in the employment indicator, a corresponding increase in population will appear in future projections. The county and municipalities will need to grow at the state average rate in order to meet economic development goals. This translates into 952 new jobs by 2025 instead of the 286 projected. The types of businesses and industries to be encouraged will be primarily in manufacturing, TCP and FIRE as they conform to community's development goals and are appropriate for the skill level of the population.

Economic Development Programs and Tools

Economic Development programs and tools are used to recruit industries, strengthen businesses and stimulate the economy among others. For Warren County and the municipalities, some programs are more effective than others. Job tax and investment credits, and manufacturing machinery sales tax exemptions are clearly effective as they relate directly to the types of industries in the community and provide incentives for existing industries to continue and expand their operations. These programs have been used effectively in the past and will continue to be used. The electricity exemption is less important as there are few industries in Warren County where electricity accounts for 50% or more of all materials used in manufacturing products.

Incentives provided to industrial recruits through the Georgia Business Expansion Act provide good incentives for development but these incentives are offered statewide. As such, Warren County and the municipalities enjoy no competitive advantage. Warren County is already at a disadvantage as other, wealthier jurisdictions already have the sites, water and sewer infrastructure needed to attract prospects in place. The various One Georgia programs provide funding for site development and infrastructure, and are vital resources needed by the county to remain competitive in recruiting industry. The One Georgia programs have provided funding for the East Georgia Regional Park and the county will benefit from infrastructure improvements and proximity to its primary population base.



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

Community improvement districts, enterprise communities, tax increment financing, and development impact fees are all important and useful economic growth tools that cities in Warren County can use to develop or redevelop downtowns or city sectors. However, not all of these tools are effective. Development impact fees, for example, are useful when demand for development is high and local governments have the luxury negotiating. In Warren County and the municipalities, the current economic realities are not conducive to development impact fees. Similarly, community improvement districts are useful when businesses absorb the extra cost. The struggling downtowns throughout the cities in Warren County would not benefit from this tool. To date, Warrenton, Norwood and Camak have relied on state and federal funds, and the efforts of private citizens and civic groups associated with the Main Street and National Register for Historic Preservation programs to revitalize downtown areas. This approach has been highly successful and should continue.

Entrepreneurship is actively encouraged by the Chamber of Commerce, which provides training and support. Chamber members receive periodic training from a variety of sources, including the Georgia Entrepreneur and Small Business Coordinating Network, an alliance of representatives from state agencies and academic outreach units involved in entrepreneurship.

Educational and Training Opportunities

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

Goals, Objectives and Policies

All goals, objectives, and policies apply to Warren County and the municipalities unless otherwise noted.



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

Goal 2: Attract new business and retain existing ones.

Goal 3: Diversify the local economy.

Goal 4: Create employment opportunities residents.

Goal 5: Promote Warren County as a tourism attraction.

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

To address these goals, Warren County and the municipalities will need to:

- Enhance Warren County's visibility as a place for business to locate.
- Enhance and promote the growth and expansion of existing business and industry.
- Encourage collaboration between employers, employees, and existing educational facilities to establish an educated, quality, and sustaining workforce.
- Facilitate a relationship between federal, state, and local governments with business and industry to promote economic development.
- Nurture sectors that provide high earnings and wages.
- Encourage higher labor participation rates.
- Collaborate on a multi-jurisdictional level to promote tourism throughout the region.
- Revitalize downtown Warrenton, Norwood and Camak. (applies to Warrenton, Norwood and Camak).

Policies that will address these needs include:

- Continue to offer financial programs, tax incentives and credits, and technical assistance to new and existing businesses and industry.
- Participate more actively in regional economic planning entities such as the Unified Development Authority and the Unified Development Council.
- Support and advertise job training, business assistance and education programs available through the University of Georgia Small Business Center, Georgia Tech Economic Development Institute and the CSRA Regional Development Center.
- Use authority granted under the Georgia Enterprise Zone Employment Act to create jobs and economic activity in distressed neighborhoods.
- Complete and promote the East Georgia Regional Industrial Park. (applies to Warren County and Camak).



- Encourage future development in areas with adequate services and infrastructure.
- Encourage economic growth of existing populated and developed areas.
- Monitor existing industries for plant job reduction or closure.
- Work closely with surrounding area technical schools to assist local residents with job training and employment placement.
- Work with the business community to encourage the development of a hotel or bed & breakfast in Warrenton (applies to Warrenton and Warren County).
- Apply for state and federal grants to support tourism projects.
- Complete the Georgia Walk of Fame in Warrenton (applies to Warrenton and Warren County).



Vision Statement

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

Introduction

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

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

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

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

Housing Supply

Table H-1 identifies the existing local housing stock and includes historical data for comparison with state averages. Since 1980, the total number of housing units in Warren County increased 31.3%, less than half the state average of 63%. Approximately 55% of the current housing stock is stick built single-family units, with mobile homes or trailers accounting for 35.2%. The number of single-family units declined significantly in the past two decades. In 1980, single-family units accounted for 85.5% of the total housing stock,



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over 30% more than in 2000. The number of multi-family units increased from 1.2% to 9.8% in that same period.

The percentage of single-family units statewide has declined 8.7% since 1980. Multi-family units levels in Warren County have historically been low compared to the state average but since 1980 have increased 8.6%. The growth of multi-family units is surprising considering that the unincorporated area does not have an abundance of infrastructure typically required for increased residential development densities.

The number of mobile home units in Warren County has increased steadily in the past two decades, from 13.3% of total housing units in 1980 to 35.2% in 2000. By contrast, the number of mobile home units statewide has increased by less than 5% in that same period. In the past decade, neighboring jurisdictions have adopted strict mobile home ordinances that led many mobile home owners to locate in Warren County. Because the county has not adopted any regulations limiting the size, age, type and location of mobile homes, this trend is projected to continue in the future.

The cities of Warrenton, Norwood and Camak experienced similar housing trends since 1980. In all cases, the number and percentage of single-family units declined while the share of mobile home units increased. The most dramatic change occurred in Norwood where the percentage of single-family units dropped from 91.6% to 55.2%. Throughout the municipalities, the number of multi-family units has increased as a result of affordable and public housing initiatives undertaken in the 1980s. In Warrenton, 24.9% of the total housing stock is multi-family, a rate higher than the state average.

Table H-1

Housing Stock by Type, 1980-2000

	1980		1990		2000	
	Total	%	Total	%	Total	%
Warren Co.						
Single-Family	1,803	85.5%	1,581	66.0%	1,522	55.0%
Multi-Family	23	1.2%	200	8.0%	272	9.8%
Mobile Home	281	13.3%	625	26.0%	973	35.2%
Total	2,107	100.0%	2,406	100.0%	2,767	100.0%
Warrenton						
Single-Family	573	74.1%	521	64.6%	495	53.9%
Multi-Family	132	17.0%	145	17.9%	229	24.9%
Mobile Home	68	8.9%	141	17.5%	195	21.2%
Total	773	100.0%	807	100.0%	919	100.0%
Norwood						
Single-Family	110	91.6%	73	72.3%	80	55.2%
Multi-Family	5	4.2%	0	0.0%	6	4.1%
Mobile Home	5	4.2%	28	27.7%	59	40.7%
Total	120	100.0%	101	100.0%	145	100.0%
Camak						
Single-Family	88	88.8%	70	83.3%	73	79.3%



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Multi-Family	5	4.4%	1	1.2%	4	4.4%
Mobile Home	6	6.8%	13	15.5%	15	16.3%
Total	99	100.0%	84	100.0%	92	100.0%

Georgia

Single-Family	1,525,070	75.8%	1,712,259	64.9%	2,201,467	67.1%
Multi-Family	334,622	16.6%	598,271	22.7%	681,019	20.8%
Mobile Home	152,948	7.6%	327,888	12.4%	399,251	12.1%
Total	2,012,640	100.0%	2,638,418	100.0%	3,281,737	100.0%

Source: U.S. Bureau of the Census

Age and Condition of Housing Supply

Table H-2 provides data on the age of the housing stock within Warren County and the municipalities. Overall, the housing stock in Warren County and the municipalities is older than the CSRA and state averages. Approximately 7.5% of CSRA homes and 5.9% of Georgia homes were built prior to 1939, compared to 19.1% in Warren County, 18.1% in Warrenton, 32.5% in Norwood, and 38.3% in Camak. These communities have an abundance of historic structures that are actively preserved within both residential and commercial districts.

Over 60.1% of Warren County's housing supply was constructed prior to 1980. The largest decade of housing construction in occurred in the 1970s where over 20% of housing units were built. Nearly 41% of the Camak's housing stock was constructed prior to 1940. Camak experienced a slow but steady increase in housing through 1979, after which only 12 new units were constructed. In Norwood, 85% of housing units were constructed before 1990, and between 1990 and 2000 only 21 new housing units were built. Warrenton also experienced a steady increase in housing units through 1989. Between 1990 and 2000 only 141 new housing units were constructed in Warren County's largest city.

Table H-2

Housing Stock by Age, 1980-2000

Year	Warren County		Warrenton		Norwood		Camak		CSRA		Georgia	
	Total	%	Total	%	Total	%	Total	%	Total	%	Total	%
1939 or earlier	403	14.6%	140	15.2%	39	26.9%	38	41.3%	13,350	7.5%	172,014	5.7%
1940 to 1959	371	13.4%	182	19.8%	10	6.9%	13	14.1%	26,654	14.9%	384,397	12.7%
1960 to 1969	328	11.9%	126	13.7%	14	9.7%	17	18.5%	24,345	13.6%	376,827	12.5%
1970 to 1979	559	20.2%	190	20.7%	29	20.0%	12	13.0%	36,810	20.6%	558,943	18.5%
1980 to 1989	451	16.3%	140	15.2%	32	22.1%	2	2.2%	37,533	21.0%	669,953	22.8%
1990 to 1994	247	8.9%	48	5.2%	9	6.2%	7	7.6%	18,484	10.3%	348,006	11.5%
1995 to 1998	285	10.3%	83	9.0%	10	6.9%	3	3.3%	16,778	9.4%	387,634	12.8%
1999 to 2000	123	4.4%	10	1.1%	2	1.4%	0	0.0%	4,612	2.6%	108,607	3.6%
Total	2,767	100.0%	919	100.0%	145	100.0%	92	100.0%	178,566	100.0%	3,006,369	100.0%

Source: U.S. Bureau of the Census



The availability of plumbing facilities and percentage of homes built prior to 1939 are often used as indicators of substandard housing. Overall, housing conditions throughout Warren County and the municipalities is adequate and comparable to state levels (Table H-3). This represents a significant improvement, particularly for the county, which managed to cut the number of housing units without complete plumbing facilities from 18.6% in 1980 to 2.9% in 2000.

The higher percentage of pre-1939 units highlights increased usage of historic homes and buildings in the municipalities, particularly within the Warrenton and Camak historic districts. Given the number and importance of historic districts in Warren County, date of construction is not an accurate indicator of housing conditions.

Table H-3

Housing Conditions

	Lack Plumbing			Pre-1939		
	1980	1990	2000	1980	1990	2000
Warren Co.	18.6%	5.2%	2.9%	29.5%	18.3%	19.1%
Warrenton	N/A	1.9%	2.8%	26.1%	18.7%	18.1%
Norwood	N/A	N/A	0.0%	51.7%	N/A	32.5%
Camak	N/A	3.5%	4.3%	36.4%	38.4%	38.3%
CSRA	N/A	2.1%	1.5%	N/A	9.4%	7.4%
Georgia	N/A	1.1%	0.9%	15.0%	8.0%	5.9%

N/A = Not Available

Source: U.S. Bureau of the Census

Occupancy and Tenure

Housing occupancy and tenure characteristics are important variables in determining the adequacy of the existing housing stock. Owner-occupied housing in Warren County and the municipalities is significantly above the CSRA and state averages (Table H-4), reflecting traditionally higher rates of ownership in rural areas. The percentage of owner-occupied housing units has remained relatively stable in Warren County and Camak. (Table H-4). Norwood experienced a sharp rise in the percentage of owner-occupied units while Warrenton underwent a decline. The relative decline of owner-occupied units in Warrenton highlights the substantial growth in multi-family public and affordable housing units.

The owner to renter ratio mirrors the above-mentioned trends and highlights increased home ownership throughout most jurisdictions in the county. In the unincorporated areas, the ratio has increased from 2.88:1 to 3.31:1 in the past decade, indicating that for every renter-occupied unit, there are 3.31 owner-occupied units. The trend of high owner to renter ratios is also seen in the municipalities, as well as the CSRA and elsewhere in the state. The only exception is Warrenton, where the ratio dropped from 3.29:1 to 1.29:1 since 1980.



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Vacant homes and apartment units are necessary to provide a choice of location and price for housing consumers. A healthy vacancy rate is approximately 5% and fluctuates according to the housing market. Too few vacant units drive up prices and limit housing choices, while too many reduces the demand for new units. With the exception of Camak, vacancy rates throughout Warren County are below both the CSRA and state average (Table H-4). In 2000, the vacancy rate in Warren County was 11.9% and ranges from 8.5% to 14.2% in the municipalities. In the past decade, vacancy rates declined in the county and Norwood but increased in Warrenton and Camak. The CSRA and state averages dropped slightly in that same period.

The owner vacancy rate throughout Warren County and the municipalities is below 2%, in line with CSRA and state averages. Renter vacancy rates in jurisdictions that have available rental units range from 3.2% in Warrenton to 5.3% in the county. Renter vacancy rates are significantly below CSRA (7.9%) and state (8.4%) averages. Since a 5% vacancy is often cited as necessary for a healthy rental market, this suggests that more rental units may be needed.

Table H-4

Occupancy and Tenure of Housing, 1980-2000

	Occupied Units			Vacancy Rate			Owner-Occupied %		
	1980	1990	2000	1980	1990	2000	1980	1990	2000
Warren Co.	2,111	2,130	2,435	N/A	12.8%	11.9%	76.8%	74.8%	77.0%
Warrenton	761	787	815	N/A	9.5%	11.4%	76.7%	66.8%	54.8%
Norwood	88	31	133	N/A	13.8%	8.5%	77.3%	75.6%	84.2%
Camak	38	81	80	N/A	5.8%	14.2%	76.3%	72.4%	76.3%
CSRA	117,685	139,071	158,840	N/A	13.1%	12.4%	65.1%	65.7%	68.4%
Georgia	1,871,700	2,366,600	3,006,400	7.0%	10.3%	8.4%	60.4%	58.2%	67.5%

	Owner	Renter-Occupied %			Renter	Owner-Renter Ratio		
	Vacancy %	1980	1990	2000	Vacancy %	1980	1990	2000
Warren Co.	2000	23.2%	25.9%	23.2%	2000	3.3 : 1	2.88 : 1	3.31 : 1
Warrenton	1.5%	23.2%	32.7%	42.2%	3.2%	3.29 : 1	2.03 : 1	1.29 : 1
Norwood	1.9%	22.7%	N/A	26.6%	0.0%	2.14 : 1	N/A	3.15 : 1
Camak	0.0%	23.6%	34.2%	28.9%	0.0%	2.22 : 1	2.11 : 1	2.63 : 1
CSRA	2.1%	34.9%	34.3%	31.6%	7.9%	1.89 : 1	1.91 : 1	2.17 : 1
Georgia	2.2%	32.0%	31.5%	32.5%	8.4%	1.85 : 1	1.85 : 1	2.0 : 1

N/A = Not Available

Source: U.S. Bureau of the Census

There are less than a dozen seasonal units in the Jewel community in western Warren County. Seasonal units are not a significant portion of the housing supply in Warren County and the municipalities.



Cost of Housing

The cost of housing in Warren County and the municipalities has increased steadily since 1980 but remains significantly below CSRA and state median values (Table H-5). The median property value of a Warren County home in 2000 was \$46,400, slightly lower than in Warrenton but higher than Norwood and Camak. By contrast, the median value of a home in the CSRA is \$73,500 and \$100,600 statewide. Between 1980 and 2000, the median value of a home in Warren County increased by 118.8% and more than doubled in Norwood. In Camak, by contrast, median home values declined by approximately 9%. Median property values in the CSRA and state average have increased fourfold since 1980.

Median monthly rent throughout Warren County and the municipalities averages just over \$200, below the CSRA and state averages. This is primarily due to the lack of high-end apartment units for rent in the county and the high number of multi-family public housing units. The least expensive rents are in Warrenton, where a cluster of affordable housing serves a majority of the low-income, unemployed, and low-wage retail and service sector labor force.

Table H-5
Cost of Housing, 1980-2000

	Median Property Value			Median Rent		
	1980	1990	2000	1980	1990	2000
Warren Co.	\$21,200	\$32,600	\$46,400	\$50	\$224	\$208
Warrenton	N/A	\$36,100	\$49,200	N/A	\$224	\$204
Norwood	N/A	\$14,999	\$32,500	N/A	N/A	\$213
Camak	N/A	\$29,600	\$26,900	N/A	\$270	\$217
CSRA	N/A	\$59,999	\$73,500	N/A	\$277	\$364
Georgia	\$23,100	\$71,278	\$100,600	\$153	\$365	\$505

N/A = Not Available

Source: U.S. Bureau of the Census

Assessment

Housing Stock

In the past two decades, the total number of housing units in Warren County and the municipalities has increased over 30%. While the housing growth rate was less than half the state average of 63%, the statewide population increased along with new housing growth. During that same period, the local population declined from 3.7% in Warren County to a high of 14.2% in Warrenton. Compounding population is decreasing household size (-.50 persons per household since 1980) and 14% increase in the number of new households across Warren County.



Approximately 55% of the current housing supply is stick built single-family units, with mobile homes or trailers accounting for 35.2%. Since 1980, there has been a shift in the county's housing types. Single family units that were dominant form of housing units in the 1980s, have continually declined both in absolute numbers and in their percentage of the total housing supply. In 1980, 85.5% of the housing stock in Warren County was single-family units. By 2000, the rate dropped to less than 55%. A similar shift away from single-family units occurred in the municipalities. The most dramatic decline was in Norwood where the percentage of single-family units declined from 91.6% to 55.2%.

Overall, the total number of single-family units contracted by 404 in Warren County and the municipalities. While the number of multi-family units increased throughout Warren County, most notably in Warrenton where multi-family units account for close to a quarter of the total housing supply, the growth of this housing type has not kept with increases mobile home units. The growth of mobile home units has been explosive. Since 1980, over 833 new units were added to county's total housing supply and currently account for over 35.2% of the housing stock. Even in Warrenton, where available infrastructure is conducive to stick-built housing developments, over 1 in 5 housing units are mobile homes. In Norwood, the percentage of mobile homes has increased almost tenfold since 1980.

A number of causes explain these housing trends. First, the decline of single family units mirrors population loss during the past two decades. Second, the increase in mobile home units is directly related to housing affordability. Over 94.4% of the mobile home supply is in Warrenton and the unincorporated areas. While the median value of a home in Warren County is \$46,400 and \$49,200 in Warrenton, mobile homes values rarely exceed \$33,000. Countywide income levels highlight the increasing popularity of mobile housing. Close to 27% of the countywide population falls below the poverty line and per capita and average household incomes are significantly below the state average. Finally, over 24% of Warren County households and 33% of Warrenton households earn less than \$10,000 per year. In short, mobile home units are partly a response to housing affordability issues.

Related to population and income indicators are local government ordinances and regulations. In the past decade, neighboring jurisdictions, including McDuffie and Richmond Counties, have adopted strict mobile home ordinances that led many mobile home owners to locate in Warren County. While difficult to quantify, a qualitative assessment indicates that a significant segment of the commuting population to McDuffie and Richmond Counties are Warren County mobile home owners. Because the county has not adopted land use regulations limiting the size, age, type and location of mobile homes, and income levels are not projected to increase substantially over the next twenty years, the number of mobile home units is projected to increase through 2025.

For the local community, there are primarily two issues related to mobile home ownership. First, mobile homes do not provide sufficient revenue to offset the cost of infrastructure provided. Second, it is widely accepted that stick-built units encourage



community stability because it limits mobility and increases a homeowner's financial stake in the community.

Overall, there range of local housing types is sufficiently diversified. There is no longer a dominant housing type like as in the 1980s when single-family units accounted for in excess of 80% of the housing supply. The increase in multi-family housing, though mostly affordable and public housing units, provides more diversity in housing choices.

The existing supply of housing units in Warren County and the municipalities meets the community's current needs. Both the number of households and the number of total units has increased at a higher rate than the population. Between 1980 and 2000, the total number of households in Warren County grew 14.8% while housing units increased by over 30%.

Income and Housing Adequacy

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

Concern with housing affordability lies with low-income groups. Over 27% of Warren County residents fall below the poverty line. The number of households earning less than \$29,999/year in household income far exceeds mid-income ranges. In Warrenton alone, over 30% of households earn less than \$10,000/year. The presence of multi-family, subsidized housing units throughout Warren County and Warrenton currently house a large share of low-income residents. Low incomes are offset only by the lower cost of living.

The community's non-resident workforce's housing needs is more complicated to quantify because of the assumption that they wish to reside in Warren County. The idea behind the statewide objective of "to make it possible for all who work in the community to also live in the community" relates primarily to communities in which the non-resident workforce commutes to areas where the cost of housing is unaffordable, not to rural jurisdictions where housing cost differentials are minimal from one county to the other. Over 21% of the county's nonresident population commutes from McDuffie County, a larger rural county adjacent to Warren County where the median value of a home is 50% higher and more services are provided. Per capita incomes in McDuffie County are \$4,488 higher than in Warren County while average household incomes are \$5,864 more. The distribution of income in McDuffie County is similar to that of Warren County.

Both owner and renter vacancy rates in McDuffie County (2.8% and 7.9% respectively) are higher than Warren County.

Housing Conditions

In general, the housing stock in Warren County and the municipalities is older than the CSRA and state averages. Less than 5.9% of Georgia homes were built prior to 1939, significantly less than Warren County (19.1%), Warrenton (18.1%), Norwood (32.5%), and Camak (38.3%).

Over 60.1% of Warren County's housing supply was constructed prior to 1980, relatively higher than the 56.6% for the CSRA and 49.9% for the state. The largest decade of housing construction in Warren County and the municipalities occurred during the 1970s, with over 20% of the housing units were built.

Overall, the condition of the housing stock is adequate throughout the county and the municipalities and very comparable to regional and state levels. Over forty percent of Warren County's housing units have been built in the past twenty-five years. The lack of complete plumbing facilities in the county has declined from 18.6% in 1980 to 2.9% in 2000, and is comparable to CSRA (1.5%) and statewide (0.9%) averages. Rates in the municipalities are similar to the county average. Housing conditions have improved drastically since 1980, primarily because of the phasing out of older units and increased care by homeowners.

The municipal housing stock, while older, has been aided by the preservation efforts of homeowners. None of the historic districts are at risk of dilapidated structures. There are no concentrated areas of substandard housing. It is generally agreed however that these units are scattered throughout the unincorporated areas. Some underserved residential areas around the downtown Warrenton area, are in need of housing rehabilitation.

Assessment of Occupied Units

Homeownership trends vary throughout the region. In the CSRA, homeownership has increased gradually since 1980, from 65.1% to 68.4% in 2000. This mirrors a statewide trend towards increased homeownership. Statewide, homeownership increased from 60.4% to 67.5% in the last past two decades. In Warren County, the home ownership rate has remained flat, increasing less than 0.2% since 1980. In Camak and Norwood, rates have increased slightly. In Warrenton, however, the owner unit rate has dropped from 76.7% in 1980 to less than 54.8% in 2000. This reflects the city's continued population decline since 1980 and relatively high poverty levels as seen through the provision of significant multi-family public housing units.

Homeownership trends are reflected in the owner-to-renter ratio. In the CSRA, there are 2.17 owners for every renter, up from 1.91 since 1980. Statewide, the ratio is has

increased from 1.89 to 2.17 in the past two decades. By contrast, the ratio in Warren County has remained flat since 1980. The ratio in the unincorporated area is typical of rural communities where home ownership rates are higher.

With the exception of Camak, vacancy rates throughout Warren County are below both the CSRA and state average. In 2000, the vacancy rate in Warren County was 11.9%, slightly below the 12.8% in 1990. In Warrenton and Camak vacancy rates increased while in Norwood they declined. The vacancy rate in the CSRA is 12.4% and 8.4% statewide.

The owner vacancy rate in Warren County is below 2%, in line with CSRA and state averages. Renter vacancy rates in jurisdictions that have available rental units range from 3.2% in Warrenton to 5.3% in the unincorporated areas. The renter vacancy rate is low compared to the CSRA (7.9%) and state (8.4%) averages. Since 5% is a desired rate for rental unit availability, this suggests more units will be needed in light of projected increases in new households through 2025.

Seasonal Units

There are very few seasonal units in Warren County and the municipalities.

Housing Costs

The median property value in Warren County is \$46,400, slightly lower than the \$49,200 in Warrenton, but higher than the \$32,500 in Norwood and \$26,900 in Camak. Median property values countywide are significantly below the CSRA average of \$73,500 and state average of \$100,600. Since 1980, the median value of a home in Warren County increased by 118.8%, with most of the municipalities following suit. By contrast, median property values in the CSRA and statewide have increased fourfold in that same period. With owner vacancy rates at historic lows and below the state average, coupled with an increasing number of new households, median property value increases have been relatively small. This is primarily due to little demand in residing in Warren County. The county will enjoy very limited population growth and the commuting population, primarily located in neighboring counties, is willing to commute reasonable distances to work.

Median monthly rents in Warren County are \$208, in line with those of the municipalities, but well below median rents found in the CSRA (\$364) and statewide (\$505). In the past decade, median rents actually declined 7%, due primarily to the lack of high-end apartments and a relatively high number of public and affordable housing units. The least expensive units are found in Warrenton, where there is a cluster of affordable housing that houses the majority of the low-wage retail and service sector labor force.

The supply of affordable housing for the resident and nonresident commuting populations is not readily available. Although property values and rents are affordable to even the lowest paid workers, vacancy rates are too low to ensure an adequate supply.

In general, housing costs are not impacted by special circumstances. During the peak of job losses and population decline of the 1980s and 1990s, median-housing values increased substantially. This indicates strong demand for housing.

Future Demand

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

Ranging from 0% to 1.9%, owner vacancy rates in Warren County and the municipalities are well below CSRA and state averages and highlight a future housing shortage. Both total population and the total number of households are projected to increase by 9% through 2025. Furthermore, the fastest growing demographic during the planning period is the 55+ age groups (+21%). The number of younger age groups, particularly those of children-raising age, will continue to decline. This will result in even lower average household sizes through 2025. Given these demographic shifts, and assuming the owner-renter ratio remains constant over the planning period, the result will be a net shortage of available owner units and a rental vacancy rate that will quickly approach zero.

Employment base remains a significant consideration in planning for housing. The workforce is projected to increase by 12.3% through 2025, with most of the employment growth in services and TCP. Without an adequate supply of housing units, Warren County and the municipalities will fail to house the projected workforce and will struggle to attract new commercial and industrial employers. Currently, close to 40% of Warren County jobs are held by non-residents. Most commuters are from adjacent counties but a significant portion commute 30-50 miles from as far as Richmond and Columbia Counties. These workers tend to work in highly specialized manufacturing and public administration occupations. The county and cities need to view these workers as potential homeowners and support housing policies that will encourage commuters to reside in the county.

Median incomes will continue to rise in Warren County and the municipalities. This rise is particularly evident in household income, which will reach \$43,786 by 2025. Current incomes are adequate to afford median-priced homes within the county and municipalities. While projections for household income distribution are unavailable, two trends suggest overall income increases in middle-income groups. First, median incomes

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are rising at relatively high rates. Second, sector earnings indicate that the fastest growing employment sectors in the local economy will also be the highest paid.

Table H-6 provides housing needs projections through 2025.

Table H-6

Warren County and Municipalities Housing Needs Projections

	Total Units	New Units	Single- Family	New Units	Multi- Family	New Units	Mobile- Home	New Units
Warren Co.								
2000	2,767	N/A	1,522	N/A	272	N/A	973	N/A
2005	2,867	100	1,577	55	282	10	1,008	35
2010	2,961	194	1,629	107	291	19	1,041	68
2015	3,046	279	1,676	154	299	27	1,071	98
2020	3,113	346	1,713	191	305	33	1,095	122
2025	3,166	399	1,742	220	310	38	1,114	141
Warrenton								
2000	919	N/A	495	N/A	229	N/A	195	N/A
2005	952	33	513	18	237	8	202	7
2010	981	62	529	34	244	15	208	13
2015	1,009	90	544	49	251	22	214	19
2020	1,029	110	555	60	256	27	218	23
2025	1,047	128	564	69	261	32	222	27
Norwood								
2000	145	N/A	80	N/A	6	N/A	59	N/A
2005	151	6	83	3	7	1	61	2
2010	157	12	86	6	8	2	63	4
2015	163	18	89	9	9	3	65	6
2020	168	23	91	11	10	4	67	8
2025	171	26	93	13	10	4	68	9
Camak								
2000	92	N/A	73	N/A	4	N/A	15	N/A
2005	96	4	76	3	4	0	16	1
2010	101	9	79	6	5	1	17	2
2015	106	14	82	9	5	1	19	4
2020	110	18	84	11	6	2	20	5
2025	114	22	86	13	7	3	21	6

N/A = Not Applicable

The Georgia Department of Community Affairs Housing Finance Division compiles data on home sale trends. Based on a sample of 13 units, DCA found the average sale price of an existing structure in Warren County to be \$80,915 in 2000. It is doubtful this is representative of the overall housing market given that it is approximately double median



property values recorded in the U.S. Census. Purchases of existing structures probably reflect higher end unit sales throughout the county. Nevertheless, even an average sales price of \$80,915 is over \$36,901 below the state average and, based on variable income indicators discussed in the previous section, makes housing affordable to most workers in Warren County and the municipalities. However, this price range may be difficult for a significant portion of the low-wage retail trade and services workforce and residents dependent on transfer payments to afford housing. Units in the \$50,000-\$70,000 range will be needed to provide affordable housing to these population groups.

There are two significant special needs populations identified in Warren County and the municipalities. First, number of residents 65+ will increase by 25% to 1481 and account for over 20% of the population through 2025. Currently, Warren County has one nursing home/long-term care facility to meet the special needs of Warren County's elderly population. This facility, which contains 110 beds, has consistently operated at or near capacity, and as the county's population continues to age, additional options will be needed to ensure an adequate supply of special needs housing. An additional twenty-eight beds will be needed through the planning period just to keep up with the projected growth in the elderly population.

Warrenton contains a public housing supply of 99 units. Given the county's high poverty rate and income distribution slanted towards lower income groups, the supply of public housing units has not been sufficient to keep pace with the demand. While incomes are projected to rise through 2025, the county and cities will need to plan for additional public housing units.

Goals, Objectives and Policies

All goals, objectives, and policies apply to Warren County and the municipalities unless otherwise noted.

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

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

To address these goals, Warren County and the municipalities will need to:

- Encourage a wide range of housing types to support persons with special needs and to accommodate varying age groups, household sizes and work force needs throughout the community.
- Ensure adequate supply of special needs and affordable housing for seniors and low and moderate-income households. (applies to Warren County and the City of Warrenton).



HOUSING

- Preserve and rehabilitate the existing housing stock.
- Encourage housing development to locate in areas convenient to shopping, recreation facilities, schools and other community activities.
- Encourage infill-housing development, where appropriate, in suitable areas supported by necessary infrastructure.

Policies that will address these needs include:

- Ensure that all housing meets minimum federal housing standards.
- Encourage the renovation of substandard or vacant units for use as affordable housing units for low-to-moderate income households.
- Seek state and federal funding assistance for housing rehabilitation and special needs housing assistance (applies to Warren County and the City of Warrenton).
- Encourage an equitable distribution of public housing units.
- Avoid scattered, non-contiguous residential development patterns and promote clustered residential development.
- Preserve and enhance historic homes.
- Maintain higher-density housing in downtown districts (applies to Warrenton, Norwood and Camak).
- Encourage mixed-use development within downtown districts (applies to Warrenton, Norwood and Camak).
- Coordinate housing rehabilitation with downtown revitalization efforts (applies to Warrenton, Norwood and Camak).



Vision Statement

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

Introduction

The adequacy and availability of community facilities is a necessary part of the comprehensive planning process due to the importance of maintaining and attracting future residents, businesses and industries to the area. Growth needs to be managed in such a way as to not put an undue burden on existing community facilities, and thereby negatively affect the overall quality of life in the county and municipalities. It is important that the prioritizing, scheduling and construction of community facilities meet the needs of current and future populations, while at the same time guide and direct growth in an orderly and logical manner.

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

Figure C-1 provides a general overview of community facilities and will be referred to throughout this section. Since most community facilities are located within the City of Warrenton, the figure also includes a separate map for Warrenton to highlight the location of facilities.

Transportation

An efficient transportation network is a key element in determining Warren County's ability to develop. Adequate transportation facilities are necessary both for the transport of people and goods and services. The efficiency of the network has a direct impact on land use through its ability to disperse increased traffic levels as a function of residential, commercial, and industrial development.

Existing Road Network

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

1. *Principal Arterials*: These roads, which include interstates and rural freeways, serve substantial regional, statewide or interstate trips; connect most urban areas of 25,000 or more and virtually



COMMUNITY FACILITIES

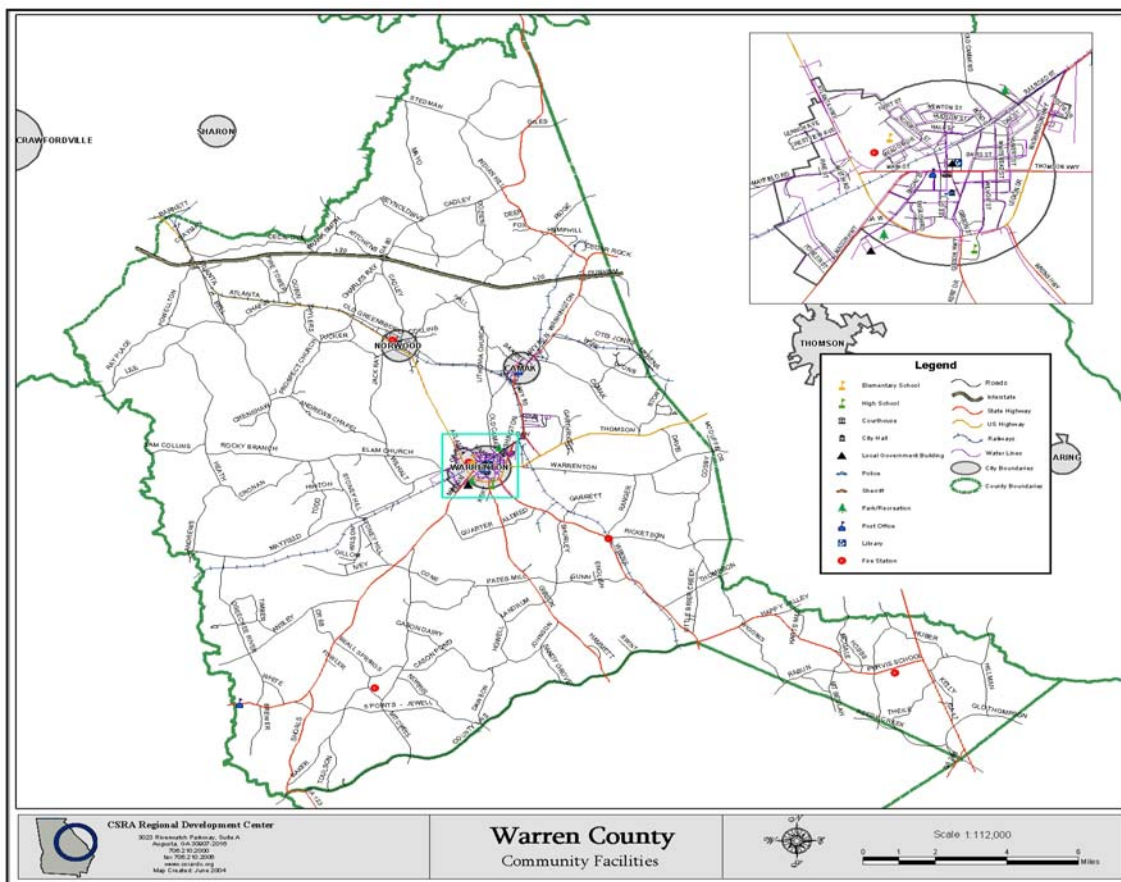
all urban areas of 50,000 or more; and provide an integrated network without stub connections except where geography dictates otherwise.

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

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

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

Figure C-1: Community Facilities in Warren County and the municipalities.



Interstate 20 and GA highways 12, 80, 223, 128, and 171 all intersect a portion of the county and are the primary arterials in Warren County. Figure C-1 displays the location of these arterials. Roads classified on the map are considered major county thoroughfares and serve as main transportation routes within the county and to surrounding areas. All other county or municipal roads not classified on the thoroughfare map are considered locally serving. Most of the roadway network is rural, with only a handful of urban roads in Warrenton.

Table C-1 identifies the total mileage and paved roadways of each local jurisdiction. Most of the network is in the unincorporated areas. The municipalities include smaller roadways most are paved. By contrast, less than half the county road network is paved.

Table C-1: Warren County and Municipalities Road Network

Jurisdiction	Mileage	Paved
Warren County		
State Routes	94.41	94.41
County Roads	316.02	147.09
City Streets	21.36	20.34
Total	431.79	261.84
Warrenton		
State Routes	5.54	5.54
County Roads	2.29	2.05
City Streets	15.14	15.0
Total	22.97	22.59
Norwood		
State Routes	1.01	1.01
County Roads	2.51	2.51
City Streets	2.37	2.30
Total	5.89	5.82
Camak		
State Routes	1.08	1.08
County Roads	1.16	0.67
City Streets	2.69	2.25
Total	4.93	4.00

Source: Office of Transportation Data, Georgia Department of Transportation, 2002

Level of Service

The quality of service provided by the road network requires quantitative and qualitative measures of operational efficiency. The primary method of analysis is to determine the Level of Service (LOS) of the major thoroughfares within the network. According to the Highway Capacity Manual, LOS is a measure describing operational conditions of a roadway in terms of average speed, travel time, maneuverability, and traffic interruptions. Table C-2 identifies six



LOS categories, ranging from A to F, each describing the operating conditions associated with them.

Table C-2: Level of Service Classification

Level of Service	Operating Conditions
A	Free flow, minimum delay at signalized intersections.
B	Occasional short delays that may require waiting through one red light.
C	Stable flow with intermittent delays at signalized intersections (typical design level). Backups may develop behind turning vehicles.
D	Approaching unstable flow and may require waiting through two or more red lights.
E	Unstable flow. Roadway is operating at capacity with high levels of congestion that may result in lengthy delays.
F	Forced flow through jammed intersections. Excessive delays resulting in extremely high levels of congestion

The LOS indicates the roadway conditions during the peak hour of traffic. It is calculated by determining the ratio of traffic volume to roadway capacity for segments of individual roadways based on accumulated flow from collector roads within the traffic shed. The typical design level of a road represents an operational LOS C. This indicates that roads are designed to adequately handle 65% of the traffic capacity while maintaining a stable flow of traffic.

The entire traffic network in Warren County is operating at an adequate level of service of C or better, with the majority of roadways operating at LOS A. According to the latest traffic count data provided by the Georgia Department of Transportation (2002) the heaviest traveled roads in the county are I-20 (16,800 Average Annual Daily Traffic) and GA Highway 12 (between 5,001k and 10,000k). With the exception of SR 16 between Hancock County and Warrenton (2,500 AADT), all other roadways carry less than 2,000 AADT.

Traffic levels have increased slightly over the past five years according to the DOT 1997-2002 Annual Average Daily Trips (AADT) with the largest increases found along I-20 and in and around Warrenton. Warrenton’s role as the county’s major employment center, combined with the access to arterial state routes, increases the amount of daily vehicle trips into and through the city.

Pedestrian and Bicycle Facilities

There is currently no comprehensive sidewalk inventory for Warren County and the municipalities. There are no known sidewalks in the unincorporated areas. Norwood and Camak have some sidewalk converge in their downtown area while Warrenton has a more extensive network, which includes both the downtown area and adjacent residential areas. The CSRA RDC is in the process of conducting a region-wide inventory of pedestrian facilities, including sidewalks and curb ramps. When complete, the inventory will assist in future planning efforts.



There are no bicycle facilities in Warren County and the municipalities. Two state bicycle routes (Route 85 and 35) pass near Warren County, in neighboring McDuffie and Washington Counties, but do not enter the county.

Signalization and Signage

The only signalized intersections and significant traffic signage in Warren County are located within the City of Warrenton, along Georgia Highways 16 and 12. These corridors handle significant traffic volumes and represent the city's main commercial corridors. Signalization is essential at these intersections to provide an orderly flow of traffic in and out of the various commercial establishments.

Bridges

There are 79 bridges scattered throughout Warren County. The county has numerous state highways and all bridges along these roads are maintained by the Georgia Department of Transportation. Bridges located along county roads are maintained by Warren County.

Public Transportation

Warren County Transit (WCT) provides public transportation for county residents and operates from the senior's center in Warrenton. Services include transporting residents to and from destinations for shopping, work, school, personal appointments, and recreational opportunities within and outside the county. WCT currently has 2 vehicles: a 1999 Mini bus and 2002 Conversion van. Both are wheel chair equipped and have a total seating capacity of 25. Approximately 770 monthly trips are provided to county residents.

Railroads

The rail companies provide crucial cargo transport for industries in Warren County. Many items and materials are too bulky or heavy to be shipped by truck and are moved by rail. Both CSX Railroad (from Augusta through Camak) and Norfolk Southern (from Savannah through Warrenton) serve Warren County (see Figure C-1).

Port Facilities and Aviation

Warren County does not have any port or aviation facilities. The nearest local airport is 20 miles away in McDuffie County while the nearest commercial air service is in Augusta, 50 miles away. Atlanta-Hartsfield International Airport, located in Atlanta approximately 105 miles from Warrenton, provides major commercial airline service. The ports of Savannah (150 miles) and Charleston (220 miles) provide port facilities.

Assessment

Road Network and LOS

Roadways drive the Warren County economy and are considered significant as much for their economic development function as for local transport needs. At just over 54%, the county has an unacceptably high percentage of unpaved roads. Neither current nor future needs are being met with so many unpaved roads. While some roads in very low density have always been and will continue remain dirt roads, the county will need to implement projects prioritized through the years. Over 95% of roads within municipalities are paved. No major problem areas were identified current needs are being met. At current levels of service, future needs will also be met in the municipalities.

Advisory members identified as critical to economic development efforts two countywide road projects: road frontage between Norwood and Camak exists parallel to I-20, and the widening to four lanes of SR 80 from Camak to the Camak interchange. These projects support to the economic development policy of industrial park expansion and the county should work with appropriate Georgia DOT officials to complete necessary improvements.

Future land use patterns will play a significant role in the continued efficiency of the transportation network. According to the Institute of Traffic Engineers, a typical single-family detached home generates an average of 9.54 vehicle trips per day while commercial and industrial facilities generate from 20 to 2000 vehicle trips per day. In 2000, there were close to two passenger vehicles per household in the county and municipalities. While population growth is projected to be minimal through 2025, countywide housing projections, based in part on continual increases in the number of new households, are anticipated to reach 400. Given current levels of service, the projected increase in new housing will not significantly impact the existing network.

The economic development policy contained in this comprehensive plan calls for significant levels of growth in manufacturing, TCP and FIRE. Increases in TCP and FIRE employment will not significantly affect the existing traffic patterns but manufacturing has the potential to alter the network. Future manufacturing sites include the East Georgia Industrial Park and other areas in the unincorporated areas identified by the county. Given Warrenton's ability to provide water and sewer infrastructure, it is likely that manufacturing plants will locate in proximity to Warrenton. Should that occur, Warrenton and Warren County will need to consider the traffic implications of potentially significant truck and vehicular traffic along State Route 12.

Warrenton's relatively high traffic levels are not only a result of its concentration of population and housing but also its importance as the county's commercial center. As noted in the Economic Development chapter, Warrenton is the main source of employment opportunities in the county, as well as attracting employees from outside of the county. As economic development continues in and around the city, and the amount of jobs increases traffic, impacts on the urban thoroughfare network can be expected to worsen.

In order to better assess the impacts of land use on the transportation network and to identify potential implementation measures to mitigate those impacts a detailed thoroughfare study and

plan is needed. A thoroughfare plan can provide a much more precise assessment and identify specific needs for implementation.

Pedestrian and Bicycle

Overall, there is lack of pedestrian and bicycle facilities in the county and the municipalities. Most of the sidewalk system in Warrenton is over 40 years old. The CSRA RDC is currently in the process of developing a bicycle and pedestrian plan for the 13-county CSRA area. A complete inventory and assessment as well as recommendations will be completed by 2005. In 2004, Warren County was awarded Transportation Enhancement funds to complete streetscape work along Warrenton's historic district. The county should continue applying for TE grants to complete much needed pedestrian projects.

No bicycle routes have been identified within the county or the municipalities. The regional bicycle and pedestrian plan will include recommendations for bicycle routes, including facilities along the proposed scenic byway route. In addition to identifying an internal network, the plan will examine ways to link local bicycle networks with the state system, thus providing residents with alternative transportation modes.

Bridges and Signalization

The adequacy of the overall road network is dependent on bridge maintenance and the adequacy of signalized intersections to maintain a steady traffic flow. The county continues to monitor the condition of bridges and repair them on an as needed basis. The only planned improvement bridge project included in the GDOT State Transportation Improvement Program (for years 2004-2006) involves railroad-crossing improvements along State Route 12 in Warrenton.

The level of service (LOS) of the signalized intersections is directly correlated to the level of service of the road segments that they control. Currently, all signalized intersections in Warrenton are operating at a LOS C or better.

Public Transportation

WCT is currently able to meet demand for public transportation. With the projected 25% growth in the seniors population group through 2025, WCT will need an additional vehicle to accommodate future demand. Like many public transit providers, the existing fleet is always an issue. The Mini bus dates back to 1999 and will eventually need replacing.

Railroads

Both CSX and Norfolk Southern currently provide an acceptable level of service and are expected to continue to do so. Even with the anticipated economic growth policy outlines in the Economic Development section, both rail providers have enough capacity to continue providing adequate service.

Water Supply and Treatment

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

Warren County does not operate a public water system. Most Warren County residents rely on private wells for their water supply while some areas of the unincorporated portions of Warren County are served by municipal water systems or by the McDuffie County water system.

The City of Warrenton operates an intake station at Paul Marshall Lake. The city has a total permitted withdrawal capacity of .75 million gallons per day (mgd), with a treatment capacity of 1.0 mgd and a storage capacity of .90 mgd. The average daily demand is .35 mgd and peak demand is .45 mgd. The system was developed in 1968 and has a useful life of 50 years. The Warrenton system provides water to approximately 1,059 customers and is adequate for the fire protection needs within the city.

The City of Camak purchases 250,000 gallons of water per day and currently serves 75 residential and industrial customers. There is one water storage tank in Camak that has a capacity of 250,000 gallons.

The City of Norwood relies on its surface water intake from two deep-water wells. The average daily demand is 20,000 gallons per day, with peak demand reaching 24,000 gallons per day. Although the city has two water storage tanks, only one 100,000-gallon tank is currently used for water storage. The water system in Norwood was upgraded in 1997 and serves 164 customers and is adequate for the fire protection needs within the city limits.

Assessment

Based on population projections discussed in the Population Element of this Comprehensive Plan, community facilities and services must be assessed to determine their levels of service and ability to meet the demands of the existing and future population. A level of service analysis for the water systems must take a number of variables into consideration when determining the adequacy of the network to serve its users. Each of the municipal water systems must be assessed based on four adequacy measures. The first variable is the water source, which must be analyzed to determine whether or not the available water is adequate to supply existing and future demand. The second variable is the treatment capacity of the water system, which addresses the systems capability of providing potable water. The third variable deals with storage capacity and the ability to meet average daily demand. The final variable is the delivery system, to determine if the current network can adequately provide water to those areas designated for service.

Water demand forecasts are derived from population, housing, and employment forecasts

based on existing average use levels. These forecasts are based on minimal expansion of the network service area and would increase accordingly if water service were extended further into the unincorporated area.

In order for Warren County to continue to attract commercial and industrial development and take full economic advantage of its Interstate 20 interchanges, water and sewer services need to be developed. Development cannot and will not occur unless these services are available. The provision of a comprehensive water and wastewater system is a requirement to support desired new development. Areas targeted for future industrial and commercial development will require adequate water service to attract higher density development and support more intensive land uses.

Currently, the water supply needs of the City of Warrenton are being met. Average and peak demand is less than half of the total permitted withdrawal, treatment, and storage capacities. Population growth is projected at 8.8% through 2025 while housing units are anticipated to increase by approximately 400. Most of the county's housing growth is projected to be in and around Warrenton. Given current water capacities, growth will easily be accommodated. However, there are two related comprehensive plan components that may render it difficult to meet future demand. First, one of the county's economic development policies is to encourage large-scale manufacturing. Second, the City of Warrenton wishes to supply water to future industrial customers as well as expand its customer base within the city and possibly the unincorporated area. This combination of factors will add significant stress on the existing system. Warrenton and other affected jurisdictions within the county will need to coordinate on planning for future water service expansion.

The city continually monitors the delivery system to identify inadequate pipe segments, which are too small or in disrepair. The city conducts periodic repairs to the delivery system and will mitigate additional problems as they arise.

The useful life of the existing system is estimated to end in 2018, significantly before the next planning period. The city needs to seriously consider and plan for the future of the facility, including any alternatives such the construction of additional facilities or significant upgrades.

As a pay per need system, Camak's water provision agreement is adequate to meet the needs of its 75 customers and the city's fire protection needs. Population and housing projections indicate minimal growth and service expansion can easily be accommodated with the purchase of additional services from Warrenton. However, the future capacity and useful life of facility issues of Warrenton's water service should be of concern to Camak given its dependence on the Warrenton system. Along with Warrenton and Warren County, Camak needs to coordinate and plan accordingly.

Currently, the water supply needs of the City of Norwood are being met. Population and housing projections indicate minimal growth. The city's deep-water wells have the capacity to supply water significantly above average daily and peak demand. The city can currently store five times its daily demand and has an additional storage tank to be used if necessary. System upgrades in 1997 ensure that the delivery system is adequate for current and future demand.



Sewerage System and Wastewater Treatment

Another major issue concerning the development of Warren County is the presence of a public sewerage system within the municipalities. Warren County residents rely on individual septic systems as the county does not operate a public sewerage system in the unincorporated areas. The City of Camak also relies on septic tanks for sewage disposal and does not provide public sewerage system for the residents.

The City of Warrenton's sewer system relies on two oxidation ponds located south of Highway 16 and north of Highway 278. Both primary treatment facilities encompass 1.5 acres and have the capacity to treat 500,000 gallons per day. The system was developed in 1928 and has a useful life of 100 years. The city serves 900 customers with a daily demand of 250,000 gallons of sewage.

The City of Norwood operates a public sewerage system established in 1992 and a useful life of 30 years. The system serves 116 customers with an estimated flow of 17,000 to 25,000 gallons of waste per day and has the capacity to treat 50,000 gallons of sewerage per day.

Assessment

The County does not operate a public sewerage system and does not plan to provide countywide service. The development of a wastewater treatment facility at the I-20 interchange would facilitate economic development efforts. The County is also considering developing a land spray application system in its industrial park.

Across the state, regional watershed studies and TMDL implementation plans have increasingly identified septic tanks as an increasing non-point source pollutant. The abundance of septic tanks in unincorporated areas has increased dramatically over the past twenty years as suburban development has outpaced urban development. The number and location of all of the septic tanks in the county is not precisely known, but the number of households not using a public sewerage system would indicate that there are approximately 1,426 individual septic systems (according to the number of households in Warren County). This estimate illustrates the large number of unmonitored septic systems in the county, which should be cleaned out every 3-5 years to ensure proper operation. Currently there are no regulations in place to monitor the maintenance of septic systems so once a problem occurs, it is generally too late to prevent contaminants from entering the ground and surface water.

Warrenton's sewer system has experienced little change in the past decade, as the number of customers is approximately the same. Given relatively slow population and housing growth projected through the planning period, the oxidations ponds are adequate to meet the existing and projected needs of the city. Warrenton has the capacity to treat sewerage and wastewater at over double the current demand levels. However, the same issues related to economic development policy and expansion outside the city's municipal boundary identified in the water supply and treatment sections apply to sewerage and wastewater treatment. Warrenton and other affected jurisdictions within the county will need to coordinate on planning for future water



service expansion.

Similarly, Norwood's sewerage system and wastewater treatment capacity is over twice current demand levels and is adequate to meet current and future demand given relatively slow population, housing, and economic development growth projected for the City.

Solid Waste Management

Solid waste management is an important issue in Warren County. The closing of the county landfill, increasing quantities of solid waste, and fewer acceptable sanitary landfills have placed more emphasis on source reduction, recovery, and reuse of materials.

The Warren County landfill was closed in 1994 and the D&H Rail Transfer Station located in Warren County was closed in 1997. At that time, Warren County entered into an agreement with McDuffie County to transport Warren County solid waste to the McDuffie County transfer station. This has been the most economical option for Warren County's disposal of solid waste generated within the County. This has also been the best alternative for Warren County in terms of water quality preservation, historic resources and general health and welfare of its citizens. Therefore, Warren County will continue to export all waste generated within the County to the McDuffie County transfer station and will not accept waste from outside the county nor support the construction of any new solid waste facilities.

The majority of solid waste in Warren County comes from residential use or household garbage, including paper products, plastics, glass, aluminum, and ferrous metals. A limited amount of commercial and industrial waste consists of corrugated paperboard and wood waste. Small amounts of chemical or hazardous waste are disposed of outside the county.

Green box collection is used in the unincorporated areas for solid waste disposal. Currently there are sixty (60) green boxes at five (5) separate sites in the county. Warren County contracts with a private company to collect waste from the green boxes and transport the solid waste to the McDuffie County transfer station. The cities of Camak and Norwood contract with the County for waste disposal. Waste is collected and taken to the McDuffie County transfer station.

Warrenton provides solid waste collection through a private waste hauler. Household waste is collected once a week for residents. Solid waste in Warrenton is transported to the McDuffie County transfer station. Warrenton also offers yard waste pickup, which is transported to the City Inert Landfill. The inert landfill is operated under permit (PBR-149-02IL) at the intersection of US 278 and Georgia State Road 16. The landfill was constructed in 1994 and has a useful life of 30 years. Just over 55 tones per month are handled at the facility. Commercial and industrial businesses contract their own solid waste collection.



Assessment

Warren County is experiencing very little population growth and the County's current disposal programs and operations are adequate for meeting needs during the planning period. Collection programs in Warren County are sufficient to meet the demands of residents and businesses. Because the County is rural and residential areas are scattered, at-the-source countywide collection is not a priority at this time. The more populated areas of Norwood, Camak, and Warrenton are served by curbside collection.

A regional approach to solid waste is the only cost-effective way for rural counties to deal with the issue. McDuffie County plans to expand their transfer station and the current agreement between Warren and McDuffie Counties is adequate. Warren County and the Cities of Camak, Norwood and Warrenton do not currently have recycling capabilities. A recycling program should be designed and implemented within a regional approach for handling recyclable materials. There is interest in initiating education programs for recycling as well as starting a Clean and Beautiful and Recycling committee. There also is a need for educating businesses on waste reduction.

The County should also consider the implementation of a Code Enforcement Officer to cut down on litter and illegal scrap tire disposal, as well as to enforce building codes and city and county ordinances. This will enhance the quality of life for residents and reduce environmental pollution.

Warrenton's inert landfill is operating significantly below capacity and is adequately meeting current demand. Given limited growth anticipated through the planning period, the landfill is projected to meet future demand.

Cities of Norwood and Camak are adequately served under their current agreement with the county.

General Government

Warren County operates under a commission-based system of government in which three commissioners are elected to four-year terms. The chairman is elected at-large and serves full-time as the county's chief executive officer. The District 1 and District 2 commissioners each serve a district. Warren County employs thirty-eight (38) full-time and twenty (20) part-time employees.

The Warren County Courthouse located in Warrenton serves as the site for the Board of Commissioner's Office, Probate Court, Magistrate Court, Tax Assessor's Office, Tax Commissioner's Office, Clerk of Superior Court, Superior Court Judge's Office, Warren County Sheriff's Office, Superior Courtroom, and meeting rooms (see Figure C-1 for location of government buildings).

COMMUNITY FACILITIES

The Warren County Community Services Building houses the Warren County Extension Office, Voter Registration Office, Senior Citizens Center, Juvenile Courtroom, Georgia State Patrol and meeting rooms.

The Warren County Public Safety Building houses the Sheriff's Department, EMS, EMA Dispatch/ E911 and the Fire Station Headquarters.

The City of Warrenton operates under a Mayor and City Council-based system of government. Warrenton employs seventeen (17) full-time and three (3) part-time employees. The City operates from City Hall, which houses administration, the police and fire departments. Warrenton operates a water treatment plant, oversees Cedar Park, operates a warehouse for storage of city equipment and operates the Learning Center, which is currently leased to Sandersville Tech and the Head Start Academy. Warrenton also manages the Warrenton-Warren County Cultural Center, which is currently leased to the Warren County Historical Society.

The Cities of Camak and Norwood operate under similar Mayor and City Council based systems of government. Camak has two (2) part-time employees and its only municipal buildings are City Hall and a fire station. Norwood has four (4) part-time employees and the municipal buildings include City Hall, two (2) shop buildings for housing equipment, fire station, wastewater treatment plant and two pump houses.

Assessment

Government facilities are generally meeting county and municipality needs and are adequate through 2025. Population projections do not justify hiring additional government employees and the county does not intend to do so, with the possible exception of a code enforcement officer or other staff related to regulatory needs. Space shortages may develop with the addition of new staff members. The County has continually renovated the courthouse in the past two decades but will need to continue renovation efforts to other governmental buildings through the planning period.

There are no planned expansions of any government facilities in Warrenton and Norwood. The City of Camak is planning to restore and renovate the Camak Fire Station to serve as the new City Hall.

Public Safety

Public safety includes sheriff services, E-911, emergency medical services, fire protection, code enforcement and animal control. The Warren County Sheriff's Office provides general police protection and court services. All other public safety functions are provided through the Warren County Emergency Operations Center.



Law Enforcement

Three law enforcement offices serve Warren County: the Warren County Sheriff's Department, the Warrenton Police Department, and the Georgia State Patrol. The Warren County Sheriffs Department provides police protection for unincorporated Warren County and the Cities of Camak and Norwood. The Warrenton Police Department provides services within the city limits. The Georgia State Patrol has jurisdiction over 18 miles of Interstate-20, but the Warren County Sheriff's Department responds to calls on I-20 as well.

Sheriff's Department

Warren County residents depend on the Warren County Sheriff's Office for law enforcement including the serving of arrest warrants and civil papers. In 2002, the Sheriff's Department responded to approximately 250 calls per month with an average response time of twelve (12) to fifteen (15) minutes. In addition to the Sheriff, the office has employs (4) Deputies and is equipped with five cruisers.

The Sheriff's Department is located in the Emergency Operations Center (EOC) in Warrenton, which serves as the base of operation, records bureau, administration, and detention facility with one holding cell. The Warren County EOC also houses Communications, E-911, Fire and Rescue, but does not have a jail. The County contracts with McDuffie and Lincoln Counties for jail facility space when necessary.

Warrenton Police Department

Warrenton is served by a separate Police Department, which is staffed by a Chief of Police, one sergeant, one senior patrol officer and four patrol officers. The Police Department, located in City Hall in Warrenton, is equipped with (5) five police cruisers and has no detention area.

Emergency 9-1-1 Center

9-1-1 is the official national emergency number in the United States and Canada. Dialing 9-1-1 quickly connects you to a Public Safety Answering Point (PSAP) dispatcher trained to route calls to local emergency medical, fire, and law enforcement agencies. Under a federal law enacted in 1999, 9-1-1 will replace all other emergency telephone numbers.

The 911 network is a vital part of our nation's emergency response and disaster preparedness system. Upgrades in this network to provide emergency help more quickly and effectively are constantly being made. For example, most 9-1-1 systems now automatically report the telephone number and location of 9-1-1 calls made from wire line phones, a capability called Enhanced 911 or E-911.

The FCC has also established a program requiring wireless telephone carriers to provide E-911 capability. When fully implemented, wireless E-911 will provide the precise location of 911 calls from wireless phones. The wireless E-911 program is an important part of the County's program to apply modern communications technology to public safety.



In 2003, Warren County built a new Emergency Operations (EOC) Center and incorporated enhanced E-911 services. There are eight communications officers, or dispatchers who work in the E-911 dispatch center. There is one supervisor, three part-time and four full-time officers. For dispatch services, the City of Warrenton funds half of the salaries for the communications Officers in the EOC.

Fire Protection

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

The availability and adequacy of a water system is a determining factor in the rating given a fire department by the Insurance Services Organization (ISO). Other factors include: the size and type of buildings in a community, the presence or absence of fire alarm systems, how calls are received and handled, whether fire fighters are paid or volunteer, whether there is a community water system, the size of water mains, and how long it takes a department to respond to an emergency call. This independent organization weighs all these factors to assign a department a rating between one and ten, where a rating of nine or ten indicates relatively little protection.

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

The ISO ratings in Warren County are indicative of their water system. The county and the City of Camak have an ISO rating of 9, the City of Norwood has an ISO rating of 7 and the City of Warrenton has an ISO rating of 6. The County is working diligently on upgrading their water system to improve their ISO rating, thus lowering their insurance premiums.

Warren County Fire and Rescue services operate from the EOC. In the EOC, there are six bays which house fire trucks and ambulances. There are seven (7) fire stations located throughout the County: one in each of the cities, and four located throughout the unincorporated areas of Warren County. There are thirty-two (32) volunteer fire fighters countywide equipped with three (3) class A pumpers, one (1) tanker and four (4) fire knockers. The City of Warrenton operates a fire department within the city limits, staffed with 16 volunteers and 2 class A pumpers. All fire stations are in operation twenty-four (24) hours a day. Response times for fire protection across the county average between twelve (12) and fifteen (15) minutes.

Animal Control

The City of Warrenton is the only jurisdiction in Warren County with animal control services. The City utilizes an off-duty police officer and contracts with a local veterinarian to provide animal control services within the Warrenton city limits.

Assessment

Law Enforcement

According to the Federal Bureau of Investigation Uniform Crime Report (UCR) of 2002, national averages of rural counties for the number of sworn officers per 1,000 residents was 2.5 sworn officers per 1,000 residents. According to the staff figures for the Warren County Sheriff's Department, Warren County averages are currently less than one sworn officers per 1,000 residents. Although the number of officers and personnel falls below the national average, the Sheriff's Department adequately serves the existing population. Crime rates are close to half the state average and the geographic size of the area is relatively small.

Population growth is projected to be minimal and the Sheriff's Department should continue to serve future populations. However, the county should support more clustered housing development as this can dramatically reduce the need for additional law enforcement.

The UCR states that the national law enforcement average for cities of less than 10,000 people was 4.1 sworn officers per 1,000 residents. According to the staff figures for the Warrenton Police Department, the city currently averages 3.6 officers per 1,000 residents. Similar to the county, however, levels of service meet current needs and is projected to meet future needs.

Equipment needs will vary through the planning period but both Warren County and the City of Warrenton will need to invest in vehicles and other equipment on a periodic basis to ensure adequate levels of service.

Emergency 9-1-1

Warren County is protected by an enhanced-911 communications and dispatch system. This system offers the best available technology to the residents and visitors to the County. All of the public safety branches operate from the new Emergency Operations Center, which also improves coordination and centralizes operations in the county. The county has consolidated all county emergency departments' dispatching under a single emergency 9-1-1 system and upgraded its phone system to handle the increased load of calls as a result of consolidation.

Current staff levels are adequate to handle the existing workload. The number of emergency calls must continually be monitored to ensure that staff levels are capable of dealing with increased workloads as the population increases. Communications equipment and facilities maintenance and upgrades will continue to take place on a regular basis to ensure a continued



high level of service to residents.

Fire Protection

Overall, the county's level of fire protection is adequate and is expected to remain so. However, all fire stations will require renovations through the planning period. The City of Camak identified the construction of a new fire station as a pressing need.

Fire protection is directly affected by the quality of the water system and a lack of infrastructure can severely reduce the community's ability to provide adequate fire protection. The high ISO rating is an indication that water system infrastructure needs to be upgraded and improved to help lower the ISO rating. Upon completion of water system improvements, ISO ratings will begin to improve. The County should policies to expand the water system. Residents be better protected and industries will have more incentive to locate or expand operations in the County and municipalities.

Response time for fire protection averages between twelve (12) and fifteen (15) minutes, highlighting low-density development throughout the county. The county has strategically spread the fire and rescue departments around the county to better serve the residents and they continue to improve on their response times.

Emergency Medical Services

The existing level of service is adequate. There are two ambulances in the county, one on 24-hours a day duty and one back-up. To improve the level of service, investment in new equipment and staff must keep pace with population growth. The EMS Department has identified the need to replace one ambulance with a newer model in order to ensure they can continue to provide an adequate level of service.

Recreation Facilities

The availability of parks and recreation opportunities plays a significant role quality of life and business (re) location decisions. There is a total 164.11 acres of parks, recreation, and open space in Warren County.

The City of Warrenton has four areas designated as recreation areas and operates a Recreation Department. The creation of a Recreation Committee is currently being pursued which would offer recreational services for both incorporated and unincorporated areas. This Committee would represent the county and municipalities, and would be funded through SPLOST and local funds.

City Park is approximately two (2) acres and is located on Academy and Norwood Streets in Warrenton. It contains a tennis court, playground and picnic tables. Cedar Park is

approximately ten (10) acres and is located along Hall Street Extension, off Railroad Street in Warrenton. This park contains a tennis court, playground, swimming pool, basketball court, baseball field, and two meeting buildings. In the spring and summer, Cedar Park is the site of family reunions and the community's Little League Program. A regulation size basketball gymnasium is located on Gibson Highway in Warrenton. A baseball field of three (3) acres is located on Legion Drive and Parham Street in Warrenton.

The County shares a 22,400-acre state-managed Ogeechee Wildlife Management Area with neighboring counties. While the primary use of this area is forestry, residents and tourists are permitted hunting and limited camping.

In addition to the above recreational areas, the elementary and high schools have approximately 15 and 19 acres, respectively, designated for recreational use. Recreation facilities include a baseball field, football field, and softball fields.

Assessment

The National Recreation and Park Association has set a guideline level of service of 10 acres of park, recreation, or open space per 1,000 persons. Excluding the WMA, Warren County and the municipalities far exceed this standard. Nevertheless, the County should identify areas critical for open space preservation and appropriate for park development to meet increasingly growing needs and set aside for future growth and development.

The County also needs to invest in the development of a recreation complex, a long-standing complaint among residents.

The Cities of Camak and Norwood do not contain any public parks and are encouraged to develop small open space and parks. All city parks in Warrenton will require periodic maintenance through the planning period. Cedar Park is in need of upgrading the meeting buildings, swimming pools, adjacent roads and sidewalks.

Hospitals and Other Public Health Facilities

The County's health care services and facilities are provided through a network of modern private hospitals and clinics, a coordinated system of public health clinics, and independent health care providers.

Hospitals and Health Centers

Warren County residents are served by several hospitals in McDuffie County and the metro Augusta area, including McDuffie Regional Medical Center, Medical College of Georgia, and University Hospital.

COMMUNITY FACILITIES

The McDuffie County Regional Medical Center (MCRMC) is a 47 bed medical center that offers a full spectrum of medical and health services for residents of McDuffie County and surrounding communities. MCRMC has an Intensive Care Unit, and 24-hour services laboratory and radiology. The Emergency Care Department provides immediate evaluation, treatment, and stabilization emergency care to more than 11,000 patients annually. Outpatient services reached more than 16,000 people in 2001. Surgical Services of McDuffie Regional Medical Center include 2 surgical teams, an Anesthesiologist with 8 surgeons specializing in surgical areas of general surgery, orthopedic, podiatry, ophthalmology, and gynecology.

University Hospital is the community hospital for the metro Augusta area. The 612-bed multi-service medical facility provides acute in-patient and outpatient emergency care, intensive care, trauma, and psychiatric care and operates two nursing homes. There are plans to completely renovate the emergency facilities in the next three to four years. In addition, the hospital addresses the specialized needs of women's healthcare issues with the W.G. Watson Women's Center.

The Medical College of Georgia Health Care System is comprised of the MCG Hospitals and Clinics, the MCG Children's Medical Center, and the doctors, nurses, pharmacists, therapists, staff and centers which combine to form the Medical College of Georgia (MCG) health system. MCG has state-of-the-art facilities and expert health care teams serving residents of Georgia, South Carolina and the Southeast. MCG Hospitals contain 632 licensed beds (520 Adult and 112 Child), 22 operating suites and are a Level I trauma center.

Public Health

Primary health care services are provided by the Tri-County Family Medical Center, which services Warren, Glascock, Hancock, and Taliaferro Counties. The main office is located in Warrenton and satellite offices are located in Gibson, Sparta, and Crawfordville. Since 1980, the Center has contracted the Department of Family Medicine at the Medical College of Georgia in Augusta to provide health care practitioners. The Warrenton office is open five days a week and employs two physicians who work three days a week; one physician who works five days a week; one full-time nurse practitioner; one resident and one medical student from MCG. The Center treats approximately 12,500 patients a year. In response to the demand for medical services, the satellite centers have increased their medical services to four days.

Nursing Homes and Seniors Services

The Warrenton Health and Rehabilitation Center is located at 129 Norwood Road in Warrenton. There are 110 available beds with an average occupancy rate of 97%. The nursing home is a private, for-profit nursing home. Residents at the home receive care, on average, 0.34 RN hours per day, 0.80 LPN hours per day, and 2.19 CNA hours per day, which total 3.33 nursing hours per day. The national average for total nursing hours per day is 3.83 hours per day.

Warren County houses its Senior Citizens Center in the Community Services Building in Warrenton. They currently offer activities such as exercise classes and quilting. The Senior Citizens Center provides twenty-two (22) meals per day in the Center and twenty-two (22)



homebound meals per day. The Center hosts an annual seniors banquet and schedules regular outings.

Assessment

In general, current public facilities and private hospitals are adequate to meet the current and projected needs of Warren County and the municipalities. The Augusta metro area contains more hospital beds and physicians per capita than most parts of the nation. However, as the closest hospital for emergencies, it is in the county’s interest to see it MCRMC expand as this is a regional hospital that serves numerous communities around McDuffie County. While population growth is projected to be minimal, the combined effects of population growth in neighboring counties and an aging population will put stress on the existing system.

The county will need to encourage the development of extended care facilities to meet the future needs of its aging population as well as continuing the support it offers senior to aid them in living independently. The Warrenton Health and Rehabilitation Center has been operating at or near capacity for years and with the number of residents 65 years or age or higher projected to increase by 25%, additional facilities will be needed.

Educational Facilities

The Warren County Board of Education and one private school provide educational facilities in the county. There are 2 public schools serving county and municipality residents, one elementary and one high school. The elementary school houses grades K-5 and the high school serves grades 6-12. Adult education and vocational training is provided at the high school. Enrollment in the Warren County school systems was 908 in the 2002-2003 school year. There were 472 students in the Warren County High School and 436 students in the Freeman Elementary School. The Briarwood private school has approximately 350 students, of which about 90 are Warren County residents.

The most recent student enrollment figures for 2003 report total enrollment in Warren County schools at 894. In 2000, there were 944 students, representing a 5% decline. The decline rate is in line with population loss figures among younger age groups contained in the Population Element. Table C-3 presents the total enrollment at each of the existing schools.

Table C-3: Full-Time Student Enrollments, 2000-2003

School Name	2000 Enrollment	2003 Enrollment	% Change
Freeman Elementary School	478	424	-13%
Warren County High School	466	470	1%
Briarwood Academy	318	347	8%
Totals	1,262	1,241	-2%

Source: Georgia Department of Education



Assessment

Warren County's educational facilities meet the current needs for housing the students enrolled in the school system. None of the schools are operating at or beyond capacity. Population growth of younger school age children is projected to be minimal through the planning period, reducing the immediate need for additional facilities. The needs in the Warren County school system appear to be related to the education of the students rather than basic facilities. It is agreed that broad based parental support is lacking in the school system. A separate middle school of sixth, seventh, and eighth graders has been proposed in order to separate younger children from older high school age children.

Though population growth, including among lower age groups, is projected to be relatively small, future impacts on the public school system must be monitored as growth to determine the ability of existing facilities to accommodate any rise in enrollment above projected levels.

Libraries and Other Cultural Facilities

The Warren County Public Library is housed in a 4,576 square-foot building located along McGregor Square in Warrenton. The library was constructed in 1989 and is in excellent condition as renovations were completed in 2004 to include a new roof, paint, and carpentry. The library employs one full-time librarian and one full-time assistant. Library services include reference and information, bookmobile circulation, children's programs, an adult literacy program, free library cards to residents, and a collection of 14,000 books, magazines, newspapers, audio and video cassettes, and compact discs. The library also contains a meeting room, which seats forty (40). The library receives approximately 1,800 – 2,000 patrons per month during the spring and summer months, and approximately 1,400 - 1,500 patrons during the fall and winter months.

The City of Warrenton owns and operates the Warren-Warrenton Cultural Center. Originally built in 1935, this 5,000 square-foot neo-classical gymnasium was restored using Transportation Enhancement funds and is in excellent condition. The cultural center is used for receptions, plays, concerts, and various community gatherings. There are bleachers on both sides of the original wooden gym floor and the stage is functional, complete with dressing rooms.

Assessment

The library possesses approximately 14,000 volumes, which is equal to 2.2 volumes per capita. The Georgia Public Library System has adopted standardized recommendations for libraries based on population size they are serving. For communities under 20,000 the basic level of service is 4 volumes per capita. Based on this standard, the Warren County Library is operating below acceptable standards. Advisory committee members noted that the library will need to expand its collection.

The library facility itself is in excellent condition and is well maintained. The space available for various collections is adequate for the current population and the relatively small growth that is projected through the planning period. There is a need for a one-room expansion to include the growing interest in genealogy research.

The Warren-Warrenton Cultural Center is in excellent condition and will adequately serve the demands of the current and future population for years to come. The only facility requirement is the need to renovate dressing room restrooms. The Cultural Center does not maintain any historic memorabilia or artifacts that could lure tourists to the area. The county needs a museum or area to hold historic and cultural treasures could aid in economic development and tourism efforts desperately needed in the county.

The Knox theatre is a major cultural facility in Warren County and needs to be rehabilitated.

Goals and Policies

All goals and policies apply to Warren County and the municipalities unless otherwise noted.

Transportation

Goal 1: Upgrade and expand existing transportation facilities, as needed, to accommodate future growth in the most efficient manner.

Policy 1-1: Build frontage road between Norwood and Camak exits parallel to I-20 (applies to Warren County, Norwood and Camak).

Policy 1-2: Complete 4-lane highway from Camak to Camak interchange (applies to Warren County and Camak).

Policy 1-3: Request funds from GDOT to pave high priority roads.

Goal 2: Improve the mobility of pedestrians and bicyclists throughout the county.

Policy 2-1: Encourage sidewalks as part of new development.

Policy 2-2: Encourage GDOT to add bike lanes and sidewalks as part of resurfacing or new construction in appropriate areas along state highways.

Water Supply and Treatment

Goal 1: Provide service to citizens in the most efficient and cost effective manner possible.

Policy 1-1: Invest in new infrastructure as needed to ensure the continued provision of an adequate level of service.

Policy 1-2: Upgrade water infrastructure.

Policy 1-3: Upgrade and expand the Warrenton Water Plant (applies to Warrenton)

Policy 1-4: Develop a water treatment facility at the I-20 interchange. (applies to Warren County)

Goal 2: Provide water service to areas of the county currently underserved.



Policy 2-1: Upgrade water infrastructure

Policy 2-2: Upgrade and expand the Warrenton Water Plant (applies to Warrenton)

Policy 2-3: Develop a water treatment facility at I-20 interchange (applies to Warren County).

Goal 3: Coordinate new development with the availability of adequate water service.

Policy 3-1: Maximize the use of existing infrastructure for water service.

Sewerage System and Wastewater Treatment

Goal 1: Provide service to citizens in the most efficient and cost effective manner possible.

Policy 1-1: Maximize the use of existing infrastructure for sanitary sewer service.

Goal 2: Provide sewer service to areas of the County currently underserved.

Policy 2-1: Develop wastewater treatment facility at I-20 interchange (applies to Warren County).

Goal 3: Consider developing monitoring and maintenance regulations for septic tank systems.

Solid Waste Management

Goal 1: Provide service to citizens in the most efficient and cost effective manner possible.

Policy 1-1: Continue to maintain and purchase solid waste equipment needed to properly operate solid waste collection efforts.

Policy 1-2: Continue to identify viable collection efforts and implement efficiency programs when feasible.

Policy 1-3: Evaluate collection efforts periodically to determine if changes are needed or if new collection mechanisms are feasible.

Policy 1-4: Research existing green box system and determine if changes are needed.

Goal 2: Ensure that disposal facilities in the county meet regulatory requirements and can continue to support and facilitate effective solid waste handling programs.

Policy 2-1: Increase education and awareness of recycling programs and opportunities for paper and organic waste materials

Policy 2-2: Encourage waste reduction programs.

Policy 2-3: Participate in the Earth's 911 project to educate the public about recycling programs within the state and surrounding area.

Policy 2-4: Participate in the Scrap Tire Cleanup Program to clean up and eliminate scrap tires within the county.

Policy 2-5: Participate in the Keep Georgia Beautiful Campaign.

Policy 2-6: Participate in ACCG and GMA's programs designed to provide local officials the opportunity to record public service announcements about environmental issues.

Policy 2-7: Work with the State's Recycling Coordinator to identify viable recycling projects in the county in coming years.



Policy 2-8: Consider hiring a Code Enforcement Officer.

General Government Goals

- Goal 1: Provide adequate space, equipment, and technology to elected officials and staff.
- Policy 1-1: Restore/renovate the Camak Fire Station into the new Camak City Hall. (applies to Camak).
 - Policy 1-2: Complete renovations to all necessary government buildings.
 - Policy 1-3: Expand any needed space for government offices by occupying vacant structures.

Public Safety

- Goal 1: Continue investing in the public safety agencies to maintain an adequate level of service.
- Policy 1-1: Build new Camak Fire Station (applies to Camak).
 - Policy 1-2: Renovate all Fire Stations.
 - Policy 1-3: Purchase fire and EMS equipment and vehicles (applies to Warren County).
 - Policy 1-4: Purchase Law Enforcement equipment and vehicles (applies to Warren County and Warrenton).
- Goal 2: Provide services to citizens in the most efficient and cost effective manner possible.
- Policy 2-1: Consider consolidation services to better serve the public.
 - Policy 2-2: Coordinate water and transportation infrastructure improvements with fire protection agencies to ensure that adequate fire protection can be maintained in all new developments.

Recreation Facilities

- Goal 1: Provide services to citizens in the most efficient and cost effective manner possible.
- Policy 1-1: Improve city parks in Warrenton (applies to Warrenton).
 - Policy 1-2: Upgrade swimming pool and bathhouse facilities (applies to Warrenton).
 - Policy 1-3: Develop a recreational complex (applies to Warren County and Warrenton).
 - Policy 1-4: Coordinate public park expansion with local law enforcement agencies to ensure that they are adequately protected (applies to Warren County and Warrenton).

Hospitals and Other Public Health Facilities

- Goal 1: Continue to support public and private health care providers ensuring that all of the county's needs are capably met, including all special needs communities (applies to Warren County and Warrenton).
- Policy 1-1: Develop new senior citizens center (applies to Warren County and Warrenton).



Policy 1-2: Assist the Warrenton Health and Rehabilitation Center expand to meet the county's projected growth in the senior population (applies to Warren County and Warrenton).

Educational Facilities

Goal 1: Coordinate facility expansion based on future population projections and local land use planning.

Policy 1-1: Facilitate school board participation in the development review process to ensure that adequate educational facilities exist to accommodate future growth (applies to Warren County and Warrenton).

Policy 1-2: Coordinate the location of future school sites with local governments ensuring the compatibility of adjacent land uses (applies to Warren County and Warrenton).

Goal 2: Maximize the use of existing school facilities (applies to Warren County and Warrenton).

Policy 2-1: Pursue dual enrollment classes for the technical schools and Warren County High School (applies to Warren County and Warrenton).

Libraries and Other Cultural Facilities

Goal 1: Continued support of the public library system and other cultural facilities to ensure adequate service is provided to existing and future populations.

Policy 1-1: Expand building for genealogy department (applies to Warren County and Warrenton).

Policy 1-2: Continue to provide financial and human resource support to the Warren County Library to meet identified needs (applies to Warren County and Warrenton).

Goal 2: Continue to support the preservation and enhancement of cultural facilities throughout the county.

Policy 2-1: Complete renovations to the Knox theatre (applies to Warren County and Warrenton).

Policy 2-2: Renovate the kitchen and dressing room restrooms in the cultural center (applies to Warren County and Warrenton).

Policy 2-3: Develop a Welcome Center and Museum (applies to Warren County and Warrenton).



Vision Statement

Warren County and the municipalities recognize the importance of natural and cultural resources and will protect these resources through sound land development practices.

Introduction

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

Warren County covers an area of 285.52 square miles in East Central Georgia. With a population of just over 6,000 residents, the county's population density is 22 people per square mile, significantly below the state average of 122. This highlights the rural density of the area. The primary natural resource in the county is forested land, which accounts for 85% of the county's land use. The county's location within the state provides for a variety of landscapes, rivers, rolling hills, and prime agricultural land. Residents recognize the importance and fragility of their resources and encourage best management practices.

The county is located at the edge of two geological regions, the Southern Piedmont and the Coastal Plain, providing a mixture of features and landscapes. The southern portion of Warren County is bisected by the Fall Line, a geological boundary following the Appalachian Mountain range from Alabama to New York. In Georgia and South Carolina, the Fall Line separates the Southern Piedmont from the Southern Coastal Plain.

Water Resources

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



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

- Aquifer Recharge Areas
- Water Supply Watersheds
- Wetlands

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

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

Public Water Supply Sources

Warren County does not operate a public water system. Most Warren County residents rely on private wells for their water supply while some areas of the unincorporated portions of Warren County are served by municipal water systems or by the McDuffie County water system.

The City of Warrenton has an intake station at Paul Marshall Lake. The City of Warrenton draws raw water and produces potable water through a process of coagulation, filtration and disinfection. The current plant production capacity is 750,000 gallons per day with a current production rate of 350,000 gallons per day. The City of Camak purchases water from Warrenton. The City of Norwood relies on its surface water intake from two deep-water wells, which produce, on average, 24,000 gallons per day.

Assessment

The Rocky Comfort Creek watershed is located in unincorporated Warren County. Population, housing and economic development growth is projected to be limited throughout the planning period. The housing element calls for housing development to be clustered. The county will need to assure that future housing development is geared away from the watershed.

Similarly, the municipalities anticipate that future development will be very limited. Given their location away from the watershed, no impact is anticipated. Surrounding land uses



are primarily residential and agricultural. There are no large-scale agricultural operations in the cities that could potentially pollute the groundwater.

Water Supply Watersheds

A water supply watershed is the area of land upstream from public drinking water intake. Protection of Warren County's water supply will help keep drinking water free of contamination from various pollution sources. By limiting the amount of pollution that infiltrates the water supply, local governments can reduce the cost of purification and ensure public health. DNR established a set of criteria to protect water supplies by requiring buffer zones around streams and specifying allowable impervious surface densities within such watersheds. Since large drainage basins are less vulnerable to contamination by land development than small basins, more stringent watershed protection criteria are applied to water supply watersheds of less than 100 square miles in size.

The following are recommendations for water supply watersheds that are less than 100 square miles and include a reservoir:

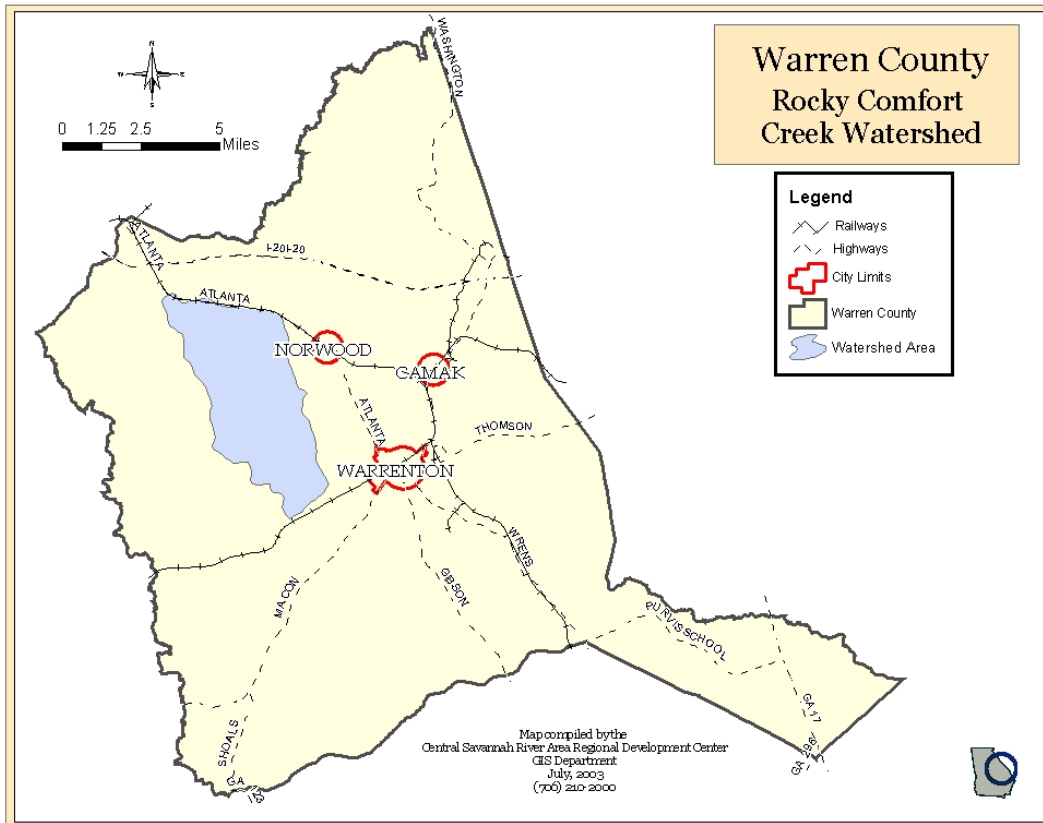
- 150 foot buffer around the reservoir
- 100 foot buffer on each side of perennial streams within a 7 mile radius of the reservoir boundary
- 50 foot buffer on each side of the perennial stream outside the 7 mile radius
- 150-foot setback on each side of the perennial stream within a 7-mile radius of the reservoir boundary
- 75 foot setback on each side of the perennial stream outside the 7 mile radius
- Impervious surfaces may not cover more than 25% of the total land area in the watershed

There are a number of factors that determine the volume of water in a stream or other body of water, such as precipitation, land cover, slope, soil type and absorption rate. Water that is not absorbed by the soil, detained on the surface by lakes or ponds, or used by vegetation, runs off the land as overflow or surface run-off. As run-off flows to areas of lower elevation, it collects in drainage areas, the boundaries of which form watersheds. Run-off from these watersheds flows into streams that serve as outlets for water in the watersheds. If too much impervious surface is developed within a water supply watershed run-off can become contaminated through various non-point sources of pollution and can adversely impact the watershed.

The only area that falls within the water supply watershed in Warren County is the Rocky Comfort Creek Water Supply Watershed (Fig. N-1). In 2001, Warren County adopted an ordinance consistent with DNR's Environmental Planning Criteria to protect the Rocky Comfort Creek Water Supply Watershed. No future water supply watershed areas are anticipated.



Figure N-1: Rocky Comfort Creek Watershed



Assessment

Elected officials and Comprehensive Plan advisory committee members agree that protection of Rocky Comfort Creek and its tributaries should be a long-term community goal. As required by the Georgia Minimum Planning Standards for comprehensive planning, Warren County adopted an ordinance consistent with DNR’s Environmental Planning Criteria to protect the Rocky Comfort Creek Water Supply Watershed in 2001. The ordinance was passed to help establish measures to protect the quality and quantity Warren County’s water supply. The Ordinance applies to all proposed water supply watersheds within the county and has been effective. These efforts will help to minimize the transport of pollutants and sediment to the water supply.

The Rocky Comfort Creek watershed is located in unincorporated Warren County. While population, housing and economic development growth is projected to be limited, the county will need to ensure that future development is directed away from the watershed.

The cities of Warrenton, Camak and Norwood are unaffected by this requirement as the water supply watershed is not within their political boundaries. However, each of these



cities benefits directly from the county's enforcement of the ordinance by preserving clean and safe drinking water.

The watershed cannot be safe guarded by one community alone. Given its proximity to neighboring jurisdictions, the county will need to coordinate with neighboring Hancock and Taliaferro Counties to preserve the resource.

Groundwater Recharge Areas

Recharge areas are portions of the earth's surface where water infiltrates the ground to replenish an aquifer, which is any stratum or zone of rock beneath the surface of the earth capable of containing or producing water from a well. In order to avoid toxic and hazardous waste contamination to drinking water supplies, groundwater or aquifer recharge areas must be protected. While recharge takes places throughout Georgia's land area, the amount of recharge reaching underground aquifers varies from place to place and is dependent on geologic conditions.

Figure N-2 displays the locations of major aquifer recharge areas and figure N-3 displays pollution susceptibility in each area. The most significant recharge areas in Warren County are areas of thick soil/saprolite characterized by low slope. These conditions serve as a groundwater reservoir for the underlying bedrock fracture system. Warren County has some relatively flat areas of thick soil. However, because of favorable soil conditions and little engineering required, these are favored sites for general and industrial development. Unless action is taken to prevent development activity in these areas, many significant recharge areas in the county are likely to become subject to future sources of pollution.



Figure N-2: Ground Water Recharge Areas

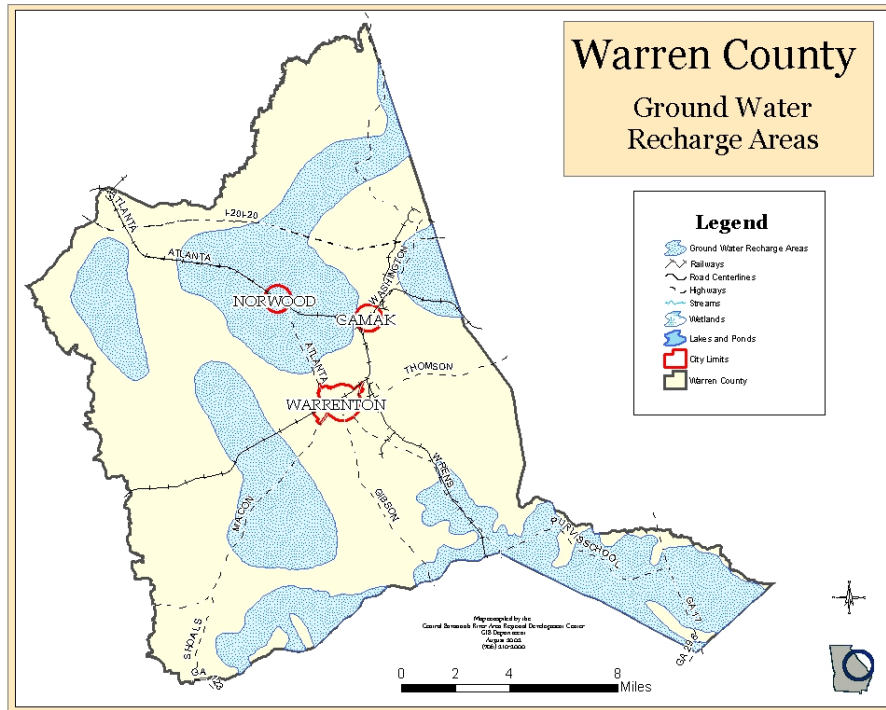
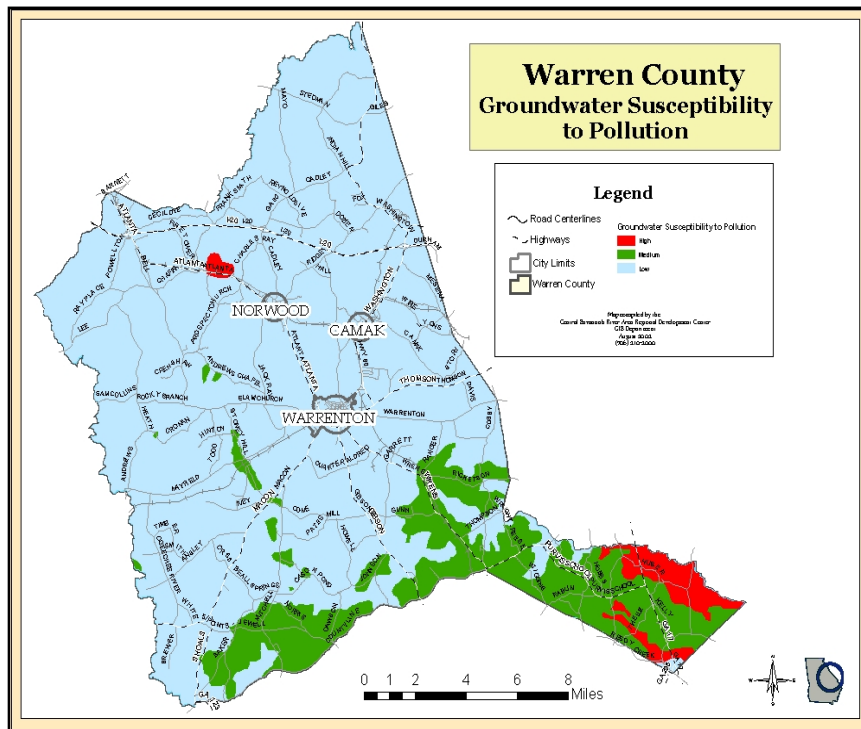


Figure N-3: Groundwater Susceptibility to Pollution



Assessment

One of the major concerns in Warren County is protecting the local water supply. As the quantity of available water is already an issue throughout Georgia, preserving and protecting the current water supply should be at the forefront of Warren County's future plans. Major areas susceptible to groundwater contamination are located in the extreme southeast area of the county, within the panhandle area where Kaolin mining occurs. Warren County passed a Groundwater Recharge Area Protection Ordinance in April 2001 with the goal of managing land use within groundwater recharge areas in order to ensure that pollution threats are minimized.

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

While population, housing and economic development growth is projected to be limited, the county will need to ensure that future development is limited in groundwater recharge areas, particularly in the southern part of the county where groundwater is more susceptible to pollution.

Wetlands

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

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

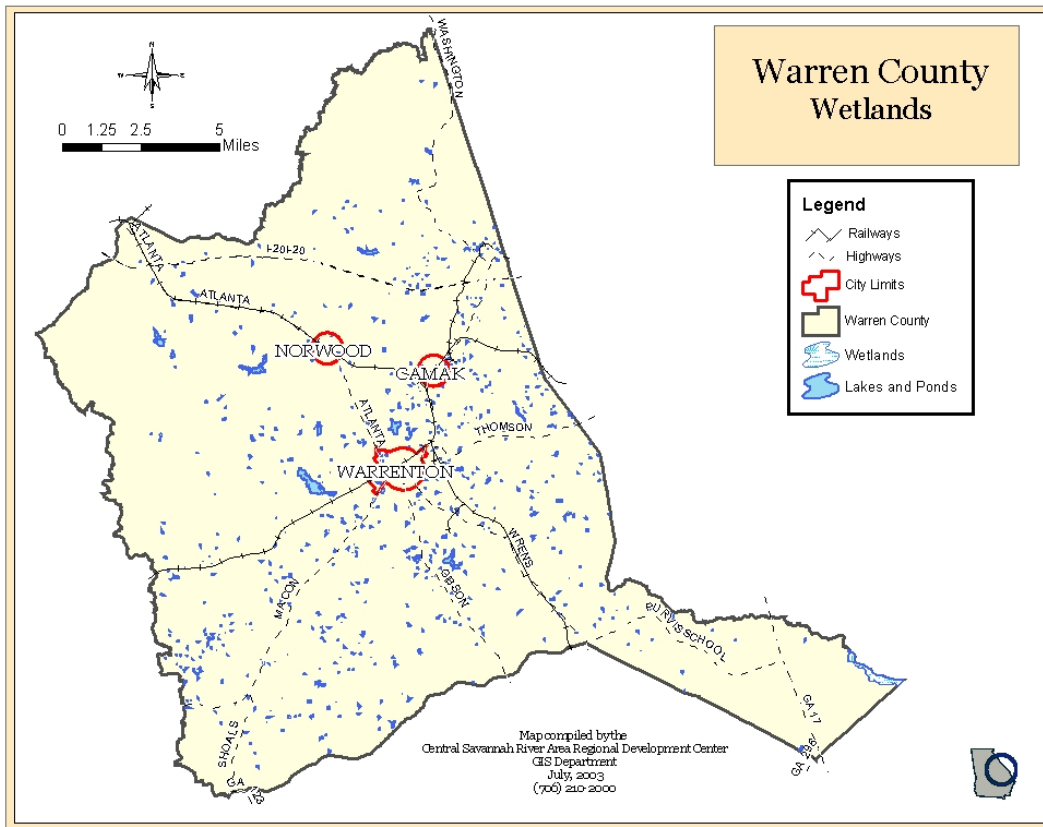
Five categories of wetlands are identified in DNR's Rules for Environmental Planning Criteria as requiring protection through ordinances: open water, non-forested emergent wetlands, scrub/shrub wetlands, forested wetlands, and altered wetlands.

The wetlands present in Warren County are displayed in figure N-4. This map is based on the location of soil associations that contain many of the characteristics found in a wetland environment. Land uses in wetland areas should be limited to low impact uses, including timber production and harvesting, wildlife and fishery management, and recreation.



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

Figure N-4: Warren County Wetlands



Assessment

Small isolated wetlands are scattered throughout unincorporated Warren County. Warren County has adopted a Wetlands Protection Ordinance as required by the Georgia Minimum Planning Standards. The ordinance was passed to promote wetland protection, while taking into account varying ecological, economic development, recreational and aesthetic values. The objective of the ordinance is to protect wetlands from alterations that will significantly affect or reduce their primary functions for water quality, floodplain or erosion control, groundwater recharge, and aesthetic nature and



wildlife habitat. This ordinance refers projects located within a wetlands area to the Army Corp of Engineers for review.

Most development within the county is in and around Warrenton. Warrenton has few wetlands within its jurisdictional boundary. Development to date has not affected wetlands. Future development patterns should not negatively affect wetlands as the city is largely built out. Warrenton has adequate staff to enforce its ordinances and therefore foresees no problem with protecting wetlands within its jurisdiction.

Projections for Norwood and Camak indicate very little growth through the planning period. Few wetlands exist in these municipalities and development impacts on wetlands are not anticipated.

Protected Mountains

There are no protected mountains in Warren County and the municipalities.

Protected Rivers

There are no protected rivers in Warren County and the municipalities. However, the Ogeechee River is an important resource for the county and every effort should be made to preserve the river corridor and protect it from any adverse effects of future development.

Coastal Resources

There are no coastal resources in Warren County and the municipalities.

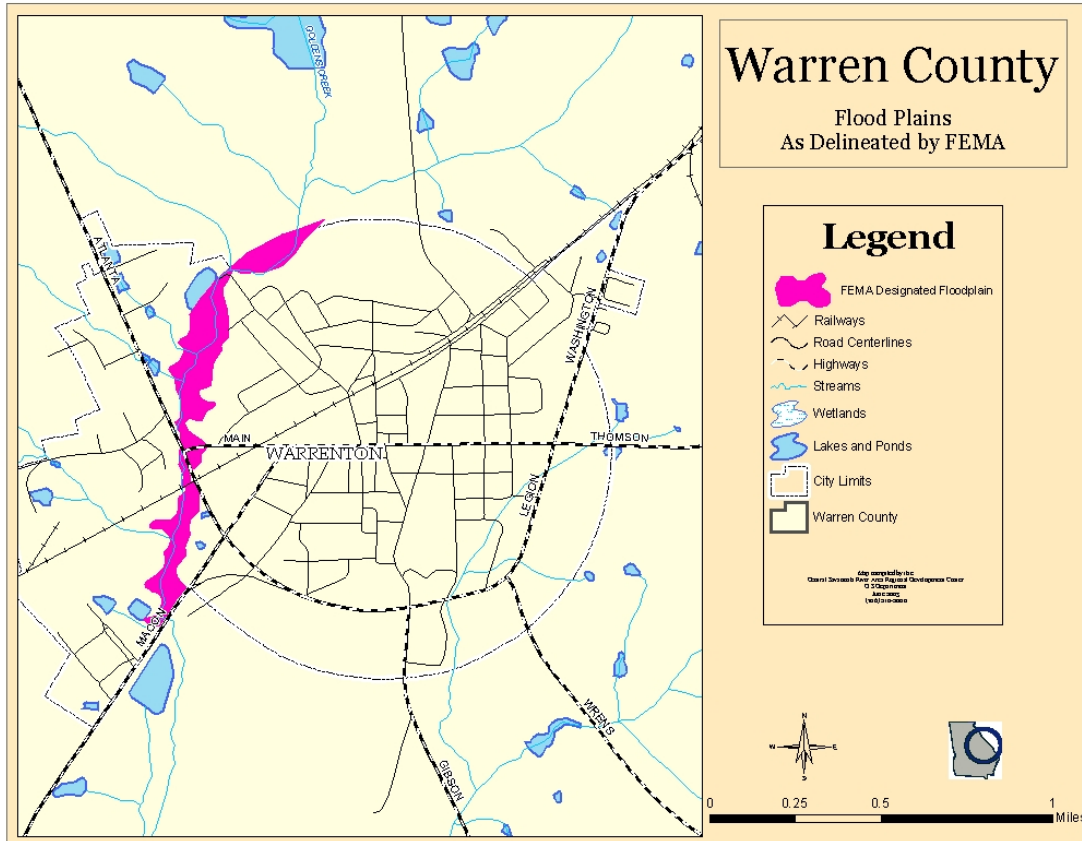
Flood Plains

Flooding is the temporary covering of soil with water from overflowing streams and by run-off from adjacent slopes. Flooding is characterized by frequency and time of year elements. Floodplains serve three major purposes: natural water storage and conveyance, water quality maintenance, and groundwater recharge. These three purposes are greatly inhibited when floodplains are misused or abused through improper and unsuitable land development. For example, if floodplains are filled in order to construct a building, then valuable water storage areas and recharge areas are lost. This causes unnecessary flooding in previously dry areas. Therefore, floodplain development is usually discouraged with exception of recreational facilities. Figure N-5 displays areas affected by a 100-year flood.



Warrenton participates in the National Flood Insurance Program. Flood insurance rate maps are available for areas that participate in the Flood Program.

Figure N-5: Warrenton 100-Year Flood Plain



Assessment

Participation in the National Flood Insurance Program is essential for communities located in or near flood prone areas. If a community is located in such an area and is not a program participant, federal agencies may withhold disaster relief and recovery funds from that locality. The cities of Camak and Norwood experience the type of flooding that warrants participation in The National Flood Insurance Program. Warren County is not participating at this time but intends to when feasible.

Soil Types

According to the United States Department of Agriculture’s Natural Resources Conservation Service, Georgia is divided into seven different soil profile areas. A soil profile is a succession of soil layers or horizons of varying thickness and physical-chemical properties. Three of these land resources are present in Warren County:



Southern Piedmont in the northern part of the county, Carolina and Georgia Sand Hills in the central part of the county and Southern Coastal Plain in the southern part. Below is a brief description of these land types:

Southern Piedmont - Characterized by steep to gently rolling thin and well drained red soil with sandy loam surface layers over sandy clay to clay subsoils. This area has fair to good suitability for building foundations and fair to poor suitability for septic tanks.

Carolina and Georgia Sand Hills - Consists of a belt of gently sloping to steep, well-drained soils originally derived from marine sands, loams, and clays. The area is largely covered with sparse forest of scrub oaks and pines, and has poor to good suitability for residential development and commercial-industry uses.

Southern Coastal Plain - Characterized by gently sloping well-drained sandy loam to sandy soils over friable and sandy clay loam to clay subsoils that are sticky when wet. This area has fair to good suitability for residential development and commercial-industry uses.

Warren County's rural landscape has remained largely undeveloped. Through shifts in population, employment and technologies, the county will change and evolve. It is therefore important to understand the soil types present in the county, as some are more suitable for development than others. These include:

Soils on the Hillside of the Piedmont Upland

Georgeville-Wedowee (3% of county)- Found in the northern part of the county, mostly in woodland, low to medium silt content, and located on convex hillsides, rills or galled spots. Well-drained soils with loamy or sandy surface layer and a clay-like subsoil.

Wedowee-Cecil-Mason (2% of county)- Located on the ridge tops and hillsides of the Piedmont, characterized by gently sloping well drained soils that have a brownish loamy surface and clayey subsoil layers. Silt content is low to medium.

Soils in the Ridge Tops and Hillsides of the Piedmont Upland

Georgeville-Applying (17 % of county) - Located along gently rolling ridge tops or hillsides. Gently sloping soils have good potential for most uses. Potential for most urban uses is fair and suitability for septic tank use is low.

Grover-Madison-Applying (7% of county)- Very gently sloping, well drained soils that have a loamy surface layer, high in content of mica. Located in a small area in the west central part of the county, mainly used for row crops and for pasture and woodland. Soil is good for these uses but fair for development uses and the clayey subsoil limits their use for sanitary facilities.



Appling-Cecil-Wedowee (45% of county)- Located mainly in central and southern part of county. These soils are well drained and have a loamy or sandy surface layer and clayey subsoil. Mainly used for row crops and for pasture and woodland in some areas, because clayey subsoil are not suitable for sanitary facilities.

Soils on Ridge Tops and Hillside of the Carolina and Georgia Sand Hills

Wagram-Troup-Norfolk (23 % of county)- Gently sloping and well-drained soils that have a sandy surface layer and a loamy subsoil. These soils are mainly used for row crops and woodland. Some areas have thin sandy surfaces and are conducive for urban uses. Some areas have thick and sandy surfaces subject to seepage, limiting uses for sanitary facilities and recreational uses.

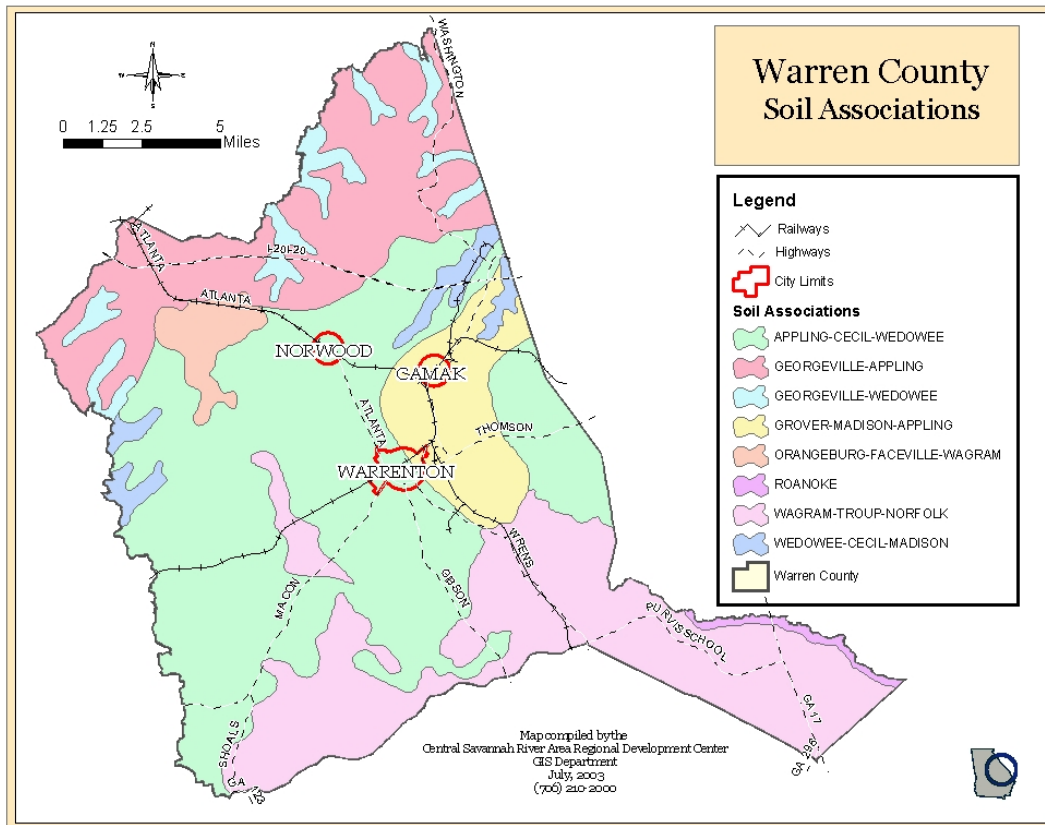
Orangeburg-Faceville-Wagram (2 % of county)- Located west of Norwood and south of U.S. 278, these soils are well drained that have a loamy or sandy surface. Mainly used for row crops, pasture and woodland. Although these soils have good potential for these and other urban uses, bare slopes need protection from erosion and thick sandy surface and subsurface layers are unsuitable for recreational development.

Soils in Floodplain

Roanoke (1% of county)- Soil is located on low, somewhat narrow terraces along Little and Big Brier Creeks in the southeastern part of county and used for woodlands. Poor for farming and urban uses as flooding and wetness are major occurrences.



Figure N-6: Soil Associations for Warren County



Assessment

Soils present are, for the most part, adequate for both farming and urban development uses. The soils in the northern, eastern and western fringes and the southeastern panhandle are better suited for farming and would require significant engineering for development to occur.

Most of the soils in Warren County have a clayey subsoil layer, which generally retards the absorption of effluent from septic tanks. Currently, Warren County and the municipalities depend on the state health department for issuing septic tank permits. Although this has not yet caused a serious problem for residents, proper site selection for new development and monitoring of permitting is essential.

The United States Department of Agriculture’s Soil Conservation Service completed the soils survey used in this analysis in 1981. Although no new surveys have been completed since then, soil associations rarely change and little new construction and development has occurred. As such, there has been no need by Warren County and the municipalities to restrict or manage development in areas that have poor soil qualities.



Unless major growth occurs, there is no need to have development restrictions based on soil.

Steep Slopes

Ninety-five percent of the land in Warren County has slopes between two and ten percent. Steeper slopes of ten to twenty-five percent compromise only five percent of the county and are located on the hillsides of the piedmont section to the north. Slopes of less than two percent compromise one percent of the county total land area and are located in the floodplain.

In Warrenton and Norwood, Appling-Cecil-Wedowee soils predominate. These soils make up forty-five percent of the county's soils and have slope ranges between two and ten percent. Grover- Madison-Appling soils are mostly found in the City of Camak. These soils account for seven percent of the county's soils and also have slopes of two to ten percent.

Assessment

The topography in Warren County poses few development or environmental concerns. As little development is projected in the 20-year planning horizon, no impact on steep slopes is anticipated. The area of the county with the steepest slopes is in the piedmont section, away from the floodplain and is not an issue for the county or the municipalities.

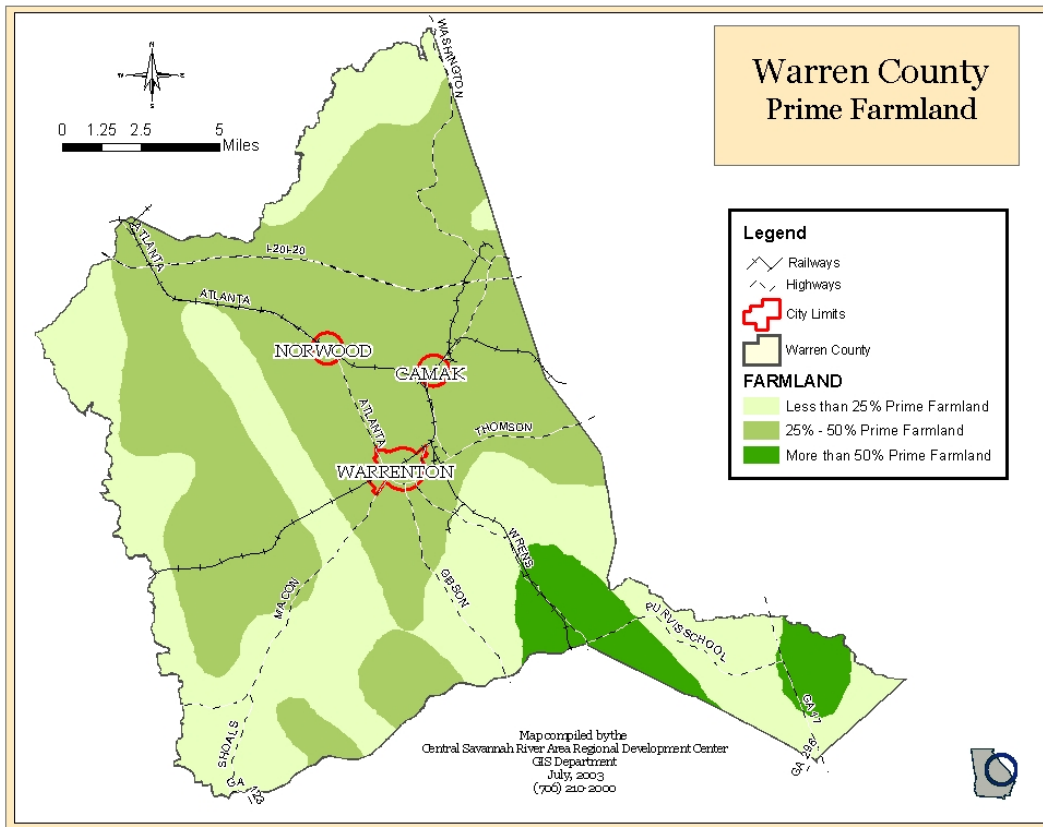
Prime Agricultural and Forest Land

Prime farmland is defined as land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and that is available for these uses. It has the combination of soil properties, growing season, and moisture supply needed to produce sustained high yields of crops in an economic manner if treated and managed according to acceptable farming methods. In 2000, Georgia ranked 4th in the nation in converting prime farmland over to urban uses as much of the prime farmland is also suitable for urban development. The most recent data from the 1997 Census of Agriculture highlights that farming acreage has decreased in the county from 47,000 in 1992 to 44,447 in 1997. At the same time the average size of farms in Warren County as decreased 4%, from 346 acres to 332 in 1997. Warren County has seen an increase in the number of full time farms rise from 59 in 1992 to 62 in 1997.

Figure N-7 shows Warren County is eighty-seven percent forested. Private individuals own the majority of timberland. Thirty-one percent is owned by the forest industry. The county and municipal governments own less than one percent of the forested land.



Figure N-7: Prime Agriculture and Farmland In Warren County



Assessment

Prime Agricultural and Forest Land areas include those valued for agricultural or forestry production that may warrant special management practices. Many Georgia communities depend on agriculture and forestry as a crucial part of the local economy. Often farmland exists in areas experiencing such high population growth that it becomes economically infeasible to continue farming, resulting in loss of agricultural property and open space. Likewise, uncut timberland provides an aesthetic value to a community, which deserves protection. Land-use regulation and innovative implementation strategies can help protect productive farmland and timberland from transitioning to other uses.

A significant portion of the Warren County’s economy is dependent on agricultural services and forestry. As one of its main resources and economic bases, Warren County should continue to protect these land resources. Farmland occupied so much of Warren County’s land area that even the county’s projected limited development will impact its total acreage. It is recommended that Warren County create a Planning and Land-Use Commission that can review ordinances or policies affecting the county’s natural resources and future development that may infringe on it.



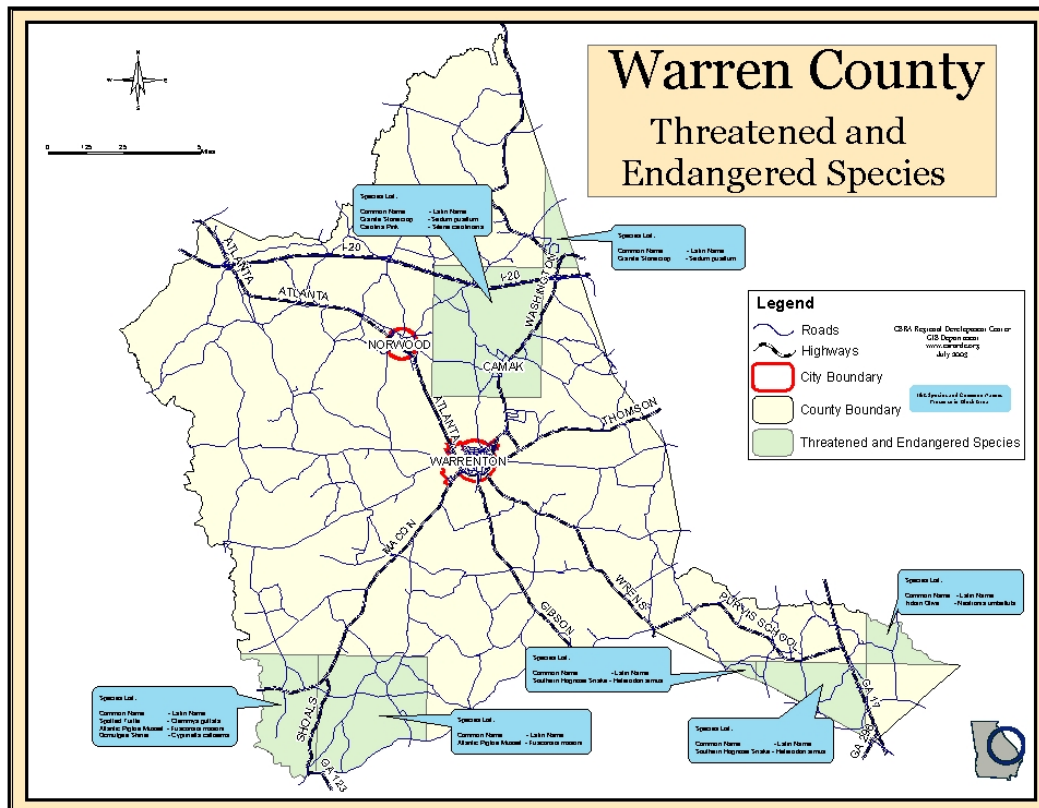
Plant and Animal Habitats

Plant and Animal Habitats include areas that support rare or endangered plants and/or animals. Protected species means those species of plant and animal life that the Department of Natural Resources has designated and made subject to the "Wildlife Preservation Act" and "Endangered Species Act".

The Georgia Department of Natural Resources inventoried endangered and threatened plants and animals in the Warren County Area. The following is a list of the species that were found and their location within Warren County:

COMMON NAME	LATIN NAME	LOCATION IN COUNTY
Spotted Turtle	Clemmys Guttata	Southwest
Atlantic Pitgoe Mussel	Fusconaia Masoni	Southwest
Ocmulgee Shiner	Cyprinella Callisema	Southwest
Granite Stonecrop	Sedum Pusillum	North-Central/Northeast
Carona Pink	Silene Caroliniana	North-Central
Southern Hognose Snake	Heterodon Simus	Southeast
Indian Olive	Nestronia Umbellula	Southeast

Figure N-8: Endangered and Threatened Species In Warren County



Assessment

Warren County should be aware of areas with endangered or threatened species. Development within the county has been limited and is expected to remain so over the next 20 years. Development has not, nor is it anticipated that it will, impact these plant and animal resources.

Major Park, Recreation and Conservation Areas

Currently there are no federal, state or regional parks in Warren County. However there are numerous hunting preserves used for recreational purposes (camping, hunting, fishing) most notably Come-Away Plantation, the Ogeechee Wildlife Management Area, and Rocky Comfort Campground.

Assessment

Warren County currently has little land set aside for parks and recreation. Setting aside some land for such uses will benefit the county in the long-term and may draw tourists and future residents.

Although Warren County does not have authority over the Ogeechee Wildlife Management Area, the county should coordinate with state agencies to ensure effective planning.

Scenic Views and Sites

Currently, Warren County and the municipalities do not have an official identification system for scenic views or sites. With the exception of the State Historical Markers and the National Register Markers there is little recognition of the many vistas and important landmarks.

Assessment

Warren County residents stress the importance of promoting their natural and historical landscape. Having more signage and information about these sites will attract more interest in the area. While the proposed scenic byway corridor along State Route 16 will document and classify scenic views and vistas, there is a need for a countywide system.



Cultural Resources

Historic Overview

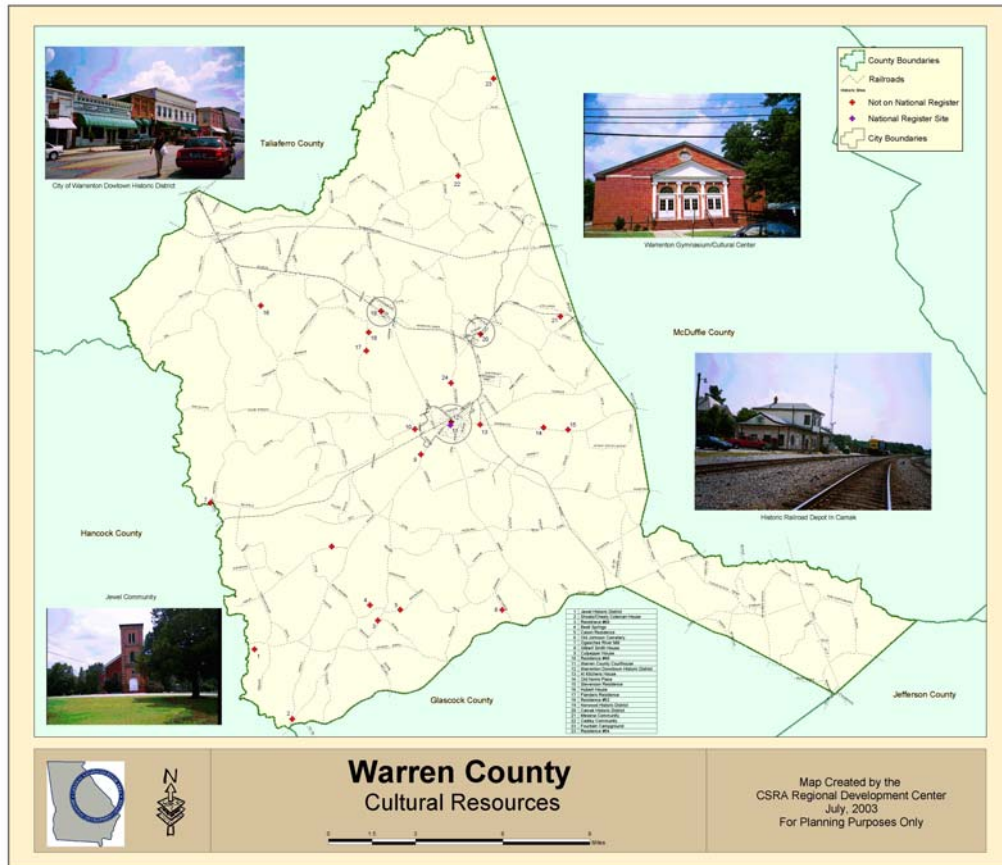
Warren County was established on December 19, 1703, by an act of the Georgia General Assembly and was created from parts of Wilkes, Washington and Columbia Counties. The county was the 20th jurisdiction formed in Georgia and named for Revolutionary War hero General Joseph Warren, who fell at the Battle of Bunker Hill.

The County was established with three municipalities. The largest, Warrenton, is the county seat that was also named for General Joseph Warren. The other two cities are Norwood and Camak. Camak is named for James Camak, a newspaper editor from Athens and the first president of the Georgia Railroad.

Warren County has a rich history and despite the rural nature of the county there are many sites, buildings and districts that are currently being preserved. The county is home of what is known as the first iron works and woolen mill established by Colonel Richard Bird at Ogeechee Falls near Georgetown. Residents are aware of the abundance of history surrounding them and would like to see continued efforts take a holistic approach in promoting their rich history.



MAP 9- Cultural and Historic Resources in Warren County



National Register of Historic Places

The National Register of Historic Places (NRHP) is the nation’s list of historic buildings, structures, sites, objects and districts worthy of recognition and preservation. Currently, there are five NRHP-listed resources in Warren County:

- Warrenton Downtown Historic District
- Warren County Courthouse (non-contributing since 2000 additions)
- Warren County Gymnasium/Cultural Center
- Jewell Historic District
- Roberts-McGregor House (demolished, but not de-listed)

There are a number of structures from a 1978 historic resources survey completed by DNR that are eligible for the National Register listing. These include:

- #48 Residence - West of Warrenton, S809
- #66 Al Kitchens House-East Warrenton, Highway 80
- #67 Residence-Highway 16



- #51 Residence- Route 45
- #68 Residence-S1097
- #52 Residence- Norwood Vicinity, Route 45
- #70 Log Residence-Route 75
- #84 Residence-Highway 62
- #62 Old Norris Place- S793, Old Augusta Road
- #189- Hubert House- off 91764 (H. Shivers mailbox)
- #191-Coleman House- County Line Road
- #64 Stevenson Place- S793, Old Augusta Road

These resources recommended for National Register-listing are known to be well maintained, with the exception of #67 and #70, which are abandoned and deteriorating.

Warren County has a number of other resources that are of cultural and historic importance. Many of are recognized with state historical markers while others are recognized locally through the efforts of residents and community groups.

Residential Resources

Warren County's rich history is evident by the numerous historic buildings dispersed throughout the area. The 1978 DNR survey included 193 buildings built between 1825 and 1940. Within the municipalities, surveyors recorded 21 historical resources in Norwood, 12 in Camak and 80 in Warrenton.

Because the northern and northwestern most parts of the county are woodlands, no known historic resources are present in those areas. Warren County's rural nature is reflected in its architecture. Most structures are frame with weatherboard siding on pier foundation systems. Among the types of houses listed in the 1978 inventory are two-story plantation plain, modified plantation plain, and hipped roof structures.

Present throughout the county are a number of high style, white-painted frame churches, especially of the neo-classical style, with front porches and flush weatherboarding across the front façades.

Warrenton, the county seat, is architecturally significant. There are two structures and a district that are included in the National Register of Historic Places. One NR listed property, the Roberts MacGregor House, has been demolished, but has not been de-listed. The Warren County Courthouse was NR listed in the statewide thematic nomination of county courthouses; however, since the 2000 additions to the courthouse, it is now considered a non-contributing resource. The Warren County Historical Society began a citywide NR nomination several years ago for all eligible historic properties within the city limits. A number of high style buildings are found, particularly along Main Street within the historic district. The northern part of Warrenton is mostly lower vernacular housing.



University of Georgia graduate students conducted a Warrenton historic resources study sponsored by the City of Warrenton and the Warren County Historical Society. More than 295 homes and 35 commercial buildings were recognized as significant.

Norwood has several historically significant homes along Highway 223. Camak is only slightly larger than a crossroads community and is grouped around central railroad tracks. The housing stock reflects the development of the railroad and the prosperity it brought during the early 1900s.

There are several notable pocket settlements in the county. A considerable number of two story buildings are located along Highway S793 (The Old Augusta Road). This road served as a stagecoach run from Warrenton to Augusta.

Jewell, another pocket settlement was once a prosperous mill town in the southwestern area of the county on the banks of the Ogeechee River. There remains a cluster of the county's most high style Victorian and early 20th century buildings.

Commercial Resources

Warrenton

As noted, the commercial district in Warrenton is listed in the NRHP. However, there are numerous buildings within the district such as the Knox Theatre that need to be restored. In addition there are facades in need of rehabilitation to blend in with the architectural theme of the downtown district. These include the Georgia Natural Gas Company building, the video store (no longer in operation) and Morgan's Furniture.

Camak

The City of Camak originally developed as a railroad town centered on the town depot. The depot, owned and operated by the CSX railroad, is still in use for freight transportation. Like many resources, the depot is endangered as CSX plans to eventually retire it from service. The City of Camak has inquired about possible grants for its acquisition and restoration.

Another important resource in Camak is the Masonic temple, long considered an important community landmark related to the history of Camak's African-American community.

Norwood

At one time, Norwood was the largest and most prosperous town in Warren County. The birthplace of rural free delivery mail service, the town was founded in 1868 as



Walker Chapel. The chapel was rebuilt in 1888 and is still present today. Historic resources are well maintained and not likely to be affected by incompatible land uses.

Industrial Resources

Ogeechee River Mill

The Ogeechee River Mill has been in operation since 1847. Several renovations have taken place. In 1949, the original mill was taken apart and reconstructed on the other side of the river. The mill's dam has also been reconstructed and new equipment and machinery was added. The mill has always been one of Warren County's landmarks, providing fresh ground cornmeal and hush puppy mix sold commercially. The mill is well protected as it is an operating commercial gristmill.

Institutional Resources

Institutional resources in Warren County include a variety of schools and churches that have historical or cultural importance. As noted, the Warrenton Gymnasium has been converted to a cultural /recreational center. Other resources of local importance include Elam Baptist Church and Warrenton United Methodist Church. Little Brier Creek Church dates back to 1777 and is the oldest known church in the county. The County has 294 known cemeteries containing over 53,977 graves, documented in Dan Crumpton's Genealogy of Warren County. One of the more notable cemeteries is the Old Johnson Cemetery in the southern part of the county, one-mile north of the Warren/Glascock County line along Sandy Grove road. The Kinsey Cemetery is also an important cemetery with the presence of the Kinsey Vault.

Transportation Resources

The Camak Depot is noted for its long and colorful history. The East Warrenton Railroad Depot, currently housed at the Augusta Museum of History, is another important local resource, and the county has been awarded state transportation enhancement funds to return and rehabilitate the depot for community use.

Rural Resources

Jewell

Jewell was once a prosperous textile mill community that employed over 600 people. The community grew and continued to thrive until the mill burned in 1927. This crossroads community still contains a number of architecturally important high style and Victorian structures. The Jewell Historic District is listed in the NRHP.



Mesena

In the early part of this century, Mesena was a busy, thriving railroad town. When the depot burned in the 1930's, a "cooler" was built in its place to give passengers a place to wait for the train. The cooler was a brick enclosure with an open shed roof. The cooler is no longer standing but would be an ideal archaeological site. A few feet from the cooler is the A.W. Mabry Store, a general store that housed the post office. Paynes Baptist Church, built in 1875 is also an important Mesena resource.

Beall Springs

The Beall Springs area was a resort destination in the 18th century, complete with a hotel and restaurant. The area was named after Revolutionary War soldier Naman Beall. It was a popular destination until it burned in 1940. One of the attractions to the hotel was nearby Beall Springs, an underground mineral spring used for medicinal purposes. In the 1970's, the Warrenton Kiwanis Club piped the spring so residents could use it as a drinking fountain. Water still runs continuously and visitors frequent the springs.

Cadley

The Cadley Community in northern Warren County was once home to the W.E. Saggus store, circa 1890. It housed a big pot-bellied stove that lured in neighbors on cold winter days. The store closed in 1956, but the building still stands. The Cadley School is still standing but has been turned into a private residence.

Fountain Campground

Fountain Campground is a 300-acre revival campground owned and maintained by the United Methodist Church. The campground and church have been in use since 1800. It is used traditionally for annual revivals in the summer. A large, open historic tabernacle, built in 1872, is where the group revival takes place. Historic cabins or "tents," owned and maintained by individual members, are used year round. This campground is protected and well-maintained for use by the United Methodist Church.

Come Away Plantation

Come Away Plantation is a historic 2000+ acre southern plantation in northwest Warren County. The grounds include wooded forests, lakes, and crop fields. The plantation is currently used as a destination for hunting and other outdoor activities. An important 1850 plantation house is the central focus of the estate, open by appointment for group tours.



Other Historic, Archeological and Cultural Resources

The Warren County Library in Warrenton houses the Mill Branch Indian Artifact displays, which date to prehistoric Warren County. The Warren County Historical Society, which was reactivated in 1992 to promote historical projects and preservation activities in the cities and county, has expressed interest in finding a suitable location for a museum to house these artifacts.

Warren County is home to a section of the Bartram Trail. The naturalist William Bartram traveled through Warren County from 1773 to 1777 during one of his trips. Bartram wrote extensively of the natural environment, recording and sketching trees, plants, animals, and native customs. He is credited for giving scientific names to many species.

Warren County is home to three (3) bicentennial farms. The same family has operated these farms since the birth of the U.S. Constitution.

Currently, the main floor of the Warren County Courthouse houses a collection of historical site paintings by Warren County native Lavonia Ricketson. The Warren County Historical Society is actively promoting these historic resources and intends to establish a mini-museum within the courthouse.

Assessment

Warren County has a plethora of cultural and historic resources. Continuing and improving the preservation and promotion of these historic resources would be of great value to the county. Historic resources in Warrenton stand a better chance of preservation because of its zoning ordinance. Local commitment and recognition are important and Warren County residents are aware of the rich history that surrounds them.

Although most two-story houses were surveyed as part of the 1978 DNR survey, few one-story or vernacular homes were included, and the survey did not include any industrial or commercial structures.

Currently, community support for the preservation of historic resources occurs at the individual level. If rural resources are occupied, they are less subject to deterioration than abandoned structures. Historic resources, unless preserved, are subject to alterations and additions by those who own them. Therefore, a concerted effort to update professionally the historic resources survey and to create a register of structures and sites within the county with preservation potential should be a top priority for the Warren County Historical Society or other interested parties.

The five NRHP sites are of major historical importance to the county. Listing in the National Register recognizes a property's historic significance and ensures that the



property will be taken into account in the planning of federally funded or licensed projects. In addition, owners of income-producing National Register listed properties are eligible for rehabilitation federal and state tax incentives. Local communities become aware of the history and architectural significance of the property, therefore encouraging its preservation. Efforts are underway to restore the Knox Theatre in downtown Warrenton. The county received a Georgia Heritage Grant that has been used to develop a rehabilitation plan, "Historic Survey and Feasibility Study: The Knox Theatre, circa 1936-37." Grants are currently being sought out to restore and reopen the theater.

The Warrenton Gymnasium was recently added to the National Register to be used as a cultural/ activities center. Although most of the improvements have already been completed, the Warren County Historical Society would like to see further improvements that include a paved parking lot, a new curtain for the stage and restoration of the basement bathrooms.

The historic resources in Jewell are in the heart of rural Warren County. Development has not occurred and is not expected to. At present, their respective owners maintain these resources.

Goals and Policies

All goals and policies apply to Warren County and the municipalities unless otherwise noted.

Goal: Preserve and protect natural and cultural resources.

To address these goals, Warren County and the municipalities will need to:

- Protect public water supply sources, wetlands, flood plains, and plant & wildlife animal habitats.
- Continually monitor natural resources for pollution
- Encourage development away from sensitive areas
- Coordinate with DNR on WMA (applies to Warren County)
- Develop scenic views and sites
- Nominate eligible historic resources to the National Register
- Adopt a historic preservation ordinance for the purpose of becoming a Certified Local Government (applies to Warrenton)
- Prioritize historic resources for preservation and enhancement
- Preserve and enhance historic downtown districts (applies to municipalities)
- Partner efforts with preservation groups
- Offer financial incentives to rehabilitate facades of historic commercial buildings. (applies to municipalities)



Vision Statement

Warren County and the municipalities recognize the importance of land use planning and will promote the orderly development of land to accommodate growth.

Introduction

Land use and development patterns are the result of interaction between demographic trends, economic circumstances and social attitudes. Technological changes in areas such as transportation and construction, and the availability and cost of land, water, and energy also influence existing development patterns.

The purpose of the Land Use element is to ensure that the distribution of land uses meets the future economic, social, physical and environmental needs of Warren County and the municipalities. The Future Land Use map can assist local governments in making development decisions that complement long-term goals established throughout this plan and avoid the emergence of inefficient development patterns.

Since the adoption of the Joint Warren County Comprehensive Plan in 1994, the county has experienced relatively small growth rates. Overall, the county remains a rural area and has not experienced the suburban growth seen elsewhere in the region. This chapter links other elements of the plan to create a vision for the future of Warren County and the municipalities, and provide direction for managing anticipated growth.

Existing Land Use

The current land use map was generated using categories from the tax assessor's database in Warren County and is mapped by parcel. The parcels were mapped in 2002 using 2002 aerial photography and existing tax maps with best-fit methodology. The parcels were then linked by parcel number to the tax assessor database which includes a land use category. These categories were not an exact match and all parcels were reviewed and corrected as necessary. The following land use categories are used for the current land use map:

Residential. The predominant use of land within the residential category is for single-family and multi-family dwelling unit organized into general categories of net densities.

Commercial. This category is for land dedicated to non-industrial business uses, including retail sales, office, service and entertainment facilities, organized into general categories of intensities. Commercial uses may be located as a single use on one building or grouped together in a shopping center or office building.



Industrial. This category is for land dedicated to manufacturing facilities, processing plants, factories, warehousing and wholesale trade facilities, mining or mineral extraction activities, or other similar uses, organized into general categories of intensity.

Public/Institutional. This category includes certain state, federal or local government uses, and institutional land uses. Government uses include city halls and government building complexes, police and fire stations, libraries, prisons, post offices, schools, military installations, etc. Examples of institutional land uses include colleges, churches, cemeteries, hospitals, etc.

Transportation/Communication/Utilities. This category includes such uses as major transportation routes, public transit stations, power generation plants, railroad facilities, radio towers, telephone switching stations, airports, port facilities or other similar uses.

Park/Recreation/Conservation. This category is for land dedicated to active or passive recreational uses. These areas may be either publicly or privately owned and may include playgrounds, public parks, nature preserves, wildlife management areas, national forests, golf courses, recreation centers or similar uses.

Agriculture. This category is for land dedicated to agriculture, farming (fields, lots, pastures, farmsteads, specialty farms, livestock production, etc.) or other similar rural uses such as pastureland not in commercial use.

Forestry. This category is for land dedicated to commercial timber or pulpwood harvesting or other similar rural uses such as woodlands not in commercial use.

Table L-1 displays current land uses in Warren County and the municipalities and provides percentage breakdowns for all current land use classifications. Figures 1 to 4 provide maps of existing land uses using the same classification.

Table L-1
Existing Land Use Acreage Totals, Warren County and Municipalities

Land Use	Warren Co.		Warrenton		Norwood		Camak	
	Acre	%	Acre	%	Acre	%	Acre	%
Residential	2,813	1.4%	481	38.6%	116	23.1%	90	18.0%
Commercial	312	0.2%	56	4.5%	4	0.8%	2	0.4%
Industrial	8,944	4.7%	59	4.7%	0	0.0%	5	1.0%
Public/Institutional	926	0.5%	159	12.7%	10	2.0%	21	4.2%
TCU	4,237	2.3%	183	14.7%	45	9.0%	80	16.0%
PRC	225	0.6%	22	1.8%	0	0.0%	0	0.0%
Agricultural	36,764	20.0%	3	0.2%	95	18.9%	43	8.6%
Forestry	129,247	70.3%	280	22.5%	231	46.1%	258	51.8%



LAND USE ELEMENT

Total	183,468	100%	1,243	100%	501	100%	499	100%
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Source: Warren County Tax Assessors Office; Calculations by CSRA RDC

Figure L-1: Warren County Current Land Use

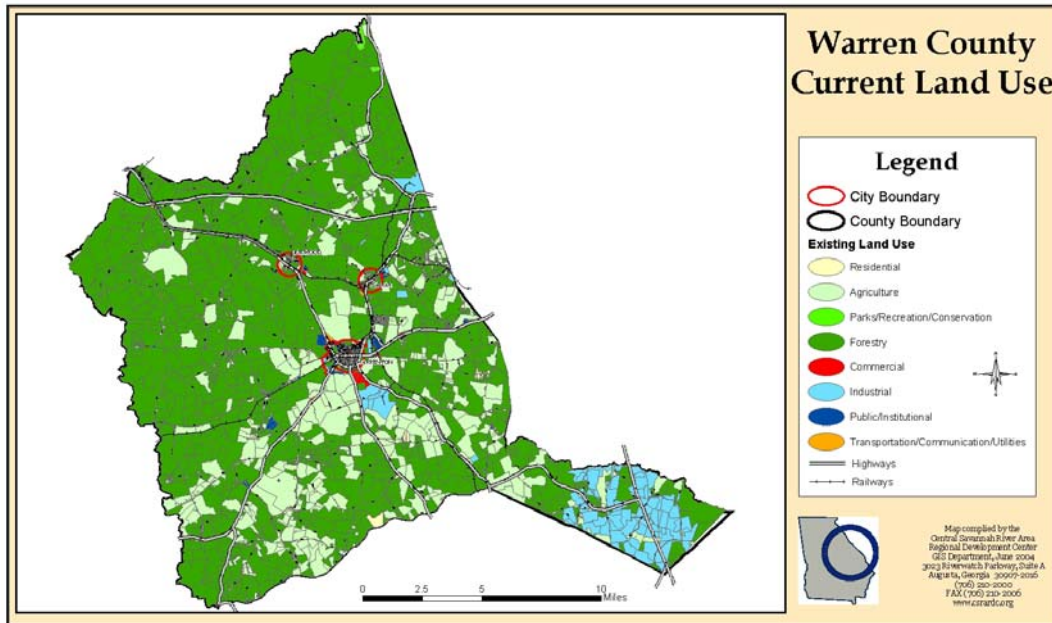


Figure L-2: Warrenton Current Land Use

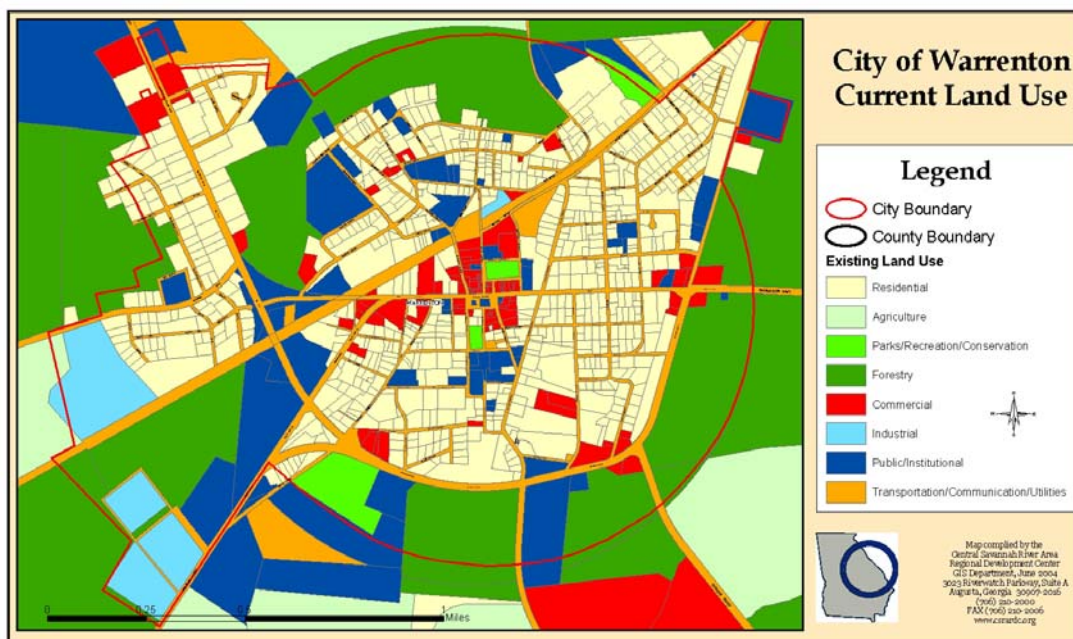


Figure L-3: Norwood Current Land Use

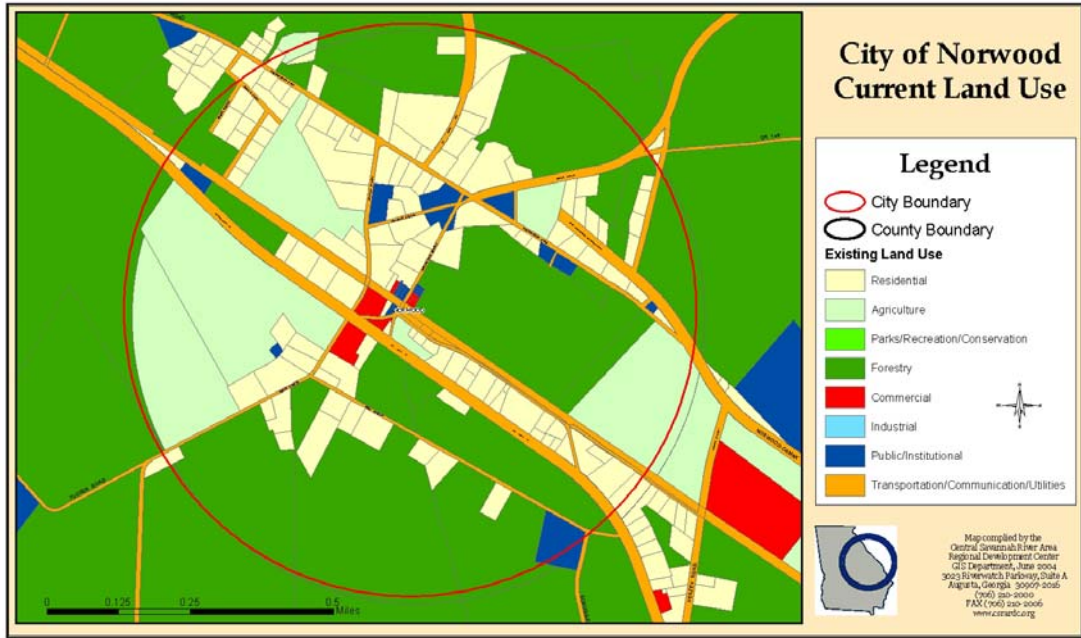


Figure L-4: Camak Current Land Use



The county's predominant land use is forestry, which accounts for 70.3% of total land use. The forestry classification includes a Wildlife Management Area in eastern Warren County currently under contract to different timber companies. Agriculture accounts for the second largest share of land use at 20%. County land use patterns have changed little since the last comprehensive plan update. In 1993, forestry and agriculture accounted for the same share of land use. All other land uses in the county combine to account for approximately 10%.

There is a large amount of industrially classified land in the Warren County panhandle. This area is almost exclusively kaolin mining and the mining operation is projected to continue throughout the planning period. Residential and commercial development is scattered throughout the county with no discernable clusters apparent.

The municipalities have more diverse land use patterns. In Warrenton, over 43% of land use is residential and commercial, highlighting more intense use and a larger concentration of population and commerce. Nevertheless, the relative high rate of undeveloped land is apparent as forestry accounts for close to a quarter of land use in Warrenton and close to 50% in Camak and Norwood. This reflects traditionally low growth rates in the municipalities.

Assessment

Historical Factors

The development of the railroad has strongly influenced development patterns. The Georgia Railroad Company was chartered by an Act of the Georgia Legislature in 1833 to build a line of railroad from Augusta to Athens with branches to Madison and Eatonton. By the late 1800s, the railroad operated in Warren County as stations were established west of Thomson in the Towns of Camak, Cross Roads, Cumming and Crawfordville. In 1917 Camak became a terminal for the Savannah and Atlanta Railroad, making it an important and prosperous junction, with trains connecting to Atlanta, Augusta, Macon and Savannah.

The railroad provided the impetus for growth in the county and strongly influenced land use patterns. Almost uniformly throughout the municipalities, residential development was clustered along both sides of the railroad tracks so workers could walk to work. Commercial establishments were also located in residential areas. In short, the railroad became the focus of residential and commercial development in the municipalities.

The growth of population in Warrenton during the 1930s resulted in infrastructure projects that essentially laid the land use foundation found in the present. In 1932, the Warrenton contracted with the Georgia Power Company to install and maintain a total of fifty (50) lamps in the city limits. The water and sewer systems had progressed from privately operated systems to a city-owned and operated network with deep wells on Depot, Gibson, and Davis Street. A water treatment plant was built at Rocky Comfort



Creek on Mayfield Road in October, 1948. The Rocky Comfort Creek Watershed on Mayfield Road was planned in the early 1960's and, by 1965, new plans for a water treatment plant, reservoir, and distribution system expansion and improvements were initiated. The new plant began operation in 1970.

These infrastructure improvements allowed for development away from the rail depot and county courthouse that had traditionally been the focus of Warrenton. Additional housing was needed in the expand town and the Easter Hill Project was approved in the 1950s. The City entered into an agreement with the Public Housing Administration to form the City of Warrenton Housing Authority. Five (5) apartment complexes consisting of fifty-six (56) units, most away from the downtown area, were built. In 1965, the City annexed a tract of land on Norwood Road and made city services accessible for the construction of Providence Medical Care Nursing Home. The Warren County Health Center also opened in 1966.

By the 1960s, railroad traffic gave way other transportation modes as the wave of large-scale highways projects through the southeast and the nation led to declining rail needs. Both passenger and commercial rail service declined substantially in Warren County and the municipalities. The Interstate and State Route system developed in the 1960s has a significant impact on land use in the county. As I-20 and several State Routes cut through Warren County, residents no longer had a need to reside in or around the municipalities. With the automobile providing mobility, more and more residents worked in neighboring jurisdictions, including as far as Augusta. Furthermore, more and more manufacturing plants located away from Warrenton and closer to the Interstate. Further sprawl was limited only by the lack of water and sewer infrastructure.

The agricultural history of the county is also important in understanding land use changes. Throughout the years, the county's farming and forestry sectors have evolved to respond to market demands. Today, there are fewer but larger farms as compared to the early part of the 20th century. In the 1930s, there were 1,560 farms in Warren County with an average size of eight-nine (89) acres. Based on the USDA National Agricultural Statistics Service, 1997 Census of Agriculture, Warren County had one hundred thirty-four (134) farms with an average size of three hundred and thirty-two (332).

Land Use Patterns and Infrastructure Improvements

Certain types of infrastructure, such as water, sewer, and transportation influence where and how much development occurs. To date, water and sewer availability has ensured that most commercial and industrial development has occurred in proximity to the municipalities, particularly Warrenton. Residential development, on the other hand, has not been subject to this limitation. As noted in the Housing section, the exponential growth of housing in the unincorporated areas is due to the availability of septic tanks and the lack of land use regulations concerning mobile home units. While I-20 provides an incentive for businesses to locate away from more dense municipalities, the county's



vast State Route system provides further incentive for residents to locate away from populated areas.

The Community Facilities section highlights areas around Warrenton where potential large-scale development threatens to outpace infrastructure capacity. It should be noted that the threat is not immediate, and the lack of such development will not add stress to the existing water and sewer systems, but Warren County and needed to plan for the possibility given their economic policies.

Blighted Areas

In general, Warren County and the municipalities have very few and isolated blighted areas. These areas are concentrated, for the most part, in the downtown areas of Warrenton, Camak and Norwood and are limited to business districts experiencing loss of retail and offices uses. While there are buildings falling into disrepair due to abandonment, these buildings are isolated and, particularly in Warrenton, there is an active downtown that shows strong signs of recovering from past losses.

Residential areas where dwelling units are in a marked state of deterioration or dilapidation are also limited to concentrated areas within the cities of Warrenton, Camak and Norwood. While there are dwelling units in the unincorporated areas of the county that are deteriorating or dilapidated, they are scattered and not noticeable in any discernable area. Due to the efforts of the Chamber of Commerce and Development Authority, Warren County and the municipalities have been successful in recruiting businesses and industry to fill abandoned or vacated industrial buildings.

There are currently no transitional areas undergoing shifts in predominate land use. County and municipality growth rates have been minimal, and in some cases negative, in the past two decades. Nevertheless, very few properties are vacant and residential land uses have remained relatively unchanged.

Environmentally Sensitive and Locally Valued land

Environmentally sensitive areas are in need of protection. To the extent possible, the County and municipalities should attempt to encourage development away from the Rocky Comfort Creek Watershed, groundwater recharge areas, wetlands, floodplains, and primary agricultural lands. There are significant land parcels outside these environmentally sensitive areas to develop. Population and housing growth rates are not projected to be significant. Even with the county's aggressive economic policy related to manufacturing growth, there are plenty to locations in proximity to Warrenton and Camak that do not impact environmentally sensitive areas.

Cultural resources are highly values by residents of Warren Count and the municipalities. Beyond the attachment of residents to sites considered historic for decades, the county is counting on historic-based tourism as an economic development



strategy. Furthermore, the county and municipalities are in the process of participating in trail projects that include the Civil War Heritage Trail and Georgia Scenic Byways along SR 16. These trails were selected for recognition because of their historic importance. Future development should not impact these resources.

Future Land Use

To ensure that adequate land is dedicated to each land use according to future needs acreage must be projected throughout the planning period to ensure the future land use map reflects anticipated development and growth. To achieve accuracy, the Per Capita Use Rate method is used. This method extrapolates the rate of population per acre for each land use and calculates the projected acreage requirements based on the estimates established in the population element.

Table L-2 displays future land uses in Warren County and the municipalities and provides percentage breakdowns for all current land use classifications. Figures 5 to 8 provide maps of future land uses using the same classification.

Table L-2
2024 Land Use Acreage Projections, Warren County and Municipalities

Land Use	Warren Co.		Warrenton		Norwood		Camak	
	Acre	%	Acre	%	Acre	%	Acre	%
Residential	3,029	1.6%	516	41.5%	126	25.1%	97	19.4%
Commercial	332	0.2%	59	4.7%	4	0.8%	2	0.4%
Industrial	9,644	5.2%	62	5.0%	0	0.0%	5	1.0%
Public/Institutional	996	0.5%	169	13.5%	11	2.2%	22	4.4%
TCU	4,569	2.5%	196	15.7%	49	9.8%	86	17.2%
PRC	6,936	3.8%	24	2.0%	0	0.0%	0	0.0%
Agricultural	34,994	19.0%	3	0.2%	89	17.7%	41	8.2%
Forestry	122,968	67.0%	214	17.2%	222	44.3%	246	49.2%
Total	183,468	100%	1,243	100%	501	100%	499	100%

Source: Calculations by CSRA RDC



Figure L-5: Warren County Future Land Use

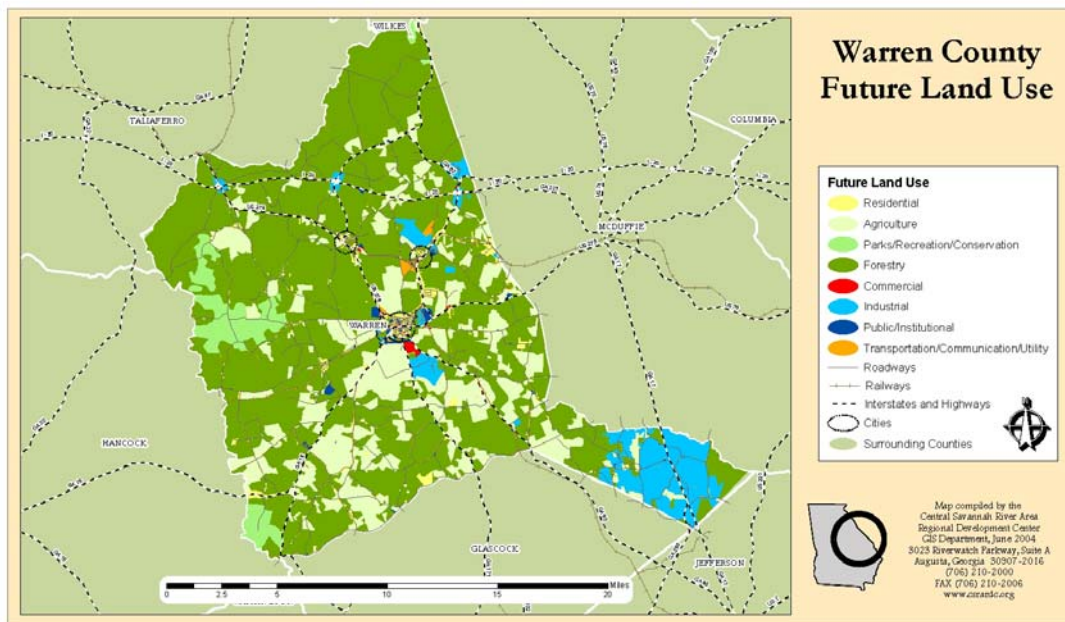


Figure L-6: Warrenton Future Land Use

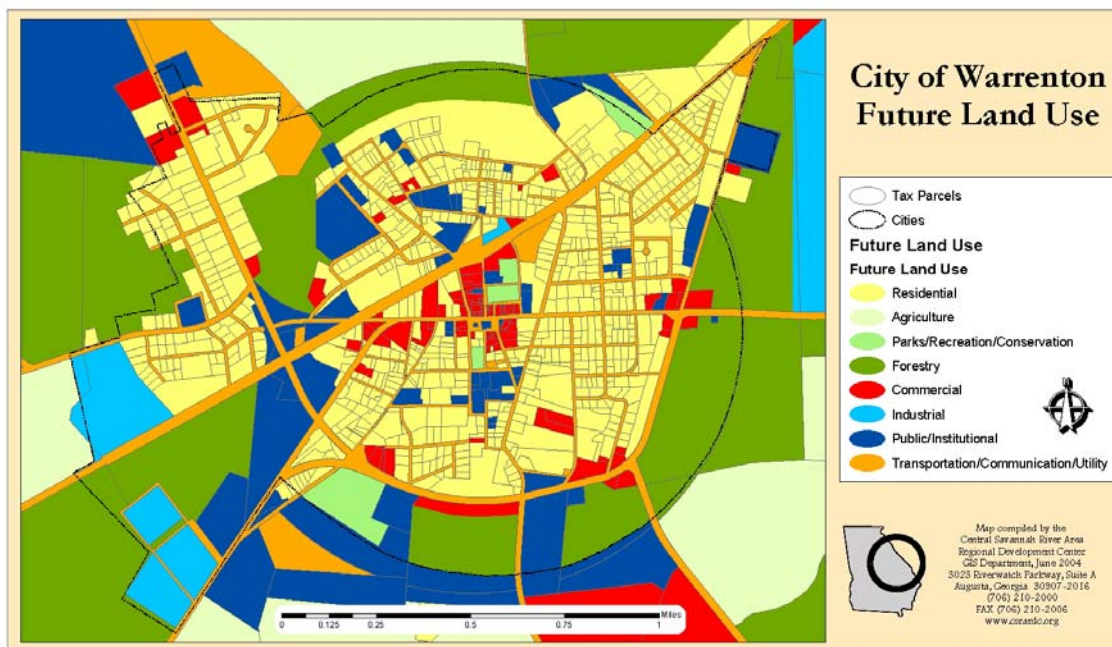


Figure L-7: Norwood Future Land Use

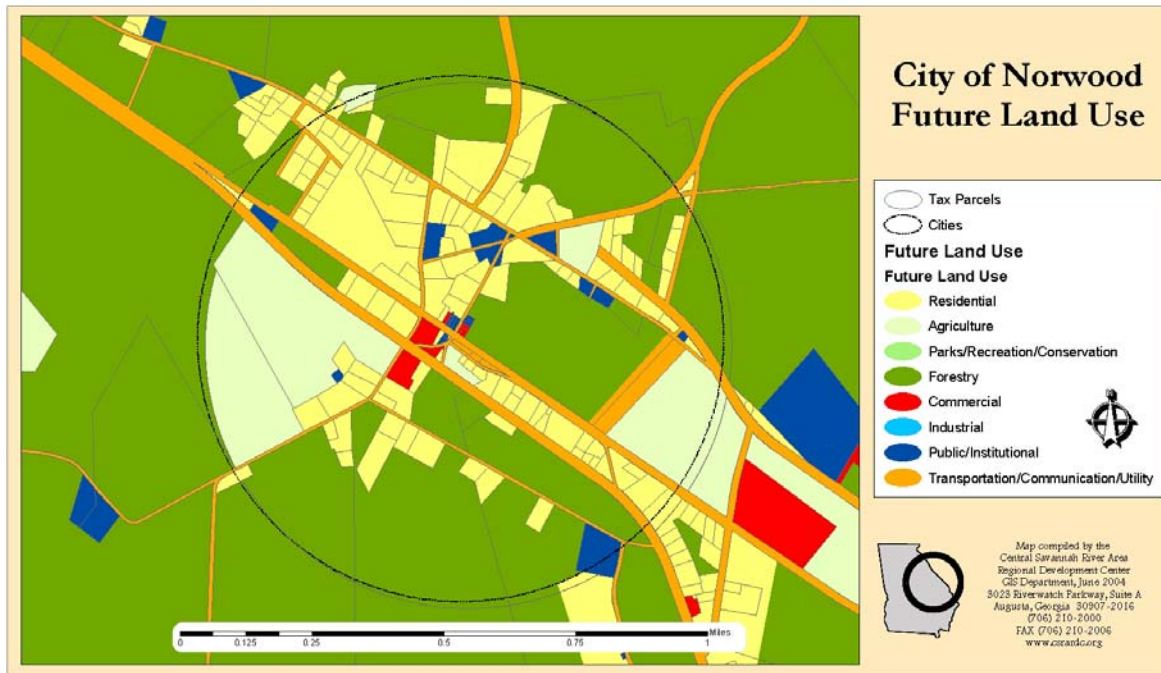
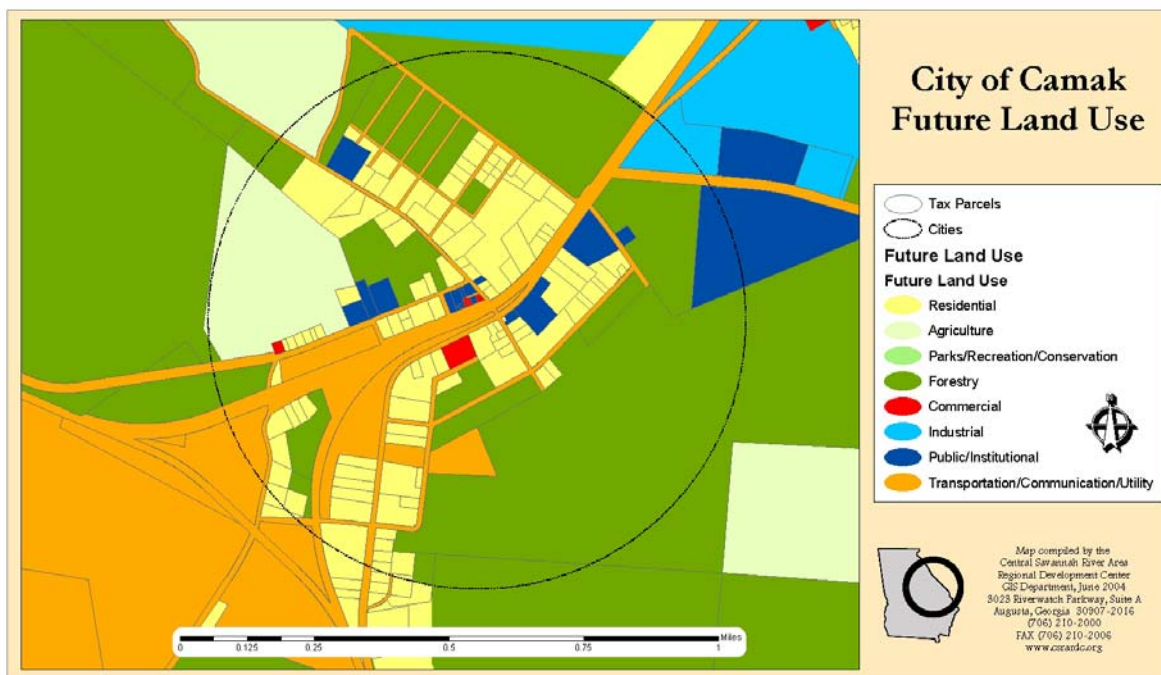


Figure L-8: Camak Future Land Use



Areas within the Community Proposed to Receive Particular Types of Growth

Some areas in along I-20 and areas east of Camak are proposed to receive industrial growth. The City of Warrenton expects higher levels of residential and commercial growth as a result of new industry developing in the county.

Recent development in Warren County has occurred primarily within the city limits of Warrenton and in unincorporated areas in proximity to the city. Development in the unincorporated areas of Warren County is scattered with no apparent locations of intense density. The county does not currently have any policies or regulations linking development and infrastructure availability, which limits its ability to encourage growth in particular areas where infrastructure is available or expansion is planned.

Areas Likely to be Annexed

There are no plans for annexation during the planning period. There is an existing annexation agreement between the county and municipalities should an annexation issue arise.

Timing and Sequence of Infrastructure Improvements

Currently, there is several infrastructure expansion projects planned to develop future industrial sites along I-20. Water expansion projects are being proposed to serve the Camak interchange on I-20. The feasibility of expanding neighboring McDuffie County's water system is also being explored in order to determine the most cost effective and efficient way to provide water service to this area. Funding sources are currently being secured for this project, which is expected to begin within the next three (3) years. The City of Warrenton continues to upgrade and expand water and sewer service within the city to service new growth and a significant capacity expansion project is planned for Warrenton's water plant.

Areas identified as Critical and Sensitive Areas Subject to Natural Hazards

Water quantity and quality were identified as the most important natural resources issues throughout the planning process. Development regulations for impaired watersheds, groundwater recharge areas with high susceptibility to pollution, water supply watersheds, and along the Ogeechee River need to be developed. Currently, the county has adopted the minimum required environmental protection ordinances. New land use regulations should include these minimum requirements as well as more stringent requirements for the most critical and sensitive areas.



Areas of Cultural, Historic, or Archeological Interest

Preservation of the scenic view sheds along proposed Scenic Byway route SR16, as well as county roads that contain portions of Civil War Heritage Trails is important due to the historic significance of these roadways. The development of land use regulations in Warren County will be required if these scenic view sheds will be protected.

There is currently no review mechanism other than national historic property legislation to evaluate negative effects of potential projects. Since many projects do not involve the use of federal funds, not all historic properties are subject to such comprehensive review. Apart from the NRHP-listed historic properties, the Warrenton historic downtown district, as well as historic structures in Norwood, Camak and the unincorporated areas, will need to be incorporated in land use regulations such as historic preservation guidelines.

Assessment

Approximately 8,055 acres of agricultural and forestry land uses will be needed to accommodate growth in other land uses. By 2024, the combined acreage of these two land uses will decline by 4.3% to 86% of total land use. The largest increase in land use growth share will occur in PRC, which is projected to grow by 6,717 acres or 3.2%. This significantly large change in land use reflects the conversion of currently classified forestry land to Wildlife Management Area status. The land is currently classified as forestry due to its primary use for timber production per state agreements permitting timber activity on large tracts of land. These agreements are not expected to be in effect by 2024, formalizing the area's WMA status. Should any new agreements between the state and timber companies be renewed or renegotiated, the future land use map will require an amendment to reflect this change.

Other land use changes are relatively minor, reflecting to projected slow pace of growth. Residential acreage will increase by 216 acres. This reflects an assumption, based on housing projections contained in the Housing section, of approximately 0.5 dwelling units per acre. The density assumption is supported by the distribution of housing. Current trends indicate that typical residential densities in the unincorporated areas are approximately 1 dwelling unit per acre and between 0.2 to 0.75 dwelling units per acre in the municipalities. Applying those ratios to projected housing location yields the 0.5 figure.

Commercial land use is projected to increase by 20 acres. The acreage was projected by utilizing the Per Capita Use Rate method based on population change. The projection yields a land use intensity of approximately 28 persons per acre.

The only land use classification expected to increase beyond its standard use ratio is industrial land use, adjusted to reflect the county's economic goal of above average growth in manufacturing. Approximately 700 additional acres will be needed to



accommodate industrial growth through the planning period. The projection yields a land use density of approximately 0.8 persons per acre and reflects traditionally lower densities for commercial land use.

Other land use classifications include land use projections based on the Per Capita Use Rate. Public/Institutional acreage is projected to increase by 70 acres, representing a land use density of 8 persons per acre. TCU acreage is projected to increase by 332 acres, representing a land use density of 1.6 persons per acre.

Natural and cultural resources account for over half of Warren County’s acreage. The need to protect these resources is paramount. As noted, the County and municipalities should attempt to encourage development away from the Rocky Comfort Creek Watershed, groundwater recharge areas, wetlands, floodplains, and primary agricultural lands. There are significant land parcels outside these environmentally sensitive areas to develop. Population and housing growth rates are not projected to be significant. Even with the county’s aggressive economic policy related to manufacturing growth, there are plenty to locations in proximity to Warrenton and Camak that do not impact environmentally sensitive areas.

Approximately 10% of Warren County’s total acreage is inhabited by threatened and endangered species. This figure may change by addition or deletions of species from state or federal lists. The county will need to monitor the list to ensure future development does not impact threatened and endangered species.

The Future Land Use map is an important tool used in implementing the Comprehensive Plan. The map does not represent an exact pattern of development but identifies appropriate areas of opportunity for each land use category to accommodate the projected growth.

Throughout the planning horizon, real estate markets and the availability of infrastructure and services will determine the exact location and timing of development. The map is intended as a guideline for elected officials and local government staff in making development decisions. As local economics and demographics change over time, so too should the Future Land Use map. It requires periodic monitoring to ensure that development decisions are being made using the most accurate illustration of the desired future growth patterns.

Goals and Policies

The following goals apply to Warren County and the municipalities unless otherwise noted:

Goal 1: Develop orderly and compatible land uses.

Policy 1-1: Create a county planning and land use commission (applies to Warren County).



Policy 1-2: Accommodate additional residential, commercial, and industrial designated areas.

Policy 1-3: Encourage infill housing and the revitalization of older neighborhoods.

Policy 1-4: Coordinate all new development with other elements in the Comprehensive Plan.

Goal 2: Minimize negative impacts associated with new development on environmentally sensitive areas.

Policy 2-1: Maintain water quality through the protection of environmentally sensitive lands.

Goal 3: Coordinate new development with public facilities.

Policy 3-1: Invest in facilities construction and expansion and services in areas designated for growth.

Policy 3-2: Base project approval decisions on the ability of the existing or planned public facilities to accommodate increased use.



Introduction

The intergovernmental Coordination Element provides local governments an opportunity to inventory existing intergovernmental coordination mechanisms and processes with other local governments and governmental entities that can impact success implementation of the local comprehensive plan. This section also provides an assessment of the adequacy and suitability of existing coordination mechanisms to serve the current and future needs of the community, and to articulate goals and formulate a strategy for effective implementation of community policies and objectives.

Adjacent Local Governments

Relationship to the Comprehensive Plan: Warren County and the municipalities participated in and developed a joint comprehensive plan in 1994 and are continuing this tradition of cooperation in the 2004 joint comprehensive plan update. An advisory committee was established with representatives from each city council and the county commission. Public hearings were also held jointly with most city councilpersons and county commissioners in attendance.

Existing Coordination Mechanisms: Warren County and the municipalities have a formal SPLOST agreement outlining the use of tax revenues for each jurisdiction, tax appropriations for each type of project allowed under the agreement, as well as distribution breakdowns by jurisdiction and project type. The cities and county also have a formal annexation agreement outlining the process required and circumstances necessary for an annexation to occur. Other coordinated efforts include water services, cemeteries, tax collection, magistrate court, tax assessor, clerk of court and the extension service. The county commission and city councils meet informally several times a year to discuss coordination efforts.

School Boards

Relationship to the Comprehensive Plan: A representative from the school board served on the comprehensive plan advisory committee. In addition, the county chairman gave presentations at the regular school board meetings throughout the planning process in order to gain insight to the school board's various needs. The school board consults the comprehensive plan for data and direction when applying for school funding grants.

Existing Coordination Mechanisms: Warren County, the City of Warrenton, and the Warren County Board of Education jointly pay the operating costs of the Warren County library. There is also a coordinated effort between Warren County local governments and the school board to provide recreational opportunities. The governmental recreation departments coordinate with the school system to share athletic facilities. The creation of a Recreation Authority, which would formalize the consolidation of Parks and Recreation services between the cities and county, is currently being considered.



Independent Special Districts

There are no independent special districts in Warren County and the municipalities.

Industrial Development Authorities

Relationship to the Comprehensive Plan: Representatives from the Development Authority, Downtown Development Authority and Chamber of Commerce served on the comprehensive plan advisory committee. The industrial development authorities refer to the comprehensive plan, for data, guidance, and implementation purposes, more than any other authority within the county. As a result, the comprehensive plan is a document these organizations will use to develop future projects.

Existing Coordination Mechanisms: The Downtown Development Authority and Warren County Chamber of Commerce are housed in the same building and jointly employ staff. While this is an informal coordination mechanism, the staffing needs are small enough for this structure to serve both organizations. More formal coordination mechanisms exist between the Industrial Development Authority and the two Warrenton-based organizations. The three authorities meet quarterly to discuss current and future projects and funding mechanisms.

Utility Companies

Relationship to the Comprehensive Plan: Three utility companies provide service to customers in Warren County and the municipalities. Georgia Power provides service to all jurisdictions while Jefferson Electric Membership Corporation and Washington Electric Membership Corporation provide service to the unincorporated area. There are no relationships between utility companies and the comprehensive plan.

Existing Coordination Mechanisms: Although no formal process for coordinating activities is in the place, the county and city clerks within their jurisdictions have primary responsibility for coordination.

Service Delivery Strategy

The Service Delivery Strategy identifies several agreements between local governments within Warren County and with neighboring jurisdictions. Cooperation in carrying out these agreements is generally managed at the staff level on a day-to-day basis. They include agreements:

- Between Warren County and the Cities of Camak and Norwood for the county to provide fire services.

- Between Warren County and McDuffie County to provide housing for Warren County inmates in McDuffie County facilities.
- Between Warren County, the City of Warrenton, and the Warren County Board of Education to share the operations cost of the library.
- Between Warren County and the Cities of Norwood and Camak for the county to provide public works assistance.
- Between Warren County and the municipalities for rescue services.
- Between Warren and McDuffie Counties for McDuffie County to provide water supply.
- On an adopted joint dispute resolution process for resolving land use disputes over annexation.

Governor’s Greenspace Program

Warren County and the municipalities do not qualify for Greenspace grants and therefore have not participated in the Governor’s Greenspace Program.

Costal Management

Warren County and the municipalities are not located within a costal management zone.

Appalachian Regional Commission

Warren County and the municipalities are not located within the Appalachian Regional Commission.

Water Planning Districts

Warren County and the municipalities not located within a state designated water-planning district.

Transportation Requirements for Non-Attainment Areas

Warren County and the municipalities are not located within a non-attainment area.

Assessment

Land Use Conflicts at Jurisdictional Borders

Existing coordination mechanisms are important both regionally and within jurisdictions. Warren County and neighboring counties do not have any land use conflicts at jurisdictional



borders due to the lack of development at or near their respective boundaries. However, there are no formal mechanisms in place to ensure future conflicts can be resolved. Both the Savannah River Parkway and the Fall Line Freeway, part of the Governor's Road Improvement Program (GRIP) to provide four-lane highway access to most Georgia communities, has the potential to alter traffic patterns given Warren County's proximity to these major highway projects. One of the primary purposes of GRIP is to encourage development in the state's smaller communities. Historically, major highway projects have encouraged development in scattered areas, primarily commercial development as a response to increases in traffic, that have the potential to conflict with Warren County's agricultural land use patterns. The CSRA RDC currently serves as an *ad hoc* forum to resolve such issues but formal agreements among counties will be needed.

Within Warren County, only the City of Warrenton has land use regulations in place. Currently, Warrenton has available developable land within its jurisdiction, primarily in the outer ring to the north and south. Projections for Warrenton highlight minimal population and household growth over the planning period. However, one of the economic development objectives pursued by the county and municipalities is to locate industrial development in proximity to available infrastructure. Economic development planning is therefore tied to Warrenton's infrastructure capacity. Since residential development is Warrenton's primary need for land, this has the potential to cause land use conflicts in areas adjacent to Warrenton's boundaries. As the county moves towards implementing land use regulations in the unincorporated area, coordination with Warrenton will be needed to ensure that land use conflicts do not arise at jurisdictional borders.

One existing mechanism that helps identify land use conflicts at jurisdictional borders is the review of the local comprehensive plan by the CSRA RDC. The RDC reviews all local plans within its jurisdiction for internal consistency and for any conflicts with plans of local governments within the region, plans of contiguous local governments outside the region, and the RDC's regional plan. In the absence of a plan amendment, the RDC reviews such plans every 10-year period and the local government is under no obligation to alter its future land use map and policies to address or resolve a land use conflict with a neighboring community identified during the regional review process. This limitation becomes evident when considering that the community's economic development vision calls for significant levels of development in the context of a county policy with the potential of land use implications. An agreement to hold meetings between city councils and the county commission during the planning phase of a major development impacting jurisdictional land use should be formalized.

Lack of Information about Plans of Adjacent Communities

Because of the regular meetings and coordinated efforts of all local governments within Warren County, lack of information about plans, policies or other documents relating to the communities is not an issue. However, lack of information among neighboring counties and other affected parties is obvious. The RDC is required only to provide notice of Warren County's joint comprehensive plan to other local governments and is not required to send



copies of the plan to these jurisdictions. Furthermore, this mechanism goes into affect after the local comprehensive plan is completed and regional review hearings are optional. Combined, these elements do not allow for meaningful input into the plan contents by contiguous or potentially affected local governments. Finally, the development of a countywide Service Delivery Strategy is a powerful tool to address issues arising within a county but does not address the problem of land use conflicts between two or more counties.

These limitations point to the need for additional coordinating mechanisms to address possible future issues. Beyond the obvious land use implications outlined in the preceding section, Warren County has economic development objectives and policies that relate specifically to multi-jurisdictional issues. First, the county serves as the location for the East Georgia Regional Park. While the industrial park lies within the boundaries of Warren County, it is a regional projects financed by numerous surrounding jurisdictions. Another objective of the county and municipalities is to join neighboring jurisdictions in developing tourism trails. Furthermore, commuting patterns discussed in the economic development section highlight the regional nature of the CSRA economy. These are significant issues that require a formal intergovernmental coordination mechanism. The CSRA RDC should send copies of all planning documents, including Service Delivery Strategies, to all contiguous jurisdictions and to potentially affected jurisdictions identified by Warren County. Moreover, the county and municipalities should use the RDC as a vehicle to encourage multi-jurisdictional consensus on individual SDRs.

Service Provision Overlaps or Conflicts

There is potential for service conflict or overlap in the areas of public libraries, solid waste collection, recreation, water service, street/road maintenance and fire protection. These are areas that intergovernmental coordination efforts need to be focused. During the course of developing this comprehensive plan, these topics were discussed at length and added as appropriate to the implementation program. All local governments in Warren County recognize the possibility for continued consolidation of services and are willing to examine options such as service coordination with adjacent counties as well as consolidation of governments within the county. The existing mechanism of informal coordination is currently adequate will be adequate through the planning period.

Annexation Issues Between Cities and Counties

Warren County and the municipalities have an existing annexation agreement in place and no annexation issues are expected. The existing agreement will continue to be adequate through the planning period.



Conflicting Development Projections and Public Facility Sitting

Due to existing coordination mechanisms, meetings and information sharing, there are no issues related to conflicting development projections and public facility sitting. All public entities currently use consistent population projections and the sitting of public facilities, particularly schools, recreation facilities and industrial parks, have been and continue to be coordinated through the combined efforts of local governments, the school board, and development authorities.

Issues Relating to Applicable State and Regional Programs

While there is no formal agreed upon process ensuring that extraterritorial water and/or sewer extensions and improvements are consistent with the land use plan and ordinances of the “receiving” jurisdiction, there are several circumstances mitigating any conflicts. Unincorporated Warren County would be the only potentially “receiving” jurisdiction because the county is the only jurisdiction that does not provide public water and sewer. Therefore, there is no potential conflict in offering service outside incorporated jurisdictions. Second, the comprehensive plan is a joint plan addressing current and future needs for infrastructure in each of the incorporated areas as well as the unincorporated county. Because all jurisdictions share the same comprehensive plan, there is no potential conflict for provision of services such as water and sewer that was not addressed during the planning process. Finally, each jurisdiction participated in developing future land use maps for both the county both and the unincorporated areas, and the most efficient method of providing services to areas that are intended to be developed was been identified and agreed upon during the planning process.

Warren County, Camak, Norwood and the City of Warrenton are participating in developing a joint comprehensive plan that will ensure that their plans are compatible. During the development of this joint plan, land use regulations such as zoning and environmental protection ordinances in each of the jurisdictions were reviewed for consistency with the updated comprehensive plan ensuring compatibility. There is no formal process beyond this joint comprehensive planning effort to ensure compatibility between jurisdictions. However, this informal process has been successful and should continue to be so based on the minimal amount of development projected to occur throughout the planning period.

Goals

The following goals apply to Warren County and the municipalities

Goal 1: Maintain existing formal and informal intergovernmental coordination mechanisms within county jurisdictions, among neighboring jurisdictions, and within regional organizations.

Goal 2: Encourage, where outlined, formal intergovernmental coordination mechanisms.