

Photo: Keith Hair

2025 GREATER BERRIEN COMPREHENSIVE PLAN

2025 GREATER BERRIEN COMPREHENSIVE PLAN FOR BERRIEN COUNTY CITY OF ALAPAHA CITY OF ENIGMA CITY OF NASHVILLE

CITY OF RAY CITY

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ECONOMIC DEVELOPMENT INVENTORY

A. Employment and Earnings by Sector

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Berrien County: Employment by Sector										
Category	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
Total	5,615	6,165	6,567	6,905	7,080	7,138	7,250	7,429	7,662	7,952
Farm	1,034	886	801	686	630	580	538	506	482	464
Agricultural Services, Other	43	58	90	191	197	206	216	228	240	253
Mining	0	0	4	10	8	9	9	9	10	10
Construction	155	191	195	291	407	409	409	414	423	436
Manufacturing	2,048	2,490	2,465	2,043	1,792	1,691	1,618	1,569	1,543	1,540
Trans, Comm, & Public Utilities	66	74	72	138	263	259	256	257	260	266
Wholesale Trade	162	144	109	135	169	180	191	204	218	233
Retail Trade	699	771	899	1,164	1,215	1,236	1,272	1,312	1,353	1,396
Finance, Insurance, & Real Estate	206	231	285	355	373	372	373	377	385	397
Services	582	675	903	1,102	1,152	1,259	1,375	1,501	1,637	1,786
Federal Civilian Government	39	41	44	40	42	41	40	40	39	39
Federal Military Government	56	67	62	64	63	64	65	65	66	66
State & Local Government	525	537	638	686	769	832	888	947	1,006	1,066

Source: U.S. Bureau of Labor Statistics

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Berrien County: Employment by Sector (%)										
			Berrien (County: Er	nployment	by Sector	(%)			
Category	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Farm	18.41%	14.37%	12.20%	9.93%	8.90%	8.13%	7.42%	6.81%	6.29%	5.84%
Agricultural Services, Other	0.77%	0.94%	1.37%	2.77%	2.78%	2.89%	2.98%	3.07%	3.13%	3.18%
Mining	0.00%	0.00%	0.06%	0.14%	0.11%	0.13%	0.12%	0.12%	0.13%	0.13%
Construction	2.76%	3.10%	2.97%	4.21%	5.75%	5.73%	5.64%	5.57%	5.52%	5.48%
Manufacturing	36.47%	40.39%	37.54%	29.59%	25.31%	23.69%	22.32%	21.12%	20.14%	19.37%
Trans, Comm, & Public Utilities	1.18%	1.20%	1.10%	2.00%	3.71%	3.63%	3.53%	3.46%	3.39%	3.35%
Wholesale Trade	2.89%	2.34%	1.66%	1.96%	2.39%	2.52%	2.63%	2.75%	2.85%	2.93%
Retail Trade	12.45%	12.51%	13.69%	16.86%	17.16%	17.32%	17.54%	17.66%	17.66%	17.56%
Finance, Insurance, & Real Estate	3.67%	3.75%	4.34%	5.14%	5.27%	5.21%	5.14%	5.07%	5.02%	4.99%
Services	10.37%	10.95%	13.75%	15.96%	16.27%	17.64%	18.97%	20.20%	21.37%	22.46%
Federal Civilian Government	0.69%	0.67%	0.67%	0.58%	0.59%	0.57%	0.55%	0.54%	0.51%	0.49%
Federal Military Government	1.00%	1.09%	0.94%	0.93%	0.89%	0.90%	0.90%	0.87%	0.86%	0.83%
State & Local Government	9.35%	8.71%	9.72%	9.93%	10.86%	11.66%	12.25%	12.75%	13.13%	13.41%

Source: U.S. Bureau of Labor Statistics

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

Source: U.S. Bureau of Labor Statistics

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	Berrien County: Earnings by Sector										
Category	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025	
Total (1996 \$)	\$98,829,000	\$118,975,000	\$140,372,000	\$152,954,000	\$163,478,000	\$172,180,000	\$182,462,000	\$194,678,000	\$209,001,000	\$225,724,000	
Farm (1996 \$)	\$1,951,000	\$10,167,000	\$15,275,000	\$19,562,000	\$14,755,000	\$15,055,000	\$15,454,000	\$16,023,000	\$16,776,000	\$17,739,000	
Agricultural Services, Other (1996 \$)	\$420,000	\$525,000	\$792,000	\$2,151,000	\$2,139,000	\$2,342,000	\$2,581,000	\$2,844,000	\$3,130,000	\$3,441,000	
Mining (1996 \$)	\$0	\$54,000	\$79,000	\$232,000	\$98,000	\$106,000	\$113,000	\$120,000	\$128,000	\$135,000	
Construction (1996 \$)	\$2,789,000	\$3,605,000	\$3,527,000	\$5,655,000	\$8,835,000	\$9,131,000	\$9,401,000	\$9,778,000	\$10,257,000	\$10,848,000	
Manufacturing (1996 \$)	\$48,892,000	\$52,997,000	\$59,251,000	\$51,997,000	\$51,477,000	\$51,507,000	\$52,095,000	\$53,241,000	\$55,020,000	\$57,537,000	
Trans, Comm, & Public Utilities (1996 \$)	\$1,315,000	\$1,640,000	\$1,731,000	\$2,909,000	\$6,215,000	\$6,304,000	\$6,454,000	\$6,673,000	\$6,972,000	\$7,365,000	
Wholesale Trade (1996 \$)	\$3,534,000	\$2,833,000	\$2,867,000	\$2,875,000	\$4,427,000	\$4,812,000	\$5,238,000	\$5,709,000	\$6,228,000	\$6,801,000	
Retail Trade (1996 \$)	\$14,805,000	\$18,552,000	\$20,410,000	\$22,413,000	\$23,324,000	\$24,243,000	\$25,485,000	\$26,831,000	\$28,257,000	\$29,762,000	
Finance, Insurance, & Real Estate (1996 \$)	\$4,249,000	\$4,288,000	\$5,993,000	\$7,893,000	\$7,986,000	\$8,478,000	\$8,976,000	\$9,571,000	\$10,282,000	\$11,127,000	
Services (1996 \$)	\$9,764,000	\$9,609,000	\$12,665,000	\$18,929,000	\$21,693,000	\$25,324,000	\$29,474,000	\$34,214,000	\$39,636,000	\$45,861,000	
Federal Civilian Government (1996 \$)	\$1,433,000	\$1,679,000	\$1,651,000	\$1,731,000	\$1,975,000	\$1,988,000	\$2,022,000	\$2,068,000	\$2,127,000	\$2,200,000	
Federal Military Government (1996 \$)	\$391,000	\$786,000	\$688,000	\$722,000	\$799,000	\$849,000	\$898,000	\$947,000	\$995,000	\$1,042,000	
State & Local Government (1996 \$)	\$9,286,000	\$12,240,000	\$15,443,000	\$15,885,000	\$19,755,000	\$22,041,000	\$24,271,000	\$26,659,000	\$29,193,000	\$31,866,000	

Source: Woods & Poole Economics, Inc.

	Berrien County: Earnings by Sector (%)											
Category	1980	1985	1990	1995	2000	2005	2010	2015	2015 2020			
Total (1996 \$)	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%		
Farm (1996 \$)	1.97%	8.55%	10.88%	12.79%	9.03%	8.74%	8.47%	8.23%	8.03%	7.86%		
Agricultural Services, Other (1996 \$)	0.42%	0.44%	0.56%	1.41%	1.31%	1.36%	1.41%	1.46%	1.50%	1.52%		
Mining (1996 \$)	0.00%	0.05%	0.06%	0.15%	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%		
Construction (1996 \$)	2.82%	3.03%	2.51%	3.70%	5.40%	5.30%	5.15%	5.02%	4.91%	4.81%		
Manufacturing (1996 \$)	49.47%	44.54%	42.21%	34.00%	31.49%	29.91%	28.55%	27.35%	26.33%	25.49%		
Trans, Comm, & Public Utilities (1996 \$)	1.33%	1.38%	1.23%	1.90%	3.80%	3.66%	3.54%	3.43%	3.34%	3.26%		
Wholesale Trade (1996 \$)	3.58%	2.38%	2.04%	1.88%	2.71%	2.79%	2.87%	2.93%	2.98%	3.01%		
Retail Trade (1996 \$)	14.98%	15.59%	14.54%	14.65%	14.27%	14.08%	13.97%	13.78%	13.52%	13.19%		
Finance, Insurance, & Real Estate (1996 \$)	4.30%	3.60%	4.27%	5.16%	4.89%	4.92%	4.92%	4.92%	4.92%	4.93%		
Services (1996 \$)	9.88%	8.08%	9.02%	12.38%	13.27%	14.71%	16.15%	17.57%	18.96%	20.32%		
Federal Civilian Government (1996 \$)	1.45%	1.41%	1.18%	1.13%	1.21%	1.15%	1.11%	1.06%	1.02%	0.97%		
Federal Military Government (1996 \$)	0.40%	0.66%	0.49%	0.47%	0.49%	0.49%	0.49%	0.49%	0.48%	0.46%		
State & Local Government (1996 \$)	9.40%	10.29%	11.00%	10.39%	12.08%	12.80%	13.30%	13.69%	13.97%	14.12%		

Source: Woods & Poole Economics, Inc.

Average Weekly Wages Paid by Sector to Individuals

Be	Berrien County: Average Weekly Wages										
Category	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
All Industries	\$319	\$332	\$332	\$359	\$364	\$377	\$395	\$398	\$410	\$414	\$443
Agri, Forestry, Fishing	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	464
Mining	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Construction	NA	289	279	277	294	297	318	312	344	362	372
Manufacturing	NA	338	342	381	389	413	424	430	447	453	508
Transportation, Comm, Util	NA	343	406	413	469	443	409	510	540	393	372
Wholesale	NA	271	263	305	318	304	337	374	351	367	397
Retail	NA	341	347	353	332	332	363	359	363	360	377
Financial, Insurance, Real Estate	NA	435	411	447	454	513	509	498	513	561	594
Services	NA	252	257	295	319	328	384	385	362	368	382
Federal Gov	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
State Gov	NA	408	NA								
Local Gov	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Source: U.S. Bureau of Labor Statistics

Personal Income by Type

Berrien County: Personal Income by Type (in dollars)								
Category	1990	2000						
Total income	132,652,616	260,969,400						
Aggregate wage or salary income for households	97,007,250	188,100,600						
Aggregate other types of income for households	2,210,567	5,216,400						
Aggregate self employment income for households	9,577,749	19,599,600						
Aggregate interest, dividends, or net rental income	6,515,752	15,782,800						
Aggregate social security income for households	9,315,014	15,685,600						
Aggregate public assistance income for households	1,465,338	3,233,900						
Aggregate retirement income for households	6,560,946	13,350,500						

Table 7

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

Berrien County: Personal Income by Type (in dollars)						
Category	1990	2000				
Total income	100.0%	100.0%				
Aggregate wage or salary income for households	73.1%	72.1%				
Aggregate other types of income for households	1.7%	2.0%				
Aggregate self employment income for households	7.2%	7.5%				
Aggregate interest, dividends, or net rental income	4.9%	6.0%				
Aggregate social security income for households	7.0%	6.0%				
Aggregate public assistance income for households	1.1%	1.2%				
Aggregate retirement income for households	4.9%	5.1%				

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

Employment by Occupation

Berrien County: Employment by Occupation	n	
Category	1990	2000
TOTAL All Occupations	6438	7335
Executive, Administrative and Managerial (not Farm)	334	625
Professional and Technical Specialty	551	1005
Technicians & Related Support	182	NA
Sales	471	830
Clerical and Administrative Support	902	959
Private Household Services	28	NA
Protective Services	70	NA
Service Occupations (not Protective & Household)	502	770
Farming, Fishing and Forestry	582	158
Precision Production, Craft, and Repair	984	1125
Machine Operators, Assemblers & Inspectors	1008	925
Transportation & Material Moving	463	751
Handlers, Equipment Cleaners, helpers & Laborers	361	NA

Table 9

Berrien County: Employment by Occupation(%)					
Category	1990	2000			
TOTAL All Occupations	100.00%	100.00%			
Executive, Administrative and Managerial (not Farm)	5.19%	8.52%			
Professional and Technical Specialty	8.56%	13.70%			
Technicians & Related Support	2.83%	NA			
Sales	7.32%	11.32%			
Clerical and Administrative Support	14.01%	13.07%			
Private Household Services	0.43%	NA			
Protective Services	1.09%	NA			
Service Occupations (not Protective & Household)	7.80%	10.50%			
Farming, Fishing and Forestry	9.04%	2.15%			
Precision Production, Craft, and Repair	15.28%	15.34%			
Machine Operators, Assemblers & Inspectors	15.66%	12.61%			
Transportation & Material Moving	7.19%	10.24%			
Handlers, Equipment Cleaners, helpers & Laborers	5.61%	NA			

Table 10

Table	1	1
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Georgia: GA Employment by Occupat	tion	
Category	1990	2000
TOTAL All Occupations	3092057	3839756
Executive, Administrative and Managerial (not Farm)	378984	538647
Professional and Technical Specialty	383012	717312
Technicians & Related Support	110766	NA
Sales	379746	446876
Clerical and Administrative Support	494823	581364
Private Household Services	15882	NA
Protective Services	52596	NA
Service Occupations (not Protective & Household)	302084	444077
Farming, Fishing and Forestry	68111	24489
Precision Production, Craft, and Repair	366819	346326
Machine Operators, Assemblers & Inspectors	262930	415849
Transportation & Material Moving	142189	254652
Handlers, Equipment Cleaners, helpers & Laborers	134115	NA

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

Table 12

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

Table 13

All of United States: US Employment by Occ	cupation (%	(0)
Category	1990	2000
TOTAL All Occupations	100.00%	100.00%
Executive, Administrative and Managerial (not Farm)	12.32%	13.45%
Professional and Technical Specialty	14.11%	20.20%
Technicians & Related Support	3.68%	NA
Sales	11.79%	11.25%
Clerical and Administrative Support	16.26%	15.44%
Private Household Services	0.45%	NA
Protective Services	1.72%	NA
Service Occupations (not Protective & Household)	11.04%	12.01%
Farming, Fishing and Forestry	2.46%	0.73%
Precision Production, Craft, and Repair	11.33%	8.49%
Machine Operators, Assemblers & Inspectors	6.83%	9.45%
Transportation & Material Moving	4.08%	6.14%
Handlers, Equipment Cleaners, helpers & Laborers	3.94%	NA

Table 14

Employment Status

Berrien County: Labor Force	Partici	pation
Category	1990	2000
TOTAL Males and Females	10708	12287
In Labor Force	7030	7790
Civilian Labor Force	6865	7679
Civilian Employed	6438	7335
Civilian Unemployed	427	344
In Armed Forces	165	111
Not in Labor Force	3678	4497
TOTAL Males	5145	5915
Male In Labor Force	3929	4316
Male Civilian Labor Force	3793	4219
Male Civilian Employed	3602	4078
Male Civilian Unemployed	191	141
Male In Armed Forces	136	97
Male Not in Labor Force	1216	1599
TOTAL Females	5563	6372
Female In Labor Force	3101	3474
Female Civilian Labor Force	3072	3460
Female Civilian Employed	2836	3257
Female Civilian Unemployed	236	203
Female In Armed Forces	29	14
Female Not in Labor Force	2462	2898

Berrien County: Labor Force Participation (%)							
Category	1990	2000					
TOTAL Males and Females	100.00%	100.00%					
In Labor Force	65.65%	63.40%					
Civilian Labor Force	64.11%	62.50%					
Civilian Employed	60.12%	59.70%					
Civilian Unemployed	3.99%	2.80%					
In Armed Forces	1.54%	0.90%					
Not in Labor Force	34.35%	36.60%					
TOTAL Males	100.00%	100.00%					
Male In Labor Force	76.37%	72.97%					
Male Civilian Labor Force	73.72%	71.33%					
Male Civilian Employed	70.01%	68.94%					
Male Civilian Unemployed	3.71%	2.38%					
Male In Armed Forces	2.64%	1.64%					
Male Not in Labor Force	23.63%	27.03%					
TOTAL Females	100.00%	100.00%					
Female In Labor Force	55.74%	54.52%					
Female Civilian Labor Force	55.22%	54.30%					
Female Civilian Employed	50.98%	51.11%					
Female Civilian Unemployed	4.24%	3.19%					
Female In Armed Forces	0.52%	0.22%					
Female Not in Labor Force	44.26%	45.48%					

Source: U.S. Bureau of the Census

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

Table 17

Source: U.S. Bureau of the Census

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

Table 18

Source: U.S. Bureau of the Census

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

Source: U.S. Bureau of the Census

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

Source: U.S. Bureau of the Census

Unemployment Rates

Berrien County: Labor Statistics											
Category	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Labor Force	6,963	6,566	6,507	6,388	6,393	6,423	6,624	6,933	6,838	6,813	6,528
Employed	6,450	6,209	6,005	5,888	6,005	6,043	6,280	6,601	6,525	6,355	6,160
Unemployed	513	357	502	500	388	380	344	332	313	458	368
Unemployment Rate	7.4%	5.4%	7.7%	7.8%	6.1%	5.9%	5.2%	4.8%	4.6%	6.7%	5.6%

Table 21

Source: Georgia Department of Labor

Table 22

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

Source: Georgia Department of Labor

Ta	ble	23

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

*Souce: U.S. Bureau of Labor Statistics

Commuting Patterns

Table	24
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Berrien County: Labor Force by Place of Work		
Category	1990	2000
Worked in County of Residence	4323	4026
Worked outside county of Residence	2113	3198

ECONOMIC DEVELOPMENT ASSESSMENT

EMPLOYMENT AND EARNINGS BY SECTOR

Southeast Georgia is experiencing a period of significant change that will shape the region's future economic development, population growth, and quality of life. Following long years of an agri-based economy, relatively stable demographics, and few opportunities for many of the area's working-age population, times are changing. Traditional economic patterns and indicators in the region are exhibiting signs of a transitional phase. Although the area's economy is still dominated by the timber industry in terms of land use (70%) and sales, (\$78 million annually) the overall regional reliance on agriculture continues to decline. There has been moderate growth in the manufacturing, retail trade, services, and public administrative sectors. Farming has shown the most significant decline region wide with a reduction from 5,725 in 1980 to 3,887 in 1990. This trend is expected to continue through the end of the decade with a projected 3,135 farms by 2000.

In the year 2000, the average weekly wage for all the employment sectors in Berrien County was \$443. This amount was less than the statewide average of \$622.

In Berrien County, Manufacturing is the largest employment sector providing 36.8% of the jobs. The other predominant employment sectors are Retail trade and Services. Statewide, the service industry is the largest employment sector, contributing 25.6% of the states jobs



CITY OF ALAPAHA

The City of Alapaha is a highly agricultural based community and the major crops in the area are peanuts, cotton, tobacco, pecans, and fish.

The City of Alapaha rental of their gym, lunchroom, and other rooms at the old school complex bring added income into their city by innovative usage of available infrastructure located inside their city. The City has a Post Office but no newspaper.

The City of Alapaha has no authorities, industrial parks or public agencies, they are however part of the Berrien County Housing Authority, members of the Berrien County Chamber of Commerce, and the Berrien County Recreational Board. City of Alapaha needs as a long-term and short-term goal to provide representation on both the Recreational Board and Chamber of Commerce and to facilitate interaction with their representative so that they in return have plenty of interaction with both of these entities.

Special and unique economic activities that are inherent to the City of Alapaha are the Legend of Hogzilla and the City Hall and Alapaha Depot Museum. The City of Alapaha has a festival that is built around this urban legend and further promotion could be a big drawing card for tourism for Alapaha.

The City Hall and Alapaha Depot Museum has been converted form a historical train depot. This unique building also houses a small library and many artifacts of a bygone era such as: two beautiful quilts one presented to the town by the 1993 8th grade graduating class from the now county consolidated elementary school which depicts different aspects of the city and the state and a second quilt presented to the town by the Glory United Methodist Women where each square represents businesses open at the time the quilt was made in 1992. Another benefit this historical building contributes to the community is its annual Christmas at the Depot.

CITY OF ALAPAHA BUSINESSES

Ken's Fish Hatchery & Plantation	Especiallly Yours
Metal FX	Virginias
Atlas Greenhouse System	Mary Jo's
Ken's Greenhouse & Laundromat	Moore Truck LInes
Tucker's Station	Barfield Gas
Jernigan's	Alapaha Station Food Depot
Exprezit	Bank of Alapaha

Dixon Peanut	Bracewell Wrecker Service
Dixon Seed & Chemical	U.S. Lawn Service
Sentup Car Wash	Melinda Roberts Animal and Vet Supplies
Becky's	Experiment Station
Liz's Pecan	Alapaha Dance Station
Monographics	Cates Manor Bed & Breakfast
Flanders Cafe	Roberts Chicken Houses
True Gospel Messenger Farm	Sheboggy Stodghill Hog
Thrift Shop	Aarons

The types of businesses listed give creditability to the earlier statement that Alapaha is a highly agricultural based community.

City of Alapaha has several buildings not in use that represents possible economic development to the City. The possibilities for usage of these buildings are endless and cost for development can be off set by grants for various sources such as HUD, USDA, and available CDBG money. City of Alapaha's local SEGaRDC can be a valuable resource to aide in the pursuit of these grants. Buildings not in use include; Old Dixon gas building, Mark Dixon building, Bradley house, and an office beside the business Becky's.

CITY OF RAY CITY

Ray City is located within Berrien County and at present has no development authorities, industrial parks, or public agencies. They are however as with the City of Alapaha, part of the Berrien County Housing Authority, a joint city/county recreational board, and a member of the Berrien County Chamber of Commerce. Ray City does have local representation on the recreational board but are in need of local representation on the Chamber of Commerce.

The City of Ray City has been officially recognized as a "City of Ethics". The City was awarded this honor on October 2, 2001 at the Pre-Legislative Conference in Atlanta. This award is given to cities taht make a "tangible commitment to ethical conduct".

The City has a post office and library. Old city hall has been remolded and is used for council meetings and monthly court and could be rented to civil organizations, clubs, etc. for added revenue for the City.

LOCAL BUSINESSES IN RAY CITY

H&K Supermarket	The Hair Place
H&K Hardware	Ann's Beauty Shop
Ray City Automotive	Susan's Hair Fashions
Fastop Convenience Store	Dollar General Store
Ezprezit Convenience Store	Ray City Auto Sales
Big Mel's BBQ	The Citizens Bank
The Coffee Shop	Register's Car Wash

CITY OF ENIGMA

The City of Enigma is part of the joint recreational board with the other local government agencies, and are a member of the Berrien County Chamber of Commerce. At this time, Enigma has no representation on either board from their City. A short-term goal needs to be implemented for Enigma to incorporate a member onto the Chamber Board and the recreational board so that these Boards better serve the needs of Enigma's citizens. Enigma is also part of the Berrien County Housing Authority.

City of Enigma plays host to several events during the year that not only brings in added revenue into the community but people as well. These events include that annual Enigma Firecracker Pageant, annual Christmas Parade, and the turkey shoot, which is a popular event in rural South Georgia communities.

Patrick's Paradise is a special and unique activity that belongs to Enigma and can be incorporated into eco-tourism. Fishing rodeos, bird watching, and bicycling are among a few of the activities that can be built around Patrick's Paradise to bring revenue into the business in and around the Enigma area.

CITY OF ENIGMA BUSINESS

Experzit Mart	Tucker Farms
Bar-B-Cue House	Dixon Gin
Enigma Food Store	Whiskey Barrel

B&G Heating & Cooling	Sumner Construction
Frieda's Beauty	Berry Patch
Crumley Farms	South Central Gin
Hobbs Satellites	Rays Liquor Store
B&G Home Improvements	Bogging
Hanson Construction	Giddens Logging
Geo Fabrics	Jack Lee Cabinet Shop
Glass Unlimited	Berrien Peanut

City of Enigma is part of the Rural Outreach (weed&seed) and has planned use of some of their older buildings.

CITY OF NASHVILLE

The City of Nashville is the County Seat of Berrien County and includes the following government facilities: library, City Hall, Community Center, Housing Authority, Conference Center, Post Office, Extension Service, Board of Education, and the Chamber of Commerce.

Nashville has a Downtown Development Authority and a joint City/County Industrial Park. Nashville is also a member of joint recreation board with the other local city governments of Berrien County.

City of Nashville is also home to Leadership Berrien, which is actively involved within the County in economic development and training and producing future leadership for Berrien County.

Local tourism includes historic buildings, agricultural tours, and hunting and fishing. The City of Nashville plays host to many local events such as:

Ag Appreciation Dinner

Annual Golf Tournament

Life of Christ around the Square

Trick or Treat Around the Square

Special Olympics

Nashville, although a typical small, rural community, is home to several significant industries including:

<u>COMMERCIAL, MANUFACTURING, AND INDUSTRIAL BUSINESSES IN</u> <u>NASHVILLE</u>

Chaparral Boats: A 966, 524 square foot manufacturing space that builds sport boats, deck boats, and cruisers. Chaparral Boats employ approximately 1200 employees and is the leading employer in Berrien County.

B&H Electronics: Manufacturing company that recently expanded to increase employment to over 100, Company produces boat helms.

Amoco Fabrics & Fibers Co.: Manufactures industrial fabrics and employs 858 workers.

Specialty Converting: This is an agricultural based manufacturing company, which produces, horticultural fabrics, construction fabrics, textile fabrics, and agricultural and landscape fabrics. Specialty employs 30 workers.

Dixie Concrete Services

Harvey's Warehouse

Harvey's Corporate Office

City of Nashville contains a large number of locally owned and operated businesses within the city limits.

City of Nashville has several restaurants whose cuisine run the gambit from fast food hamburgers, ethnic Asian, and Hispanic delicacy, to good old South Georgia B-B-Q.

City of Nashville has four banks: Citizens, United, Credit Union, and Bank of Alapaha serving the needs of their community. Three attorneys have offices in Nashville and include; Studstill & Moore, Knight & Franklin, and Waugh Turner.

Due to Nashville's proximity to Valdosta, the community has realized a significant amount of population and housing growth in recent years. The SEGa EDD staff has been very involved in Nashville since it joined the District. Efforts are underway to save the short line railroad that currently provides rail service to the two major industries in the community. Working with state officials, GA DOT has made a commitment to purchase the track IF funds can be acquired to renovate the deteriorated track line. EDA has been requested to assist with this project in 2005.
Berrien County is experiencing unprecedented residential growth in the unincorporated areas of the County. The District is working with elected officials to put in place county land use planning regulations to control the unorganized growth.

LABOR FORCE DATA

Between 1996 and 2000, Berrien County's annual unemployment rate was higher than the state's rate, averaging 5.3% compared with the state's average of 4.2%. Nationally, the unemployment rate for the same period averaged 4.8%.

The county per capita personal income in 1999 was \$18,454, as compared with \$27,324 for Georgia and \$28,546 for the United States.

ECONOMIC DEVELOPMENT RESOURCES

Economic Development Agencies

- Berrien County Chamber of Commerce
- Berrien County Housing Authority
- Berrien County Development Authority
- Berrien County Planning Commission

GOALS & IMPLEMENTATION

Goal 1

Encourage economic development through business/industry recruitment and/or expansions that capitalize on and are compatible with the natural attributes of the county.

Policy 1.1

Prepare incentive package for prospects and incentives for incoming businesses.

Policy 2.1

Create better transportation opportunities for businesses.

Policy 3.1

Use whole county not small parts in trying to entice new businesses. Get more involvement from outlying towns.

Policy 4.1

Incorporate and/or take advantage of all programs and assistance provided by local SEGaRDC.

Policy 5.1

Create more agribusinesses.

Policy 6.1

Attract more businesses through partnership with current leaders.

Policy 7.1

Consider a joint venture for an industrial park with infrastructure with City of Enigma and City of Alapaha.

Goal 2

Promote quality of life that is conducive to retaining current residential population and attracting new residents.

Policy 1.2

Design a more attractive city (e.g., Better Hometown Design)

Policy 2.2

Attract jobs that pay living wages

Policy 3.2

Training programs, vocational and technical, should be designed to correlate with anticipated industrial and commercial growth and needs.

Policy 4.2

Programs should be developed which encourage local college and technical school graduates to seek employment within the county.

Policy 5.2

More effective way to promote our assets and draw new people to area by brochures, advertisement, accurate information.

Natural and Cultural Resources Element

Inventory of Existing Conditions

Natural resources

General Description

Introduction

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

<u>Location</u>

Berrien County is located in south-central Georgia and has a land area of 292,992 acres or about 458 square miles. It is part of the Alapaha Soil and Water Conservation District. The southern one third of the county is in the Atlantic Coast Flatwoods Major Land Resource Area. Most of this land but it is well suited for forestry uses. The remaining two thirds of the county is in the Southern Coastal Plain. Most of the land in this section is well suited for row crop agriculture and forestry. Most of the county is slightly sloping, grading to nearly level in the southeastern portion. However, steeper slopes are commonly found along rivers and major streams. The county is dotted with wetland depressions ranging in size from less than an acre to over one thousand acres. While the relatively flat terrain precludes any far reaching vistas, there are several natural areas along the Alapaha River such as wide sweeping sand bars and river bluffs.¹

General Physical Environment

Berrien County's lowest elevation is about 143 feet above sea level at the county's southwestern corner where the Withlacoochee River enters neighboring Lowndes County. Another low point in the county (168 feet) is at the county's southeastern comer where the Alapaha River enters neighboring Lanier County. The highest elevations are a

¹ USDA-NRCS, Harold B. Simpson, Jr., (229) 686-2363, September 2, 2003.

little greater than 350 feet along several hilltops in the northwestern part of the county. The highest elevations are all north of the City of Enigma and generally lie along CR 106.

Most of the City of Nashville is above 230 feet, with the courthouse and downtown area averaging around 240 feet. The city's lowest elevation is about 185 feet along the Withlacoochee River at the far southwestern corner of the city limits. The highest elevations are a little greater than 250 feet along Enigma Road at the northern city limits, and in the residential subdivision along US 129, about one mile north of Berrien County High School. The City of Alapaha is generally very flat with elevations ranging from about 285 feet along the city limits to a little greater than 290 feet in downtown. However, the far northeastern corner of the city drops nearly 60 feet down to the Alapaha River floodplain where the elevation is only 230 feet. Most of the City of Enigma is above 300 feet with the downtown United Stated Geological Service (USGS) benchmark being set at 314 feet.

Elevations otherwise range from about 263 feet in the extreme southwestern part of the city near Hardy Mill Creek, to a little more than 330 feet near the northern city limits west of Turner Church Road. Elevations in the City of Ray City range from 170 feet where Cat Creek exits the western city limits near SR37, to a little greater than 210 feet in the northeastern part of the city east of SR 64. Most of the City of Ray City is above 180 feet with the downtown averaging near 190 feet. Other elevations in the county include: 204 feet at Rays Millpond, 246 feet at Tenmile Bay, 275 feet at the West Berrien School, 226 feet at Bannockburn, and 218 feet at New Lois.

The county's topography and forest cover is such that notable views and vistas are not present. The most pronounced topography is where the floodplain of the Alapaha River cuts through the northern part of the county. Here, total elevation changes can be in excess of 100 feet over a short distance. The flat flood plain ranges from approximately 4,000 to 6,000 feet wide and is bounded by steep banks, which are commonly 40-50 feet high such as those at Rowe Town Church. Like other major rivers in south Georgia, the Alapaha River is a dark water slow flowing river containing a dense tree canopy and broad floodplain, and is navigable by canoe only part of the year.

Berrien County's climate is classified as humid-subtropical according to the Koppen Climate Classification System. Winters are short and mildly cool with periodic cold spells moderating in 1-2 days periodically. Summers are hot and humid. From 1971-2000, the average annual amount of precipitation measured 50.73 inches in the southern half of the county, and 55.16 inches of precipitation in the northern half of the county. During this thirty (30) year period, the monthly precipitation average was 4.22 inches in the southern half of the county and 4.59 in the northern half of the county.² Measurable snowfalls are very rare with a less than 5% probability each year. When they occur, snowfall amounts most always less than one inch and melt quickly. In winter, the average minimum daily temperature is 39 degrees. In summer, the average maximum daily temperature is 90 degrees. Berrien County's growing season ranges from 8-9 months,

² http://cirrus.dnr.state.sc.us/cgi-bin/sercc/cliMAIN.pl?ga6237, June 14, 2003

with an average of 260 days that have daily minimum temperatures greater than 32 degrees. The first winter freeze typically occurs in early November and the last freeze typically occurs in mid-March.³

Geology

Berrien County is located within the Southern Atlantic Coastal Plain geomorphic province. The Coastal Plain ranges in age from late Cretaceous to Holocene (recent). Berrien County's bedrock is composed of younger, softer sandstones, limestone, and sediments. The Coastal Plain appropriately resembles a seabed, with sandy soils and gentle slopes. The county's land surface is a flat, weakly dissected alluvial plain formed by deposition of continental sediments onto submerged, shallow continental shelf, which was later exposed by sea level subsidence.⁴

Sedimentary rocks are composed of sediment particles deposited by wind or water, organic products of living creatures, or residues deposited by inorganic chemical processes such as precipitation or evaporation. About 100 million years ago, in mid-Cretaceous time, sea level stood hundreds of feet higher than today. Cretaceous shoreline erosion cut the Fall Line scarp in Georgia's surface. Below the Fall Line, shallow seas deposited Cretaceous and younger sediments of today's Coastal Plain. Sea level has fallen erratically since mid-Cretaceous, leaving progressively younger sediments toward the south and east. ⁵

The Southern Atlantic Coastal Plain is underlain by sedimentary rocks of Cretaceous, Tertiary, and Quaternary age. Cretaceous rocks crop out in a discontinuous belt adjacent to the highlands. They are composed of terrigenous gravels and sandstone near the highlands and grade southward and eastward into beds composed of limestone and marl. Sediments of Tertiary and Quaternary age are present in successive outcrop belts in a coastward direction. The youngest sediments of the Quaternary age also are exposed along stream and river courses that flow across the Cretaceous and Tertiary outcrop belts.

Due to transmogrify by geophysical events, Berrien County has a moderate density of small to medium size perennial streams and a low density of associated rivers, most with moderate volume of water at very low velocity.

Below is a brief description of the out cropping units in Berrien County. If specific information is needed, contact Alan J. Giles, Department of Natural Resources, Information Geologist, (404) 656-3214.

³ Stooksbury, David, State Climatologist, (706)-583-0156, e-mail: stooks@engr.uga.edu

⁴ http://www.fs.fed.us/land/pubs/ecoregions/ch21.html#232C, June 14, 2003.

⁵ http://home.att.net/~cochrans/sedrok01.htm, June 14, 2003

Quaternary alluvium

Quaternary alluvia consist of unconsolidated sediments found in floodplains of rivers and streams, and eolian sand dunes along major rivers and streams.

Altamaha Formation

The Altamaha formation is Miocene to Pliocene in age and consists of thin-to thick-bedded, locally cross-bedded, variably indurated, well to poorly sorted, feldspathhic, argillaceous, local gravelly, fine-to coarse-grained sand to clay.

	DEDIOD	MILLION	YEARS	FROOM	
ERA	PERIOD	DURATION	BEFORE PRESENT	EPOCH	
	QUATERNARY		0.01	HOLOCENE (Recent)	
0	QUATERNARY (Q)	1.99	2.5	PLEISTOCENE (Qp)	
õ	TERTIARY (T)	5	7	PLIOCENE (Tpl)	
CENOZOIC		19	26	MIOCENE (Tm)	
		12	38	OLIGOCENE (To)	
		16	54	EOCENE (Te)	
		11	65	PALEOCENE (Tp)	
dυ	CRETACEOUS (K)	71	136		
MESO- ZOIC	JURASSIC (J)	54	190		
	TRIASSIC (TR)	35	225		
	PERMIAN (P)	55	280		
~	PENNSYLVANIAN (P)	30	310		
ĕ	MISSISSIPPIAN (M)	35	345		
PALEOZOIC	DEVONIAN (D)	50	395		
	SILURIAN (S)	35	430		
	ORDOVICIAN (O)	70	500		
	CAMBRIAN (C)	70	570		
	PROTEROZOIC	1930	2500		
	ARCHEAN	1900	4600		

Table 1-1

Oligocene sediments

These Oligocene sediments are primarily composed of limestone and dolostone.

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Barnwell Group

Sediments of the Barnwell Group are Late Eocene in age and are predominately composed of very fine-to very coarse-grained quartz sand in thin to thick, horizontally-bedded **layers**.

Marshallville Formation

The Marshallville Formation consists of fine-to medium-grained sand interlayered with clay. Generally, the Marshallville Formation crops out as channel deposits of fine-grained sand and clay. The Marshallville also occurs as thin to thick beds of cross-bedded, fine-to medium-grained sands. Those sediments are Paleocene in age.

Oconee Group

Sediments in the Oconee Group are Upper Cretaceous to Tertiary in age and consist primarily of kaolin, kaolinitic sand, and mica, with minor amounts of heavy minerals present in medium-grained sand.

Hawthorne Group

The Statenville, Cypresshead, and Miccosukee Formations represent the Hawthorne Group.

Statenville Formation

The Statenville Formation, middle Miocene in age, consists of cross-bedded "argillaceous, dolomitic, phosphatic sand," It is predominately composed of fine-to coarse-grained well-to poorly sorted quartz sand.

Cypresshead Formation

The Cypresshead Formation, late Pliocene age, consists of quartz sand, including some "pebbles and gravel, heavy minerals, mica, trace fossils..."

Miccosukee Formation

The Miccosukee Formation, late Pliocene in age, is primary composed of sand, with clay being predominant in certain areas. The Miccosukee is usually found in thin beds of fine-to medium-grained sand, and locally, is found occurring as scour and fill structures filled with coarse-grained sediments and gravel stringers.⁶

Public Water Supply

The Berrien County area is served by municipal and individual wells. According to the 2002 Georgia County Guide, public water service providers supplied 50.5% of the water utilized in the County. The remaining 49.5% are served by individual wells. In 2000, 8,200 individuals consumed .85 million gallons per day or 103.66 gallons per individual. The total water consumption rate for the county was 12.90 Million Gallons Per Day (MGD). 7.43 million gallons of water were withdrawn form aquifers daily and 5.47 million gallons were withdrawn daily from surface sources.

Berrien County

Permitted Systems

City of Alapaha	City of Enigma
City of Ray City	Camp Tygart

City of Nashville Ray's Mill pond

Water Supply Watershed

Berrien County has no Water Supply Watersheds as defined by the Department of Natural Resources Rules for Environmental Planning Criteria.

Groundwater Recharge Areas

Resource Description

⁶ Construction Material Potential of the Middle Georgia Coastal Plain, *An Evaluation*, Jeane S. Brackman, Atlanta 1991, Bulletin 19, p. 5

Precipitation is the ultimate source of Georgia's fresh ground water. Recharge is the process by which precipitation infiltrates soil and rock to add to the volume of water stored in pores and other openings within them. Aquifers are soils or rocks that will yield water to wells. While recharge takes place throughout practically all of Georgia's land area, the rate or amount of recharge reaching underground aquifers varies from place to place depending on geologic conditions. Major ground water resources may develop where permeable aquifers underlie or are connected to extensive areas favorable for recharge.

Berrien County is located in the coastal plain area. Alternating layers of sand, clay and limestone, which get deeper and thicker to the southeast, underlies the Coastal Plain. In the Coastal Plain, aquifers generally are confined, except near their northern limits where they crop out or are near land surface. Principal aquifers of the Coastal Plain include the Upper Brunswick and Lower Brunswick aquifers, the Floridan aquifers system, the Claiborne and Clayton aquifers and the Cretaceous aquifers system.

Upper and Lower Brunswick Aquifers

The Upper and Lower Brunswick aquifers are below the Superficial aquifer. These two aquifers rest below Berrien County and consist mainly of phosphatic and dolomitic quartz. These aquifers are generally confined. At the present time, these aquifers are not a major source of ground water.

Floridan Aquifer System.

The main aquifer beneath Berrien County is the Floridan aquifer, which consists of confined limestone, dolostone, and calcarious sand. This aquifer system is one of the most productive ground water reservoirs in the United States. This system supplies about 50 percent of the ground water used in Georgia. It is used as a major water source throughout most of South Georgia.

Wells in this aquifer are high-yielding and are extensively used for irrigation, municipal supplies, industry and private domestic supply. For example, the City of Nashville pumps on average 800,000 gallons daily, and the City of Alapaha pumps on average 52,000 gallons from the Floridan aquifer.

Claiborne Aquifer

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

Clayton Aquifer

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

Cretaceous Aquifer System

The Cretaceous aquifer system is the deepest of the principle aquifers in South Georgia. It serves as a major source of water in the northern one-third of the Coastal Plain. The aquifer system consists of sand and gravel that locally contain layers of clay and silt which function as confining beds. These confining beds locally separate the aquifer system into two or more aquifers.⁷

Recharge Areas

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

	(2000) WITHDRAWS IN MILLION GALLONS PER DAY						
	Public	Domestic &	Industrial	Irrigation	Livestock	Thermoelectric	TOTALS
	Supply	Commercial	& Mining				
Ground							
Water	0.80	0.60	0.18	6.91	0.02	0.00	8.51
Surface							
Water	0.00	0.00	0.00	6.64	0.11	0.00	6.75
TOTALS	0.80	0.60	0.18	13.55	0.13	0.00	15.26

Table 1-2

(Georgia Geologic Survey Information Circular 106, p27)

Groundwater recharge areas in Berrien County are mostly limited to narrow strips running parallel to both banks of the New River, Withlacoochee River, and Hardy Mill Creek. There is also a wider strip running parallel to the northeasterly bank of the Alapaha River floodplain in northern Berrien County. All aquifer recharge areas are vulnerable to both urban and agricultural development. Pollutants from storm water runoff in urban areas and excess pesticides and fertilizers in agricultural areas can access a groundwater aquifer more easily through these recharge areas. Once in the aquifer, pollutants can spread uncontrollably to other parts of the aquifer thereby decreasing or

⁷ http://www.ces.uga.edu/pudcd/elinor/DOCS/B1096-W.HTM, June 23, 2003

endangering water quality for an entire region. Therefore, development of any kind in these areas, including installation of septic tanks, should be restricted.

Total water consumption in Berrien County averages approximately 15,260,000 gallons per day. Approximately 8,510,000 gallons (55.8%) of this comes from groundwater and the remaining 6,750,000 gallons (44.2%) is from Surface water. Crop irrigation is by far the heaviest user of water with approximately 36,140 acres irrigated daily. Table 1-2 depicts the breakdown of water consumption in Berrien County.

Wetlands

Resources Description

Berrien County is slightly sloping, grading to nearly level in the southeastern portion. The southern one third of the county is in the Atlantic Coast Flatwoods Major Land Resource Area. Most of this land has very poor to poor drainage, but it is well suited for forestry uses. The remaining two thirds of the county is in the Southern Coastal Plain. Most of the land in this section is well suited for row crop agriculture and forestry. The county is dotted with wetland depressions ranging in size from less than an acre to over one thousand acres. While the relatively flat terrain precludes any far reaching vistas, there are several natural areas along the Alapaha River such as wide sweeping sand bars and river bluffs.

Shallow ponds, swamps, and wetlands are common throughout. Due primarily to a high water table, most of the soils have severe to very restrictive limitations for development. For the most part, woodlands line the creeks draining the area and, consequently, act as buffer zones between potential sources of non-point water pollution and siltation from urban lands and farmlands and from contiguous water bodies. Forest topsoil and litter reduce the speed of urban and rural runoff to creeks through absorption, adsorption and mere water flow deterrence. At the same time, absorbed and adsorbed runoff nutrients (dissolved as well as particulate detritus from such sources as fertilizers and farm animal wastes) are incorporated into the nutrient cycles of the forest fringe communities for production and maintenance. The importance of maintaining the viability of these wooded farm fringe areas cannot be overestimated. These peripheral uncut strips of forest account in large part, for the generally good visual quality of surface waters as well as the abundance of "farm game," such as squirrels, rabbits, quail and mourning doves, prized by local hunters of the area. Where these fringe areas are greatly diminished or absent, algae blooms and subsequent anaerobic conditions and odor problems testify to eutrophication.

Also of great ecological importance are the swamplands and wetlands within and surrounding the county. These swamplands and wetlands provide valuable wildlife habitat and nesting areas for migratory and indigenous waterfowl and other bird species. Deer, turkeys, quail, squirrels, opossums, rabbits, raccoons, mourning doves, marsh hens, herons, hawks (a protected species) and turkey vultures are among the wildlife species dependent upon these marshes for habitat and final retreat from human encroachment.

In addition, swamplands, wetlands, and peripheral pine forest vegetation provide Berrien County and associated farmlands with: 1) lumber; 2) oxygen for every oxygen demand; 3) heat and carbon dioxide sinks; 4) clean groundwater; 5) hunting, fishing, and other recreational benefits; and 6) aesthetic benefits of retreat from urban areas.

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

INVENTORY

A review of the wetlands inventory maps prepared by the U.S. Department of Interiors, Fish and Wildlife Service indicate the presence of wetlands in the Cities of Alapaha, Enigma, Nashville, Ray City, and throughout Berrien County. The majority of wetlands are comprised of marsh and swampland, small farm ponds, and the flood prone areas of the perennial creeks. Most of the wetlands are located in the eastern and southern portions of the county. These wetlands are primarily associated with the flood plains of the Alapaha and Withlacoochee Rivers, Tenmile Bay, and the numerous creeks that meander throughout the eastern and southern portions of the county.

Protected Mountains

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

Protected Rivers

The Georgia General Assembly passed the "Mountain and River Corridor Protection Act" in 1991 which requires local governments to adopt corridor protection plans for certain designated rivers affecting or bordering their jurisdiction. In Berrien County, the only river affected by this Act is the Alapaha River.

The county can be divided into 2 major drainage basins for major rivers in south-central Georgia. The Withlacoochee River drainage basin encompasses approximately the

western three-fifths of the county and includes Enigma, Ray City, the western half of Alapaha, and all but the eastern airport area of Nashville. The Withlacoochee River itself originates in northern Berrien County and is fed by many tributaries including Cat Creek and the New River. The Alapaha River encompasses the remaining part of the county and its primary tributaries include Tenmile Creek and the Willacoochee River. Both of these major rivers flow southward from Berrien County to the Suwannee River (in Florida), which empties into the Gulf of Mexico.

When following the generally winding stream channel, the length of the corridor is approximately 25 miles along both sides of the river from the Irwin County line southeastward to the confluence of the Willacoochee River at the Atkinson County line. From there, the corridor follows the winding stream channel (and the eastern county boundary) southward for approximately another 26 miles until the river enters Lanier County. Therefore, the total length of the designated river corridor within Berrien County is approximately 51 miles.

Under the Act, Berrien County adopted the "River Corridor Protection Ordinance" in 1990 for the Alapaha River in accordance with the minimum criteria contained in the Act and as adopted by the Georgia Department of Natural Resources. With exception of approximately three recreational dwellings and a few road and railroad bridges, field surveys in Berrien County indicate only natural (mostly riverine wetlands) vegetation associated with river floodplains to be located within 100 feet of the river banks which is the state's minimum corridor width. There are no other land uses currently within this area along the Alapaha River. To ensure compliance with state rules and regulations, to protect the health and welfare of the citizens, and ensure that lands are protected. Berrien County has adopted a Soil Erosion and Sedimentation Control Ordinance (2001), County Subdivision Regulations (2002), and Land Development Codes.

Coastal Resources

Coastal areas are not present in Berrien County.

Flood Plains

Resources Description

Flood plains are the channel and relatively flat areas adjoining the channel of a stream or river, which has been or may be covered by flood water. Rivers and streams that run through the south-central Georgia areas are bordered by wide flood plains. These flood plains consist mostly of swamps, pine and hardwood forests. Berrien County and the surrounding region are characterized by wetlands and flood prone areas.

Flood plains provide favorable condition for the growth of pine and hardwood forests, which dominate Berrien County landscape. As part of the region's wetlands, it provides natural habitat necessary for the survival of endangered or threatened plants and animals.

Berrien County has a very high water table and is relatively susceptible to flooding. The risk of flooding is an important economic issue as well as a public safety concern in the area. Any major increase in population density, and industrial and economic development could heighten the intensity of development within these flood plains. Foresight is now needed to restore the natural function and preserve the capacity of the flood plains and, where possible, limit development.

Berrien County has taken steps to control and/or restrict development in areas susceptible to flooding. In 2001 and 2002, Berrien County, with assistance from South Georgia Regional Development Center, adopted the Flood Prevention Damage Ordinance and the Berrien County Land Use Development Code. These two instruments will enhance public safety and protect lives and property.

Flood hazards along the major rivers and streams typically occur in late winter and early spring. Within Berrien County, only the Cities of Nashville and Ray City have official flood hazard area maps prepared by the federal government. The Federal Insurance and Mitigation Administration's Hazard Mapping Division on June 21, 2002 entered into an agreement to assist and provide flood hazard mapping services to the unincorporated areas of Berrien County. As of June 2003, the Cities of Alapaha and Enigma have yet to have flood hazard maps developed.

The flood maps for Nashville and Ray City were prepared in 1975 and 1977 respectively. Due to annexations and improved standards for flood mapping, these maps are in need of an update. The flood hazard maps for the Cities of Nashville and Ray City will be updated and maintained by the Federal Insurance and Mitigation Administration's Hazard Mapping Division.

It should be noted that the Nashville map is in particular need of an update since some of the denoted flood hazard areas do not correspond with existing topography and known flood prone areas. Based on the county's topography and abundance of rivers and streams, flood hazards do exist in all parts of the county and these should be considered when making development decisions.

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

Flood Control Strategies

The following strategies help in local flood hazard management:

- Local ordinances regulate new construction in flood plains, stress design standards to limit changes in flood storage, and prescribe flood proofing practices to reduce flood caused property damage;
- The control approach also controls development outside the flood plains that affect storm water runoff;
- All development applications are required to incorporate the use and maintenance of natural systems for the flood control and storm water management to the maximum extent possible;
- Developers are encouraged to build at higher elevations, and when necessary require that the developer have a certified engineer submit a certificate of project feasibility;
- Local governments shall ensure the provision of adequate insurance for existing development in floodplains and flood prone areas while discouraging new development and redevelopment that requires increased flood insurance coverage.

Soil Types

The United States Department of Agricultural Natural Resources Conservation Service (USDA-NRCS)⁸, which operates an office in Nashville, has identified ten soil associations within Berrien County. These associations are described below. Each association contains between one and three major soils for which they are named, as well as several minor soils. These associations are mapped on Figure 7.

The general soil map in this plan shows, in color, the soil associations in Berrien County. A soil association is a landscape that has a distinctive proportional pattern of soils. It normally consists of one or more major soils and at least one minor soil, and it is named for the major soils. The soils in one association may occur in another, but in a different pattern.

The general soil map in this plan is useful to people who want a general idea of the soils in Berrien County. This map is useful as a general guide only. The general soil map content in this plan is not a suitable map to plan the management of farms, construction projects, or similar projects that requires a detail analysis of the soil composition.

Of the 10 soil associations in Berrien County, two consist of very poorly drained to moderately well drained, nearly level, soils of bottom lands and low stream terraces; two consist of very poorly drained and poorly drained, nearly level, soils on flats and intermittent ponded areas; one consists of excessively drained sandy soils of upland ridges and poorly drained soils of the depressions and drainage ways; and six consist of

⁸ USDA-NRCS, Berrien County Agricultural Service Building, 516-A County Farm Road, Nashville, Georgia, 31639

well drained soils of upland ridges and moderately well drained, somewhat poorly drained, and poorly drained soils of broad flats and depressions.

Johnson-Osier-Bibb Association

This association consists of nearly level soils on the flood plains of the Alapaha, Willacoochee, Withlacoochee, and the New Rivers, and their tributaries. Each year the flood plains in these regions are inundated with a thin layer of fresh soil due to the frequent flooding experienced in these areas.

The Johnston soils are on the lower position in the association. Johnston soils are nearly level and very poorly drained. The Osier soils are poorly drained to very poorly drained, and they are nearly level. The Bibb soils are poorly drained and nearly level.

This acreage is primary hardwood with a few pines. A large amount of this acreage is privately owned and not suited for cultivation due to frequent flooding and wetness. A few areas have been drained and protected from flooding. These acres are well suited for cultivation, and at times used for grazing of livestock. This association is primary suited for woodland.

Limitations are severe for most nonfarm uses, such as residences sites, sites for light industry and traffic ways, and for such recreational uses as campsites and intensive play areas.

Angie-Chipley-Rains Association

This association is broad, level terraces, generally along the Alapaha River. It is mainly between the alluvial soils along the main river channel and the adjacent uplands. Numerous small drainage ways dissect the association. Slopes range from 0 to 2 percent. During winter and spring, the adjacent rivers and streams overflow most of the areas within the association.

The Angie soils are moderately well drained and are on the better-drained part of the landscape. The Chipley soils are moderately well drained and nearly level. Rains soils are poorly drained and are the wetter part of the association.

A small acreage of this association is in cultivation or in pasture, but it is well suited to these uses only if it is protected from flooding. Nearly all the acreage is privately owned. Most of it is in woodland that consists dominantly of pines, but partly of hardwoods.

Limitations are severe for nonfarm uses, such as residential sites and sites for industry and traffic ways.

Mascotte-Rutlege-Pelham Association

This association consists of broad, wet areas. Numerous intermittent ponds ranging from a few acres to many acres in size are distributed throughout the association. Sluggish intermittent streams that have poorly defined channels form the drainage system.

The Mascotte soils are poorly drained. Slopes are mostly less than 1 percent. The Rutledge soils are very poorly drained and are in depressions and on low flats. Slopes range from 0 to 2 percent, but in most areas, they are 1 percent or less. The Pelham soils are poorly drained and nearly level. They occur as slightly depressed areas.

None of the acreage in this association is in cultivation or pasture. Most of the acreage is in woodland. This association is only fairly well suited to cultivation after drainage has been established, and in most years, some drainage is needed for pasture. Bahiagrass and white clover are suitable pasture plants. If pines are planted, drainage is needed to improve survival rates of planted seedling and to improve growth.

In its natural state, this association has severe limitation as residential and industrial sites and for most year-round recreational uses, such as campsites and play areas.

Lakeland-Pelham-Alapaha Association

This association consists mainly of nearly level to gently sloping soils on broad ridges. Slopes range from 0 to 8 percent. There are numerous flats and depressions, and a number of streams originate within the association. This association is adjacent to and east of the flood plain of the Alapaha River in Berrien County.

The Lakeland soils are excessively drained and are ridge tops and side slopes. Slopes range from 2 to 8 percent. The Pelham soils are poorly drained and nearly level. They are in slightly depresses areas and along drainage ways. The Alapaha soils are poorly drained and nearly level to very gently sloping. They are in drainage ways and low flat areas.

This association is generally poorly suited to cultivation and pasture. Doughtiness and wetness are hazards of the major soils. Most of the acreage that was formerly in cultivation has been planted in slash pine or has been reforested naturally. In the drier areas of this association, the vegetation consists of a fairly thick growth of scrub oaks, a few scattered pines, and a sparse under story of wiregrass and shrubs. In the wetter areas, the vegetation consists of water-tolerant hardwoods, such as cypress and water tupelo, and a dense stand of aquatic plants. Most of the acreage is privately owned woodland.

About half of this association has only slight limitation for use as sites for residence that have a public sewage system, light industry, and similar purposes. Because of the seasonal high water table and flooding, areas of the Pelham and Alapaha soils have severe limitations for such uses.

Tifton-Fuquay-Pelham Association

This association is mainly on broad, level to very gently sloping divides, but a small part is on flats and along drainage ways. Small shallow streams that originate within the boundaries of the association dissect the divides. Slopes range mainly from 0 to 5 percent.

The Tifton soils are well drained and are on the smooth, higher parts of the landscape. Slopes range from 0 to about 5 percent. Fuquay soils are well drained. They occur as fairly large areas, mainly in smooth parts of the association. The Pelham soils are poorly drained and are in low areas along drainage ways.

A significant acreage is in cultivation. This association is well suited to row crops and pasture plants, and responded well to good management. Corn, cotton, peanuts, and tobacco are the chief crops. A considerable acreage is in pasture and is suited to bahiagrass and Bermuda grass.

An average farm in this association is about 175 to 225 acres in size; all are of the general type. Nearly all are privately owned and operated by the owner.

The major part of this association is well suited to most nonfarm uses, such as residential sites, light industry and recreation, but because of wetness, the Pelham soils in low areas along drainage ways are severely limited.

Leefield-Pelham-Alapha Association

This association consists of nearly level soils in broad flat areas. Numerous intermittent ponds ranging from an acre to several acres in size are distributed over the landscape. Sluggish stream branches that have poorly defined channels make up the drainage system.

The Leefield soils are somewhat poorly drained and are on the higher parts of the landscape. Slopes range from 0 to 3 percent. The Pelham soils are poorly drained and nearly level. They are in slightly depressed areas. The Alapaha soils are nearly level and poorly drained. They occur as narrow bands along drainage ways and in low, flat or depressed areas.

A small to moderate acreage of the association is in cultivation and pasture. About onethird of the association, mainly the Leefield, is suited for cultivation. If adequate drainage and good management are used, corn, tobacco, and peanuts are suitable row crops. These crops are commonly grown in some of the drier areas. Bahiagrass and Bermuda grass are suitable pasture plants. The wet soils are used mostly for woodland, but some areas of Alapaha soils are in pasture.

The average farm in this association is about 175 to 225 acres in size, but several are much larger. General farming predominates, and the owner operates most of the farms.

This association has moderate to severe limitations for most nonfarm uses because of the internal wetness and the flooding.

Fuquay-Cowarts-Pelham Association

This association consists mainly of gently sloping soils on narrow ridges and knolls. Many areas are rough and choppy and contain eroded spots. Drainageways are small and originate within the association. Slopes range mainly from 0 to 8 percent.

Fuquay The Fuquay soils are well drained and are on the upland ridges. Cowarts soils are also well drained, and they are on the ridge tops and slopes. Slopes range from 2 to about 8 percent. Pelham soils are poorly drained and are mainly along drainage ways.

This association is not well suited to cultivation, because of the slope and the erosion hazard. The smoother and more gently sloping areas, mainly Fuquay and Cowarts soils, are commonly in cultivation, but the acreage in cultivation is small. Corn, cotton, peanuts, and tobacco are the chief crops. A moderate acreage is in pasture. Bahiagrass and Bermuda grass are suitable pasture plants. Many fields in this association that were formerly cultivated are now in slash pine.

Most of the land is privately owned and is used for general farming. The average farm is 175 to 225 areas in size. This association is important for wood products.

This association has mainly slight to moderate limitations for use as residential sites, play areas, traffic ways, and similar nonfarm purposes.

-Leefield-Pelham Association

This association is on broad divides that are dissected by small, shallow streams that originate within the boundaries of the association. Slopes range from 0 to about 4 percent.

The Fuquay soils are well drained and are on the higher parts of the landscape. Leefield soils are somewhat poorly drained and occupy positions between the Fuquay and Pelham soils. The Pelham soils are poorly drained and nearly level. They are in slightly depressed areas along drainage ways.

A considerable amount of this acreage is in cultivation and pasture, especially the better drained soils. Corn, cotton, peanuts, and tobacco are the chief crops grown. A considerable acreage is in pasture. Bahiagrass and Bermuda grass are suitable pasture plants.

The average farm in this association is about 175 to 225 acres in size, and all are of the general type. Nearly all the farms are privately owned and operated by the owner.

Most of this association has slight to moderate limitations fro residential sites and recreational facilities, but areas of Pelham soils are severely limited because of wetness. The major soils should be studied for the anticipated use.

Tifton-Carnegie-Pelham Association

This association consists of moderately wide ridges dissected by small shallow streams. Some broken relief is included. It has somewhat stronger slopes than the Tifton-Fuquay-Pelham association. The slopes range from about 1 to 8 percent.

The Tifton soils are well drained and are on smooth parts of the landscape. Slopes range from 0 to 5 percent. The Carnegie soils are well drained and are on the steeper parts of the landscape. Slopes range from 2 to 8 percent. The Pelham soils are poorly drained and nearly level. They are in slightly depressed areas. Slopes are 0 to 2 percent.

This association is suited to cultivated crops that respond fairly well to good management. Corn, cotton, and peanuts are the row crops that are most commonly grown. A small acreage is in pasture. Bahiagrass and Bermuda grass are suitable pasture plants. A large acreage is in woodland.

The average farm in this association is about 150 to 200 area in size, and it is of the general type. Nearly all are privately owned and operated by the owner.

Most of this association has slight to moderate limitations for residential sites, sites for industry, and campsites. Areas occupied by Pelham soils are severely limited because of the seasonal high water table and, in some places, ponding.

Irvington-Leefield-Pelham Association

This association consists of broad flat areas; Slopes are mostly less than 2 percent. Numerous intermittent ponds are widely distributed over the association, and the heads of a few branch streams occur within the outer part.

The Irvington soils are moderately well drained. They have a weakly expressed frangipani⁹. These soils are generally on the highest parts of the landscape. Leefield soils

⁹ **frangipani**: A natural subsurface horizon with very low organic matter, high bulk density and/or high mechanical strength relative to overlying and underlying horizons; has hard or very hard consistence (seemingly cemented) when dry, but showing a moderate to weak brittleness when moist. The layer typically has redoximorphic features, is slowly or very slowly permeable to water, is considered to be root restricting, and usually has few too many bleached, roughly vertical planes which are faces of coarse or very coarse polyhedrons or prisms.

are somewhat poorly drained. They occur in areas intermediate between Irvington and Pelham soils. The Pelham soils are poorly drained. They are in slightly depressed areas and along drainage ways.

Soil Type	Agricultural Uses			Urban Uses		
Association	Good	Fair	Poor	Good	Fair	Poor
Johnson-Osier-			X			Х
Bibb association			Λ			Λ
Angie-Chipley-			X			Х
Rains association			Λ			Λ
Mascotte-						
Rutlege-Pelham			X			Х
association						
Lakeland-Pelham-						
Alapaha		Х			Х	
association		Δ			Δ	
Tifton-Fuquay-						
Pelham	Х			X		
association						
Leefield-Pelham-			N/			37
Alapha			X			Х
association						
Fuquay-Cowarts- Pelham		Х		X		
association		Λ		Λ		
Fuquay-Leefield-						
Pelham		Х			Х	
association						
Tifton-Carnegie-						
Pelham	Х			Χ		
association						
Irvington-						

TABLE 1-3 SUMMARIZED LAND CAPABILITY FOR GREATER BERRIEN COUNTY

Source: Soil Survey of Berrien and Lanier Counties, Georgia, United States Department Agriculture Soil Conservation Service, May 1973.

Х

Leefield-Pelham

association

Х

A moderate acreage of this association is in cultivation and pasture. The better drained parts of the association, mainly the Irvington and Leefiled soils, are suitable for cultivation and pasture and with good management respond well. Commonly grown row

crops suited to this soil are corn, tobacco, peanuts, and cotton. Bahiagrass, Bermuda grass, and millet are suitable pasture plants.

Because of wetness, the Pelham soils are mostly in woodland, but some areas are pastured with fairly good results. This association is suited to woodland.

The average farm in this association is about 175 to 225 acres in size, but several are much larger. General farming dominates, and the owner operates most farms.

This association has moderate to severe limitations for residential sites where septic tanks are used, because of the seasonal high water table. Most of the association has moderate limitations for traffic ways, but Pelham soils are severely limited because of wetness.¹⁰

Steep Slopes

Berrien County ok no areas that have as a percentage slope of twenty-five percent (25%) or greater for at least 500 feet horizontally; nor any ridges, summits, or ridge tops that lie at elevations higher than any such identified area.

Prime Agricultural and Forestland

Prime agricultural land areas are those, which primarily include productive agricultural land with long term economic viability to produce crops, timber, livestock, poultry, dairy, or nursery products. The land is of superior soil quality. Lands used for agricultural purposes often border the urbanized portions of the county, and are important transitional buffers between intensive human activity and ecologically sensitive forest. Approximately 45 percent of Berrien County's acreage is farmland, made up of 399 farms on 130,928 acres. Of the 130,928 acres, approximately 55,241 acres is utilized in crop production. According to the 2002 Georgia County Guide, 2,486 acres of Berrien County was utilized in the Conservation and Wetlands Reserve Programs¹¹.

Berrien County has 62 percent of its land in forests. In the fullest sense, a forest is an ecological complex involving an intricate interrelationship of trees, shrubs, vines, other plants, animal life, soil, subsoil, atmosphere, and water.

A majority of the forestland in South Georgia is commercial. This region supplies a majority of the timber east of the Mississippi River. Approximately 20,000 acres of Berrien County is commercial forest production.¹² On an average, approximately 12.4 million cubic feet of timber is removal annually from Berrien County.

¹⁰ Soil Survey of Berrien and Lanier Counties, Georgia, United States Department Agriculture Soil Conservation Service, May 1973, pp 3-9.

¹¹ All highly erodible cropland or wetland enrolled in the Conservation Reserve Program (CRP) or the Wetlands Reserve Program (WRP) meeting conservation requirements. The land must be taken out of agricultural production for a minimum of 10 years. ¹² The 2002 Georgia County Guide, 21st Edition, October, 2002

Plant and Animal Habitats

Both the Georgia and U.S. Department of Natural Resources have inventoried plant and animal species in the State of Georgia. Below is several species of birds, reptilians, plants, and one amphibian that is listed as either threatened and/or endangered. Current local, state and federal regulations should adequately protect the habitats of these species to prevent further decline of their populations.

Threatened and/or Endangered Species

Birds

Bald Eagle, Haliaeetus leucocephalus

Scientific Name: The genus is derived from two Greek words, *halos* (the sea) and *aetos* (eagle). The species name is also derived from two Greek words, *leukos* (white) and *kephalos* (head), which describes the white head of the adults.

Classification

Phylum: Chordata Subphylum: Vertebrata Class: Aves Order: Falconiformes Family: Accipitridae

Species Description

Size: 79-94 cm (31-37 in) in length; 178-229 cm (70-90 in) wingspan. Color: Adults over four years old have a distinctive color pattern, with a white head and white tail, although the head can have some black flecking until at least seven years of age. During the first year, a Bald Eagle is

all or mostly dark. After the first year, birds have variable mottling of "dirty white" feathers in their dark plumage until they reach adult plumage.

Life Cycle

The breeding season begins in November and extends into May. The male and female build a very large, bulky nest out of twigs and sticks. The nest is usually built 9-18 m (30-60 feet) above the ground. Nesting sites include conifers, other trees, and cliffs. Bald Eagles maintain a long-term pair bond, and nests are sometimes reused many years in a row, with new material being added. One nest was used every year for 35 years. The

female lays 1-3 (usually 2) eggs that she and the male incubate for 34-36 days. The young are semi-altricial¹³, and leave the nest in 70-98 days.

Natural History

The Bald Eagle usually frequents areas near open water. In the winter, many birds take advantage of dams that maintain open water, and bird densities in these areas are high. Fish are the primary food of the Bald Eagle. It captures fish by hunting from a perch until the prey comes by. The Bald Eagle will eat dead fish, or take fish from a neighboring gull, osprey, or other fish-eating animal. Eagles will often also eat waterfowl and rabbits.

Range

The Bald Eagle can be found in most of the United States except for extreme elevations. Except during migration, it is not usually seen far from coastal areas, inland lakes, or rivers. The northern limits to this species in the winter is defined by the availability of open water. In the extreme southern portions of Georgia, Bald Eagles can be found in low numbers in the winter and breeding season. During the winter, there are also occasional sightings of the Bald Eagle in other parts of the state.

Conservation Status

The Bald Eagle subspecies *H. l. leucocephalus* is listed as Federally threatened, and the State of Georgia has the bird listed as an endangered species. Primarily DDT, other pesticides, and heavy metal poisoning caused the decline of this population. These chemicals cause eggshell thinning or eggs without shells. A thinned eggshell will not usually support the weight of an incubating adult and rarely survives until hatching.

Similar Species

Immature Bald Eagles can be easily confused with the Golden Eagle and vultures from a distance. The Golden Eagle has banding on the tail and lacks the random splotchy white pattern of an immature Bald Eagle. The flight pattern of a Bald Eagle is distinctly different from that of a Turkey Vulture. The Bald Eagle soars with its wings horizontal or slightly drooped. The Turkey Vulture holds its wing tips up to form a "V." The Black Vulture is smaller, with a smaller head and shorter tail. The Black Vulture also has light patches on the outer portion of its wings.

Scientific name

¹³ SEMI-ALTRICIAL: term used to describe a developmental pattern of young birds in which the young are relatively immobile when they hatch, and are fed by the adults, but the young at birth are down-covered rather than naked.

Red-cockaded Woodpecker, *Picoides borealis*. The genus name *Picoides* is from the Latin word *picus* (a woodpecker) and the Greek word *eidos* (resemblance). The Latin species name *borealis* (northern) was a mistake, as this bird occurs in the southern, not northern, United States.

Classification

Phylum: Chordata Subphylum: Vertebrata Class: Aves Order: Piciformes Family: Picidae

Species Description

Size: These are small woodpeckers, 22 cm (8.5 in) from beak tip to tail tip. Color: Back and wings with a black and white ladder pattern. Black cap and white patch on the cheek. Black bill. Belly and breast white, with black spots on the outer breast. Males have a small red tuft behind the eye, which is difficult to see.

Life Cycle

The Red-cockaded Woodpecker has an uncommon social system known as cooperative breeding. The birds live as family groups of 2 - 5 individuals. The breeding pair is often accompanied by offspring from a previous year, known as "helpers," which assist their parents in many nesting

activities. Breeding season lasts from mid-April to late July. Favored habitat is open, mature pine forest. The nest is built in the breeding male's roost cavity, typically excavated 10-13 m (30-40 ft) above ground in pines that are very old (usually more than 80 years). The breeding female lays 2-5 (average, 3) glossy white eggs. Incubation lasts 10 days and is performed by the parents and sometimes by helpers. Parents and helpers feed the nestlings, which fledge¹⁴ 26-29 days after hatching.

Natural History

Suitable habitat is very specific for these birds. They inhabit old pine forests with open understudy maintained by frequent, natural lightening fires. The home range of each family group includes a cluster of cavity trees. Cavity trees of this species always have a cavity entrance in which the edges of the hole are thickly coated with pinesap or resin. The woodpeckers peck holes around the cavity entrance to release the sticky resin, which helps deter predators such as rat snakes from invading the nest. Family groups are highly

¹⁴ **Fledge:** to become well enough covered with feathers to be able to fly. Generally used to describe the process of young birds leaving the nest for their first flights.

social and forage closely together on the upper branches and trunks of pines for ants, beetles, and other insects.

Range

Populations and suitable habitat are fragmented throughout southern Georgia and the rest of the southeastern United States.

Conservation Status

The Red-cockaded Woodpecker has been listed as an Endangered Species by the U.S. Department of the Interior since 1968, and is listed as an Endangered Species in the state of Georgia. Efforts to manage population viability on federal lands were started in 1985.

Similar Species

The Red-cockaded Woodpecker may be confused with other small black and white woodpeckers in the southeastern United States. The Downy Woodpecker and the Hairy Woodpecker both have white backs rather than the black and white ladder found on the Red-cockaded Woodpecker. Another similar bird, the Yellow-bellied Sapsucker has a red forehead and white patches on its wings and rump, which are not present in the Redcockaded Woodpecker.

Scientific Name

Wood Stork, *Mycteria Americana*. The genus name comes from the Greek *mykter* (a nose), referring to the Wood Stork's large bill. The species name is the Modern Latin meaning "American" or from the Western Hemisphere.

Classification

Phylum: Chordata Subphylum: Vertebrata Class: Aves Order: Ciconiiformes Family: Ciconiidae

Species Description

Size: 102 cm (40 in) long; 155 cm (61 in) wingspan. Color: White body. Black tail, legs, and flight feathers. Other things to look for: The combination of a grayish, baldhead and a large yellow down-curved bill is distinctive for this species.

Life Cycle

The Wood Stork does not breed until it is 4 years old. The breeding season begins in mid-December, peaks in mid-March, and ends in late April. This is a colonial species, nesting in aggregations. It prefers to nest in cypress trees, from 15-24 m (50-80 feet) above the ground. The male and female build the nest with sticks, twigs, and vegetation. The female usually lays 3 eggs that are incubated by both adults for 28-32 days. The young are semialtricial, and are cared for by the parents until 55-60 days after hatching.

Natural History

The Wood Stork is the only stork in North America. It frequents mangroves, swamps, marshes, and streams. It forages in very shallow water by placing its open bill in the water and systematically moving it until it contacts a prey item. When the prey is contacted, the Wood Stork snaps its powerful bill on the prey in an action, which is one of the fastest reflexes in the animal world. Food items include fish, amphibians, aquatic invertebrates, and crustaceans.

Range

In the United States, the Wood Stork remains all year in isolated coastal areas of the Southeast. After the breeding season, some individuals travel north beyond the normal range in a post-breeding dispersal. In Georgia during the breeding season, adults can be found in coastal areas, with post-breeding individuals being seen sporadically in the lower three-fourths of the state.

Conservation Status

The Wood Stork is Federally and State listed as Endangered, and is also state listed as Endangered in Florida, North Carolina, and South Carolina. The destruction of nesting areas and changes in land use and water levels in Florida wetlands have attributed to the decline of this species.

Similar Species

Some Egrets and Herons are similar in size to the Wood Stork, but all other species lack the combination of the large yellow down curved bill, bald head, and black tail and flight feathers.

Scientific Name

Ivory-billed Woodpecker, Campephilus principalis

Classification

Phylum: Chordata Subphylum: Vertebrata Class: Aves Order: Piciformes Family: Picidae

Species Description

Size: 50 cm (19.5 in) in length. Color: Mostly black, with a red crest on the male (the female has no red on the head). A large white stripe runs from behind the eye and down the neck on both sides of the head. When the bird is at rest, large white patches are visible near the ends of the wings. While it is flying, white is visible on both the upper and lower portions of the inner flight feathers. The bill is an ivory color.

Classification

The known breeding season occurs from approximately January to April. The Ivorybilled Woodpecker required snags in mature old-growth forest for nesting. Nests ranged 4.5-21 m (15-70 feet) in height. The female laid 1-5 (usually 2-3) eggs that both adults incubated for approximately 20 days. The male incubated at night and the female incubated during the day. The young were altricial and fledged within 35 days of hatching. Apparently, the male did most of the nest sanitation and brooding.

Natural History

The habitat where this species once occurred was mature old-growth forest and cypress swamps. The Ivory-billed Woodpecker diet consisted mostly of wood-boring insects such as beetle larvae, but it also ate other insect, fruit, and seeds. It was the only U.S. woodpecker able to pry unloosened bark off trees. It more commonly fed on insects in dead or dying portions of live trees.

Range

Today this woodpecker has no known range within the United States, and it is unlikely that any populations continue to exist outside the United States. Its former range was in the southeastern United States, including all of the Southeast north to southeastern North Carolina, west to Missouri, and southwest through Oklahoma and Texas. The last positive sightings of the Ivory-billed Woodpecker were in Cuba in 1987. Although there have been more recent reports, none have been verified.

Conservation Status

The Ivory-billed Woodpecker is Federally and State listed as Endangered, and is thought to be extinct. Loss of habitat is thought to be the major cause of this species' decline and extinction.

Similar Species

The species most similar to the Ivory-billed Woodpecker is the Pileated Woodpecker. The Pileated Woodpecker is smaller than an Ivory-billed Woodpecker, but adults of both have a red crest and dark bill. While a Pileated Woodpecker is in flight, very little white is visible from above, and the wing lining is white from below. The Pileated Woodpecker also has white on the chin and a small white-eye stripe that extends from behind the eye to the red crest.

Scientific Name: Bachman's Warbler, Vermivora bachmanii

Classification

Phylum: **Chordata** Subphylum: **Vertebrata** Class: **Aves** Order: <u>Passeriformes</u> Family: **Parulidae**

Species Description

Size: 11 cm (4.25 in) in length. Color: Male: Yellow forehead; black crown patch; gray nape; yellow chin and belly; black bib; olive back, wings, and upper side of tail; pale yellow under tail coverts. Female: Yellow forehead; gray crown patch; gray nape; yellow chin and belly; black bib; pale olive back, wings, and upper side of tail; pale yellow to white under tail coverts. Other things to look for: The song is a series of buzzy notes remaining on one pitch.

Life Cycle

Breeding habitat consisted of bottomland forests, usually those associated with water. These birds used canebrakes and other areas with dense under stories. The nests were normally low, 1-4 feet above the ground. The nest was cup-shaped, and was built from leaves, grass, moss, and other plant material and lined with finer material and Spanish Moss. The female laid 3-5 (usually 4) eggs that she incubated for an unknown period. The young were altricial, and probably remained in the nest for around 1-2 weeks.

Natural History

This bird's breeding habitat appeared to be wet forested areas, although little information is available on migration and wintering habitat. The diet consisted of insects, mostly caterpillars, spiders, and other small invertebrates. It was a low forager, searching among the leaves and probing into leaf clusters searching for prey. This species is thought to have been migratory.

Range

Bachman's Warbler occurred in the southeastern United States during the breeding season. The only positive winter reports for this species were in Cuba and southern Florida.

Conservation Status

Bachman's Warbler is thought to be extinct. Nonetheless, the bird is Federally and State listed as endangered. By the early 1900s, reports of this warbler were scarce. The last positive sighting was in the early 1960s. The decline of this species is attributed to the destruction of bottomland hardwood forests and drainage of wetlands and swamps. Problems on the wintering grounds, including several hurricanes in the 1930s, may also have attributed to this species decline.

Similar Species

The most similar species is the Hooded Warbler. The sides of the face, belly, and under tail coverts of the Hooded Warbler are all yellow. It also has large white patches on the outer tail feathers.

Reptiles

Scientific name: American Alligator, *Alligator mississippiensis*. The genus name, like the common name, comes from the Spanish *el lagarto* (the lizard). The species is named for Mississippi, the state and river system where it is common.

Classification

Phylum: Chordata Subphylum: Vertebrata Class: Reptilia Order: crocodilia Family: Alligatoridae

Species Description

Size: This is the largest reptile in North America. Adults range from 1.8 - 4.9 m (6 - 16 ft). The record is 5.8 m (19 ft 2 in). Males grow larger than females. Color: The young are dark grey to black, striped with bright yellow, which fades with age. Adult alligators are dark grey to black.

Other things to look for: The snout is broad. The large fourth tooth is not visible when the mouth is closed.

Life Cycle

Courting and mating occur in the spring. Both sexes may be territorial. In the swamps and sloughs of southern Georgia, the male's bellow is a common spring sound as he courts the female or threatens other males. Fertilization is internal. Thirty to sixty leathery eggs are laid one to three weeks after mating. The nest of debris may reach 7 feet in diameter and 3 feet in height. The eggs are laid in the center, and the rotting of the vegetation helps to warm the eggs during development. The average temperature of the nest determines sex of the young. High temperatures yield males; low temperatures result in females. This temperature-dependent sexual development of the young is found in all members of this family. The female guards the nest during incubation. Hatching is in nine weeks. The young may stay with the female for up to one year. Mother alligators are very protective. It is unwise to disturb nests or young. Maturity is reached in 4 - 8 years. The American Alligator may live for several decades.

Natural History

The American Alligator is carnivorous and will eat anything it can catch and swallow. This includes fish, amphibians, smaller alligators, snakes, waterfowl, raccoons, and wild pigs. This species occurs in a variety of habitats, from large rivers to swamps and marshes. It prefers shallow fresh water with shoreline vegetation and mud or sand banks. It often basks on the shore during the day, but will hunt both day and night. It also digs deep "gator holes" that can serve as ecologically important refuges for aquatic organisms when the water is low.

Range

The American Alligator is found in appropriate habitats throughout the Gulf and Lower Atlantic Coastal Plain and in Florida. This species is found throughout southern Georgia up to the Fall Line and occasionally past it. It has also sometimes been released outside its known native range.

Conservation Status

The American Alligator was hunted to very low numbers in the 1940s to 1960s. It was placed on the Endangered list, hunting was prohibited, and today populations have rebounded. It is now listed as a Federally a Threatened species. Georgia currently does not list this reptilian as being Endangered or Threatened. It is felt that the populations are not yet large enough to permit a regular harvest in Georgia. The prime threats to its survival are habitat reduction and over-hunting.

Similar Species

No other close relative is found in Georgia. The American Crocodile occurs chiefly in salty or brackish waters from southern Florida to South America; it has a tapering snout and (except in small individuals) the fourth lower jaw tooth protrudes conspicuously upward near its snout. The Spectacled Caiman is not native to the United States, but is locally thriving in extreme southern Florida; it has a curved, bony, crosswise ridge in front of its eyes.

Scientific name: Eastern Indigo Snake, Drymarchon carais coreperi

Classificatio

n

Phylum: Chordata Subphylum: Vertebrata Class: Reptilia Order: squamata Suborder: Serpentes Family: Colubridae

Species Description

Size: The Eastern Indigo Snake is the largest snake in North America. The record total length is 263 cm (103.5 in). Adults generally average between 152 - 213 cm (59.8 - 83.9 in) in length. The young are large at hatching, measuring from 43.2 - 61.0 cm (17 - 24 in). Color: These smooth-scaled snakes are glossy blue-black over the entire body. The chin, throat, and sides of the head may be reddish or orange brown. The color of young snakes is the

same as the adults but is more reddish on the head and front part of the belly.

Life Cycle

Breeding takes place in late fall, winter, or early spring. From 5 - 11 eggs are laid in early summer under logs or other suitable cover. These hatch in August or September.

Natural History

The Eastern Indigo Snake eats almost any type of vertebrate it can overpower and swallow. The diet includes amphibians, reptiles, birds, and mammals. This snake is not a constrictor, but the powerful jaws and large body are used to grasp and pin the prey down until it can be swallowed. The Eastern Indigo Snake lives in pine - scrub oak woods, pine flat woods, and forested sand hills and ridges in the northern part of its range. In the southern portions of its range, it can be found around wetland areas such as swamps, streams, and canals. The distribution and habitat preference closely overlap that of the Gopher Tortoise. Tortoise burrows are important retreats for the Indigo Snake. These large, diurnal snakes require from 50 - 100 hectares (123.6 - 247.1 acres) for their home range.

Range

This snake formerly occurred throughout the Gulf and Atlantic Coastal Plain from extreme southeastern Mississippi and southern Alabama to southeastern Georgia and peninsular Florida. It is now restricted to isolated populations in southeastern Georgia, peninsular Florida, and the Florida panhandle.

Conservation Status

The Eastern Indigo Snake is listed as a Threatened species by Georgia and the U. S. Fish and Wildlife Service. Many Indigo Snakes, as well as Gopher Tortoises, are killed by rattlesnake hunters when they pour gasoline into tortoise burrows to flush out Eastern Diamondback Rattlesnakes.

Similar Species

All other blackish snakes in the range of the Indigo Snake have a divided anal scale or keeled scales or both.

Scientific name

Gopher Tortoise, Gopherus polyphemus. The genus name is the Latinized name of a small burrowing mammal, the pocket gopher, a reference to this turtle's burrowing habits. The species name *polyphemus* was the name of the cave-dwelling giant in the Odyssey, an ancient Greek story. It is presumably applied to this turtle for its burrowing habits and strength.

Classification

Phylum: **Chordata** Subphylum: **Vertebrata** Class: **Reptilia** Order: **testudines** Family: **testudinidae**

Species Description

Size: The largest terrestrial turtle of the southeastern United States. Adults average 15 - 24 cm (5.9 - 9.4 in) in length. The record is 38 cm (15 in).

Color: The carapace varies in color from dark brown to grayish-black. The plastron is yellowish. The exposed skin of the head, neck, and legs is grayish black. Other things to look for: This turtle has shovel-like front legs, stumpy hind legs, and an unhinged plastron.

Life Cycle

Depending on geographic location, sexual maturity in females occurs between 10 and 21 years of age, when the turtle has a carapace length of 22 - 27 cm (8.7 - 10.6 in). Most mating occurs in the spring but some mating activity occurs in the fall. Nesting occurs from late April to mid-July, but most eggs are laid from mid-May to mid-June. In an open, sunny location, 1 - 25 white spherical eggs are laid in a flask-shaped cavity excavated in loose soil. The eggs hatch in 80 - 110 days and the young tortoises dig their way to the surface. An adult Gopher Tortoise may reach 25 years of age and some probably live twice that length of time.

Natural History

The Gopher Tortoise inhabits areas of well-drained, deep, sandy soils and open-canopied forests, such as sand hill and ridge pine-scrub oak forests, pine flatwoods, oak hammocks, and beach scrub forest. It avoids moist soils in low-lying areas. This tortoise is considered a keystone species. Both active and abandoned Gopher Tortoise burrows are used by over 100 species of vertebrates and invertebrates. Burrows are usually straight and vary from 2.7 - 6.1 m (8.8 - 20 ft) in length and 1.4 - 2.8 m (4.6 - 9.2 ft) in depth. The burrow has an enlarged chamber at the end where the tortoise sleeps and can turn around. The Gopher Tortoise has a

well-defined home range and uses several different burrows throughout the year. The Gopher Tortoise is an herbivore and mainly eats grasses and forbs, but it may also eat fungi, fruits, and carrion. Gopher Tortoise eggs and young are eaten by a variety of small carnivorous mammals such as raccoons, skunks, armadillos, foxes, and opossums. In addition, Red-tailed Hawks, Indigo Snakes, Coachwhips, Kingsnakes, and fire ants all feed on young or eggs.

Range

The Gopher Tortoise ranges from the Atlantic Coastal Plain of extreme southern South Carolina west along the Gulf of Mexico's coastal plains to extreme eastern Louisiana and peninsular Florida. Due to habitat loss, its population has rapidly declined and this species is now dispersed as isolated populations within this range.

Conservation Status

The Gopher Tortoise is listed as a Threatened species by state and federal law. Major perils are habitat loss and disturbance.

Similar Species

The Eastern Box Turtle can be distinguished by its hinged plastron, smaller adult size, and patterned shell.

Scientific Name

Alligator Snapping Turtle, Macroclemys temminckii

Classification

Phylum: Chordata Subphylum: Vertebrata Class: Reptilia Order: Testudinata Family: Chelydridae

Species Description

Size: Alligator Snapping Turtles can get almost as long as 31 inches and can weight up to 250 lb. These turtles may live longer than 100 years. Other things to look for: They can be identified by their three large, pronounced ridges running from the front to the back of their very large shells. They have a snout that is pointed and their eyes are on the sides of their heads instead of the top like the common snapping turtle. The head of an Alligator Snapping Turtle is also very large,
with very powerful jaws. The upper jaw is hooked and the tongue contains a worm like lure used to attract prey into the mouth.

Special Features: The Alligator Snapping Turtle has a tongue that looks like a worm, which can come in handy when "fishing" for food. They lie very still submerged at the bottom of their current habitat with their mouths open wide. They then wiggle the worm-like projection of their tongue to attract fish that swim by and see it as a meal for them. When the fish gets close enough, the turtle grabs it with its very strong and sharp jaws. Their diet in the wild does not only consist of eating fish; they also eat snakes, frogs, aquatic plants, clams, and even other turtles.

Life Cycle

The Alligator Snapping Turtle will reach maturity at about 11 to 13 years of age. They usually mate during the months of April and June, nesting about 2 months later. The clutches number 8 to 52 eggs in a nest just off the water's edge. Incubation lasts from 80 to 110 days. The incubation temperature determines the sex of their offspring.

Natural History

Alligator Snapping Turtles live in rivers whose water will eventually drain into the Gulf of Mexico. They are the largest of all freshwater turtles in North America, and possibly the whole world. Spending most of their time in the deep water of large rivers, canals, lakes, swamps, and bayous, Alligator Snapping Turtles may only go onto land to nest their young. Snapping Turtles are sedentary. They stay submerged under water for very long periods and usually come up for air after 15 to 20 minutes.

Conservation Status

The Alligator Snapping Turtles is listed as a Threatened species by the State of Georgia. Major verils are habitat loss and disturbance.

Similar Status

Absolutely None.

Amphibians

Flatwoods Salamander, Ambystoma cingulatum

Classification

Phylum: Chordata Subphylum: Vertebrata Class: Amphibia Order: Caudata Family: ambystomatidae

Species Description

Size: 9 - 13 cm (3.5 - 5 in).

Color: Dark, almost black with gray markings on its back. The markings may look like fine lines, a net, or circles. Its belly is black with gray specks.

Other things to look for: This is a small Mole Salamander, not as robust as other members of this genus. The head is not quite as blunt as in other *Ambystoma* species. It has 15 costal grooves.

Life Cycle

Breeding occurs in the late fall. Fertilization is internal. The female lays small clumps of eggs on damp ground near water. Hatching occurs when winter rains flood the area where the eggs have been laid, usually 20 to 40 days later. Transformation to adult form occurs in the spring, three to four months later.

Members of the Mole Salamander Family (ambystomatidae) are aptly named because they spend most of their time underground. This salamander burrows near water or moves about under debris on the forest floor. It is nocturnal and most likely to be seen during the fall courtship and breeding period. The Flatwoods Salamander is found in flatwoods dominated by longleaf or slash pines, and is very closely associated with the pine/wiregrass habitat. It is carnivorous, and is an opportunistic feeder, primarily eating earthworms and arthropods. It needs shallow winter ponds to breed and does not do well in ponds that contain fish.

Range

The Flatwoods Salamander is found in the pine woodlands and cypress swamps of the Coastal Plain.

Conservation Status

This species is listed as Threatened in Georgia, South Carolina, Alabama, and Florida both by the individual states and by the federal government. Its population has declined dramatically over the last fifteen years. The main threat is habitat destruction caused by clear-cutting, burning, and soil disturbance by heavy machinery. Protection of pine/wiregrass habitat is essential for the survival of this species. Pine wetlands should be protected and not dredged or drained.

Similar Species

There are no other Mole Salamanders that can be confused with this species in Georgia. Some Slimy Salamanders have a similar appearance, but they also have noticeably sticky mucous secretions.

Life Cycle

Mountain Lions begin breeding at 3 years of age and may breed at any season, with peaks in April and May. A litter of 1 - 6 kittens is born 82 - 98 days after mating. The female gives birth in a den located in a hollow log or crevice in a rock ledge. Kittens begin eating meat at 6 weeks of age but continue to suckle until 12 weeks of age. The female brings food to the den for several weeks, then brings the kittens to eat at her kills. After 2 months, the den is abandoned, and kittens follow the female, but stay in temporary shelters while she hunts. At 6 months of age, the kittens follow the female while she hunts and remain with her for more than a year, dispersing by the time they are 2 years of age.

Mammals

The varied habitat of Swamplands, wetlands, forests, and moist and dry uplands conducive to attracting a wide diversity of species of birds, also provides habitat mammalian species known to the southeastern coastal plain. The following list describes species presently living or which have recently lived in or in the Berrien County area.

Florida Opossum *(Didelphis marsupialis pigra)*. Common on the swamp edge and on the islands within the swamp.

Star-Nosed Mole (Condylura cristata). Apparently rare.

Florida Mole *(Scalopus aquaticus australis)*. Generally distributed on the upland adjacent to the swamp and has been found on some of the island within the swamp.

Least Shrew (*Cryptotus parva parva*). Rarely seen, but probably fairly common. Specimens have been collected on several of the islands, on the swamp edge and in the pinewoods around the swamp.

Evening Bat *(Nycticeius humeralis)*. This and other bats are seen at dusk on warm nights: searching for flying insects.

Georgian Bat (Pipistrellus subflavus subflavus). A fairly common species in the area.

Big Brown Bat (Eptesicus fuscus fuscus). An uncommon species in the area.

Northern Red Bat (Lasiurus borealis borealis). An uncommon species in the area.

Seminole Red Bat (Lasiurus borealis seminolus). A common bat of the area.

Florida Yellow Bat (Dasypterus floridanusJ.Apparently a rare species in the area.

Rafinesque's Big-Eared Bat (Corynorhinus rafinesquii). A rather uncommon species in the area.

Free-Tailed Bat *(Tadarida brasiliensis cynocephala*). An uncommon species in this area although it has been collected at Camp Cornelia.

Florida Black Bear (Ursus floridanus). Bears range throughout the area. While they are rarely seen, their signs are found in all habitats.

Florida Raccoon (*Procyon lotor elucu*) The most abundant mammal in the area. It is found the swamp edge.

Long-Tailed Weasel *(Mustela frenata olivaccea)* This species is probably more common than the few observations would indicate.

Florida River Otter *(Lutra Canadensis vega)* Occasionally observed along the watercourses, especially during winter.

Florida Striped Skunk *(Mephitis mephitis elongata)*. This species is generally distributed on the upland surrounding the swamp and is found occasionally on the islands.

Red Fox (Vu/pes fu/va fu/va). This species is rare but occurs occasionally on the upland near the swamp.

Florida Gray Fox (Urocyol cinereoargenteus floridanus). Fairly common on the upland around the swamp.

Florida Bobcat (*Lynx rufus foridanus*). Common throughout the swamp and on the surrounding upland. Occasionally seen along the nature drive.

Southern Gray Squirrel (*Sciurus carolinensis carolonensis*). Abundant in the blackgumbay forests in the swamp and in the oak woodlands on the upland.

Southern Fox Squirrel (Sciurus niger niger). Uncommon in the pine forests surrounding the swamp.

Florida Flying Squirrel (*Glaucomys volans querceti*). This species is rarely seen but is probably fairly common.

Georgia Pocket Gopher (Geomys pinetis pinetis). Sandy soils; fields; pine-oak woods.

Carolina Beaver (*Castor Canadensis carolinensis*). Common throughout the bays, swamps, and waterways in Berrien County.

Cotton Mouse (Peromyscus gossypinus gossypinus). Common throughout the area.

Southern Golden Mouse *(Peromyscus nuttalli aureolus)*. This species is probably rare. It has been found in the cypress bays and in hammocks on the islands.

Swamp Rice Rat (Oryzomys palustris palustris). A fairly common mammal throughout the bays, swamp, and waterways.

Hispid Cotton Rat (Sigmodon hispidus hispidus). A common mammal in the pine woods and old fields on the upland around waterways.

Florida Wood Rat *(Neotoma floridana floridana)*. Fairly common throughout the lowlands and swamps

Round-Tailed Muskrat (*Nefiber alleni nigrescens*). Found near ponds, lakes, rivers, and canals.

House Mouse (Mus musculus *Linnaeus*). Where conditions permit, feral mice may be found in fields, along watercourses, and in other places where vegetation is dense enough to afford concealment.

Norway Rat *(Rattus norvegicus (Berkenhout))*. They appear to be most common about feed stores, chicken houses, and garbage dumps.

Black Rat (Rattus rattus rattus) Common on farmstead.

Roof Rat (*Rattus rattus alexandrius*), Roof rats are largely commensals and live in close association with man.

Eastern Cottontail (*Sylvilagus palustria mallurus*). Commonly frequents brush-dotted pastures, the brushy edges of cultivated fields, and well-drained stream sides, clearings and in the most sparse pine swamp.

Marsh Rabbit (*Sylvilagus palustri palustri*). Found on bottomlands, swamps, lake borders, and coastal waterways.

White-Tailed Deer (*Odocoileus virginianus*). Prime areas are those, which have a mix of forest, old fields and active crop lands.

Armadillo (Dasypus novemcinctus mexicanus). It inhabits forests, scrub, and brush lands, but is most abundant in moist, bottomland hardwood forests.

Plants

Lax Water Milfoil (*Myriophyllum Laxum*)

Legal Status:

State: THREATENED Federal: CANDIDATE

Description: Perennial herb. This feathery, aquatic plant produces long, slender, reddish stems that grow to 0.7-1.0 m or more in length, having leaves both below the water's surface (submersed) and above (emersed). The submersed leaves are in whorls of 3-4, 3-5 cm long, about 1.5 cm wide, and deeply dissected into 7-10 pairs of threadlike segments. However, fast-growing stems may have submersed leaves irregularly arranged (not always in distinct whorls), with much variation in leaf dissection.

The emersed leaves are openly spaced, nearly opposite, bract-like (less than 5 mm long), mostly spoon-shaped (spatulate) to elliptic, and shallowly toothed to entire. The flowers are minute and produced in the axils of the emersed leaves (floral bracts). The flowers have four petals, each

about 1 mm long, pinkish to reddish, and recurved. The fruit is 4-lobed and splits into four nutlets.

Habitat: Found in sinkhole ponds and other shallow, freshwater ponds; also in sandy, clear streams draining spring-fed swamps.

Parrot Pitcherplant (Sarracenia psittacina)

Legal Status:

State: THREATENED Federal: CANDIDATE

Description: This is a herbaceous plant. It is a perennial. This plant has basal leaves only. Leaves can reach 25cm in length (10 inches). The leaves are decumbent and often partly hidden by vegetation. The hoods of the pitchers cover the top so that the opening faces inward toward the center of the plant.

The flowers have 5 Regular Parts. They are dark purple. Blooms first appear in mid spring and continue into early fall. The <u>scape</u> curves at the end so that the flower points down. There are five sepals and five petals.

Habitat: In or near bogs, swamps, or open pinelands generally in soils leached of soluble nutrients. May grow under water.¹⁵

A. I metands.	
Pinus palustris	Longleaf Pine
Pinus elliottii	Slash Pine
Pinus taeda	Loblolly Pine
Carya tomentosa	Mockernut Hickory
Quercus cinerea	Blue Jack Oak
Quercus laevis	Turkey Oak
Quercus falcata	Southern Red Oak
Quercus nigra	Water Oak
Flex glabra	Gallberry
Lyonia fruticosa	Staggerbush
Polycodium sp.	Deerberry
Vaccinium arboreum	Tree Huckleberry
Aristida stricta	Wiregrass
Serenoa repens	Saw Palmetto
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Berrien County's Area Vegetation/Moist to Dry, Generally Flat Areas

A. Pinelands:

B. Oaklands: associated with pineland, often establishing after pine is removed.

Quercus falcate	ate Southern Red Oak	
Quercus Marylandica	Blackjack Oak	
Carya tomentosa	Mockernut Hickory	
Quercus margaretta	Shrubby Post Oak	

¹⁵ www.2bnthewild.com/plants/H338.htm, October 6, 2003

C. Upper Terrace Hardwoods: mixed or dominating in some upper headwater areas.

Q	Quercus alba	White Oak	
Q	Quercus falcata	Southern Red Oak	
F	Fagus grandifolia	Beech	
L	irodendron tulipifera	Tuliptree	
S	assafras varrifolium	Sassafras	
II. Bluffs	s and Slopes:		
Р	Pinus palustris	Longleaf Pine	
Р	Pinus taeda	Loblolly Pine	
C	Carya glabra	Pignut Hickory	
C	Castanea alnifolia	Chinquipin	
Q	Quercus falcata	Southern Red Oak	
Q	Quercus laurifolia	Laurel Oak	
Q	Quercus virginiana	Live Oak	
Р	Persea pubescens	Red Bay	
H	Iamamelis virginiana	Witch Hazel	
C	Cornus Florida	Flowering Dogwood	
S	'erenoa repens	Saw Palmetto	
L	yonia ferruginea	Staggerbush	
S	ymplocos tinctoria	Horsesugar	
λ	Aitchella repens	Partridge Berry	

III. Cypress Ponds: common in pinelands (wooded ponds dominated by Pond Cypress).

Taxodium ascendens

Pond Cypress

Berrien Area Vegetation

Nyssa biflora	Swamp Gum	
Acer rubrum	Red Maple	
Cephalanthus occidcntalis	Buttonbush	
flex myrtifolia	Myrtle-leaved Holly	
Thickets bordering ponds:		
Clethra alnifolia	Sweet Pepperbush	
Cyrilla racemiflora	Titi	
Vaccinium spp.	Blueberries	

IV. Open Water Courses: ponds and tributary streams not heavily shaded by swamp forest.

Nymphaea odorata	Water Lily
Nuphar advena	Spatterdock
Pontederia cordata	Pickerel Weed
Sagitta ria spp.	Arrowhead

Numerous brushes, sedges, grasses.

V. River (alluvial) bottoms, swamps:

Pinus rigida serotina	Pond Pine	
Quercus nigra	Water Oak	
Quercus prinus	Swamp Chestnut Oak	
Liquidambar styraciflua	Sweetgum	
Carya pallida	Pale Hickory	
Celtis spp.	Hackberries	
Magnolia virginiana	Sweet Bay	
Persea pubescens	Red Bay	
Ulmus alata	Winged Elm	
Nyssa biflora	Swamp Gum	
Nyssa ogeche	Ogeechee Lime	
Fraximus caroliniana	niana Water Ash	
Tillandsia usn eo ides	es Spanish Moss	
flex decidua	Deciduous Holly	

Smilax walteri	Coral Greenbriar
Sabal minor	Swamp Palmetto

VI. Sandy Stream Banks: drier than swamps and bottoms. On the banks of the Alapaha, New River, Willacoochee, and Withacoochee Rivers pinelands often extend to the banks.

Salix nigra	Black Willow
Betula nigra	River Birch
Planera aquatica	Planer Tree
Acer rubrum Nyssa ogeche Fraxinus caroliniana Platanus occidentalis	Red Maple Ogeechee Lime Water Ash Sycamore

VII. Marshes: mostly herbs and shrubs.

Zizaniopsis miliacea

Southern Wild Rice

Berrien County Area Vegetation

Typha latifolia	Cattail
Panicum hemitamon	Maiden-cane
Scirpus validus	Bullrish
Pontederia cordata	Pickerel Weed
Eichhornia crassipes	Water Hyacinth
Hymenocallis Grassifalia	Spiderilly
Alternanthera philaxeroides	Alligator Grass
Rosa palustris	Swamp Roses

Known Species of Fish

Bowfin	Amia	Longnose Gar	Lepisc
Florida Gar	Lepisc	Chain Pickerel	Esox niger
Redfin Pickerel	Esox americanus	Spotted Sucker	Minytrema melanops
Lake Chubsucker	Erimyzon oblongus	Channel Catfish	Ictalurus punctatus
Yellow Bullhead	Ameiurus natalis	Brown Bullhead	Ameiurus nebulosus
Snail Bullheads	ameirus brunneus	Tadpole Madtom	Noturus gyrinus
Speckled Madtom	Noturus leptacanthus	American Eel	Anguilla rostrata
Starhead Topminnow	Fundulus escambiae	Mosquitofish	Gambusia affinis
Pirate Perch	Aphredoderus sayanus	Brook Silversides	Labidesthes sicculus
Largemouth Bass	Micropterus salmoides	Black Crappie	Pomoxis nigromaculatus
Blackbanded Sunfish	Enneacanthus chaetodon	Banded Sunfish	Enneacanthus obesus
Bluespotted Sunfish	Enneacanthus gloriosus	Warmouth	Lepomis gulosus
Dollar Sunfish	Lepomis marginatus	Spotted Sunfish	Lepomis punctatus
Bluegill	Lepomis macrochirus	Redbreast Sunfish	Lepomis auritus
Swamp Darter	Etheostoma fusiforme		

Major Park, Recreation and Conservation Areas

There are no Federal recreation or wildlife management areas within Berrien County.

Paradise Public Fishing Area

The Paradise Public Fishing Area (Paradise PFA) is the only state-owned recreation/wildlife area in Berrien County. Paradise PFA is located in the northwest

corner of the county, south of US82/SR520. Up until 1991, it was a private fishing club but is now owned and managed by the Georgia Department of Natural Resources.

Description: Paradise PFA is a unique combination of 71 lakes and ponds totaling 550 acres of water, 568 acres of forested land, and 123 acres of open fields and roads. The lakes are professionally managed to provide bass, bream, crappie, and channel catfish. The facility is open during daylight hours throughout the year and includes an information shelter, onsite office, picnic area, comfort station, and pay phone. Recreational activities include: fishing, picnicking, hiking, bird watching, and primitive camping. Habitat types include wetlands, upland pine, planted pine, pine savannas, longleaf pine/wiregrass, and mixed hardwood. The area is intertwined with roads and trails providing visitors passage too much of the area. Slightly rolling hills covered with pines slope down to lake banks and distinct wetland habitats. Lake shorelines, cypress-gum ponds, and branch swamps provide habitats for a variety of wading birds and waterfowl. Clusters of pond cypress and black gum surrounded by water provide an ideal resting spot for wood storks and herons. In contrast, a large longleaf pine/wiregrass community located on the south side of the area provides a perfect habitat for gopher tortoises and a variety of snakes.

Viewing Information: Paradise PFA, managed primarily for public fishing, is also a paradise for those looking for an unforgettable wildlife viewing experience. Numerous species of birds, mammals, and reptiles are found within the boundary. Bald eagles visit the area beginning in October and stay until mid-March. It is common to see them catching shad from Lake Patrick and finishing the freshly caught meal atop a large longleaf pine. Sometimes pairs can be observed clasping talons and squealing loudly while falling away toward earth, waiting until the last instant to release their clasp. Osprey are frequently seen throughout the year over the lakes hunting for fish or resting while perched atop standing timber in Lake Paradise. Marsh hawks, red-tailed hawks, and red-shouldered hawks can be seen perched on power poles or flying low hunting for food. Wood storks, Canada geese, wood ducks, white ibis, tufted titmice, pied-billed grebes, common loons, pintails, hooded mergansers, green-winged teal, blue-winged teal, and common gallinules are just a few of the birds that can be observed in the area. Migrating birds can be viewed mainly in the fall and winter months.

Mammals include white-tailed deer, bobcats, coyotes, river otters, striped skunks, beavers, gray foxes, gray squirrels, nine-banded armadillos, and an abundance of cottontail rabbits. Gopher tortoises are common in and around the longleaf, pine/wiregrass plant communities. Tortoises can be found feeding and digging burrows throughout the summer months. Their activity decreases in November, and they are not frequently observed until late Feb. and March. Eastern diamondback rattlesnakes are common throughout the upland areas. Timber rattlesnakes, although present, are far less numerous. Many interesting non-venomous snakes such as the eastern king snake, eastern hognose snake, and the gray rat snake are found in abundance along the roadways and in brush piles near open fields. A rare find would be the indigo snake, which has been seen during the summer months on the south side of the area. Funding for the purchase of the property came from the 1987 cost increase from hunting and fishing licenses. The area is operated with federal aid in Sport Fish Restoration funds. Monies for this fund came from an excise tax on tackle and motor boat fuels, and are returned to individual states on a cost-share basis.¹⁶

Scenic Views and Sites

No scenic views or sites have been identified within the County as warranting special management practices.

Inventory of Cultural Resources

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

In recognition of the importance of these factors, significant historic and archaeological resources, including historic buildings listed on the National Register of Historic Places, are inventoried in this element. Local historic or archaeological resources that have potential as nomination are also inventoried in this element. These resources include cultural, historic, residential, commercial, industrial, institutional, transportation, rural, and other historic, archaeological and cultural resources.

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

In addition, an assessment of the local support and the desire for historic preservation activities is evaluated. Based on this analysis, a set of goals and objectives has been designed for each Berrien County community in developing a historic preservation plan. More specifically, a Five Year Work Program based on to inventory and analysis provides strategies aimed to preserve, protect, and promote the historic resources in each community.

¹⁶ http://www.sherpaguides.com/georgia/wildlife_viewing/plantation_trace/49.html, July 31, 2003

Residential Resources

Approximately 13.4% of the homes in Berrien County's are older than 50 years. The major of these homes are of wood frame construction, a gable roof, brick chimneys, and 1/1 window. Many of this turn of the century homes have been lost due to neglect while others remain dilapidated.

The City of Alapaha also retains some residential neighborhoods that are important historic resources. These neighborhoods lie to the north, south and west of downtown. There are many historic churches and homes south of downtown that are valuable historic resources. The area also includes an old vernacular colored school that was built sometime in the 1920's. The building, though in poor condition, is very interesting in that the original structure has never really incurred any changes.

Alapaha contains a large number of historic resources, many of which are grouped together in neighborhoods. The groups of historic resources may be eligible for the National Register of Historic Places. In addition, other buildings may be individually eligible for the National Register

The City of Enigma also has some residential areas surrounding the downtown. Many of the buildings in downtown, as well as in the neighborhoods, are historic.

The City of Nashville had been in existence since the 1850's and was chosen in the beginning to be the county seat, it was not incorporates as a city until 1892. Since the time of its incorporation, Nashville has grown steadily. It started with a few wooden buildings housing offices arid stores and a few houses. Today, the city retains many buildings and structures from the turn of the century and some earlier. It also retains many homes built before the turn of the century. Nashville has many buildings of historical importance. Concentrations of historic buildings can be seen in and around Nashville. The buildings in these areas might be eligible for listing on the National Register of Historic Places either individually or in groups.

Ray City is a quiet town. A small downtown core exists with residential neighborhoods surrounding it. The town retains some historic buildings in its business district as well as some historic residential neighborhoods nearby.



Ray's Mill, located in Ray City, Georgia

Commercial Resources

The Commercial and Downtown Business Districts areas of Alapaha, Enigma, Nashville, and Ray City serves as the backbone of the community and represents the linear form of development typical of railroad towns. Fortunately, the majority of these business districts have remained intact and vital.

The area now known as Alapaha was originally a Cherokee Indian village. The Cherokees inhabited this area long before the white settlers came. They named the place Alapaha, which stands for "Smiling Sunshine or Laughing Water," Alapaha, remained a Cherokee village as late as the 1780's.

The first white settlers began arriving in Alapaha around 1820 or 1830. They built their first houses in a crude fashion which consisted of poles covered with bark and cane. More wrote settlers began moving to Alapaha in the 1870's because of the land grants, the sawmill and the arrival of the B & W (Brunswick and Western) Railroad. Once the

railroad arrived, Alapaha was then called either "The Station" or" Alapaha Station. The Town of Alapaha soon sprang up with buildings, houses, stores and warehouses.

The fact that the tracks ended in Alapaha made that town really grow and prosper. Not only did the trains bring products to merchants and businesses in Alapaha but farmers and manufacturers used it as a drop-off point where the train would pick up goods and transport them elsewhere for sale. Alapaha grew into a large marketplace and retained this status for many years. It was not until the very early 1900's that the railroad began expanding its lines westward creating new markets, many of which were more convenient locations than Alapaha.

Its business district still exists in the original location with the abandoned railroad bed running through the center of town. Some of these commercial buildings located in the business district may be individually eligible for the National Register.

The City of Enigma was typical in design for a small town developing in rural South Georgia during the late 1800's to early 1900's. A small downtown business district sprang up along the east-west route of the Brunswick and Western Railroad. Many of the original structures that sprang up around the east-west route are no longer in existence. The business district is slowly migrating towards US 82/520. This migration has left the small business district abandoned and crumpling.

The Town of Nashville had been in existence since the 1850's and was chosen in the beginning to be the county seat, it was not incorporates as a city until 1892. Since the time of its incorporation, Nashville has grown steadily

Many if not all of the mid-to-late 1800's structures used for businesses no longer exist. These early structures where mainly constructed of wood. Dampness, decay, insects, and the lack of maintenance significantly degraded the structure integrity of these buildings. The majority of these structures where dismantled, collapsed due to weakened structural supports, or succumbed to fire.

During the late 1800's to early 1900's, it was common for businesses to be constructed of brick and steel. Today, the city retains many buildings and structures from the turn of the century and some earlier concentrations of historic buildings can be seen in and around Nashville. The buildings in these areas might be eligible for listing on the National Register of Historic Places either individually or in groups.

Ray City first came into being as "Ray's Mill" because of a corn meal and grist mill (water powered) that was owned and operated by T .M. Ray. Ray's Mill started with just the mill and grew only a small amount over the years. In 1909, it was decided that Ray's Mill should incorporate as a city. R.D. Swindle was appointed to serve as temporary mayor until an election could be held in January of 1910.

Ray City is a quiet town. A small downtown core exists with residential neighborhoods surrounding it. The town retains some historic buildings in its business district as well as some historic residential neighborhoods nearby.

Industrial Resources

Naval Stores in Berrien County has dominated the industry in the late 1800's and early 1900's. Little information is known about the early industries in Berrien County and it Municipalities.

In Berrien County the railway systems has had the most influence on industries because they afforded individuals reliable transportation for goods and travel. Automobiles at the turn of the century were not reliable and roads were converted wagon trails. Berrien County still has many miles of roads that need paving.

Berrien County is experiencing slow but steady growth. This gives Berrien County and its municipalities the opportunity to implement strategies to inventory and protect these valuable resources.

Institutional Resources

Berrien County Courthouse

Once Berrien County was established in 1856. it was added along with Ware and Colquitt to the Southern Judicial Circuit, which already included Appling, Irwin, Laurens, Lowndes, Pulaski, Telfair, Thomas, and Twiggs Counties. The first term of the Superior Court was held in Berrien in November of 1856. This first court was held in a schoolhouse since there was no courthouse or any other public building for that matter.

The schoolhouse was located on the property of Mrs. Amy Kirby, who lived on the Coffee Road just one mile northeast of the present courthouse.

The land for the Town of Nashville was purchased from Daniel Griner in 1857. The site chosen for the courthouse is on the approximate location of Daniel Griner's cattle pens. Bids for the

Buildings were let in that same year. The building was to be two stories tall at a cost of \$2,600. In March 1858, the building was completed and used for 39 years.

In 1897, the people of Berrien County decided that it was time to build a new courthouse. They wanted a larger and more pretentious building - one more in keeping with the times. The erection of the new courthouse necessitated the moving of the old one. A Dr. Goodman bought the building for \$200 and had it moved to a comer lot across the street. He then remodeled the building for use as a hotel. The courthouse built at this time is still in existence and continues to serve as the county courthouse today.



Berrien County Courthouse under construction late 1800's

The "new" courthouse is a well-built building and was completed in 1899 at a cost of about \$17,000. The drawings for the building were done by W. Chamberlin of Knoxville, Tennessee and the company that built it was Hager and Winston. This Queen Anne style building was built to be fireproof and has almost no wood used in its construction.

The building consists of approximately 535,000 bricks. As many as 85,000 of these came from Macon and all the rest were made in Berrien County. The tower rests on three steel beams weighing more than 6,000 pounds each. All ceilings are made of steel and every door is either solid steel or covered with it. The window frames are also covered with steel. The floor of the second story is wood but sits on top of ten inches of concrete. The roof is slate and at the time of

construction, the clock cost \$367.50. The clock had weights of over 600 pounds each and the bell weighs 500 pounds.

The courthouse continues along with many other historic buildings to exist in Berrien County today. The county has a wealth of these types of resources.

Transportation Resources

Berrien County General Knowledge

One of the state's earliest railroads, the Brunswick & Florida was chartered in 1835 to open up southern Georgia and northern Florida to the port of Brunswick.

Progress was slow, however, and it was not until 1858-59 that the line was completed from Brunswick to a connection with the Atlantic and Gulf Railroad at Glenmore.

At Schlatterville, about 12 miles east of Glenmore, the railroad branched, with a second line running northwest towards Albany. This northern leg crossed the A&G at Tebeauville (also known as Yankee Town and later renamed Waycross). By the time of the Civil War, this branch had reached only to Waresboro.

In 1863, the Confederate government seized the Brunswick and Florida and took up its tracks for reuse in more militarily important regions. After the war, the line lay in ruins until 1869 when the state approved aid for rebuilding. At this time, the B&F was reorganized and renamed the Brunswick and Albany Railroad.

The Brunswick & Albany was organized in 1869 to take over the operation of the defunct Brunswick and Florida Railroad, which did not survive the Civil War. Poors 1869-70 Manual reported that the road "at the present time is in the condition as after dismantlement in 1863."

Early in 1869, the Georgia General Assembly approved aid for the rebuilding of the line. By May of that year, the tracks were open from Brunswick to the Atlantic & Gulf Railroad at Tebeauville (now Waycross). Trains did not reach Albany, however, until October of 1871.

The old branch line between Schlatterville and Glenmore (a part of the original main line) had become unnecessary and was abandoned.

In 1872, the General Assembly nullified a bond issue for the railroad. It entered receivership that year and was sold under foreclosure the following year. In 1882, it was once again reorganized, emerging under the new name Brunswick and Western Railroad.

On December 19, 1882, the Brunswick and Albany Railroad was reorganized as the Brunswick & Western. It connected Albany and Brunswick over a distance of 171 miles.

The Savannah, Florida & Western purchased control of the Brunswick & Western in 1888. It was merged with the SF&W in 1901.

Henry B. Plant purchased the Atlantic & Gulf Railroad in November 1879 at a foreclosure sale. He organized the SF&W on December 9, 1879 to operate the line. Plant served as president of the road from 1880 until his death in 1899.

The South Georgia and Florida Railroad, a 24-mile line between Thomasville and Pelham, was acquired by the Savannah, Florida and Western (SF&W) in November 1879.

In 1882, Plant established the Plant Investment Company to acquire other railroads.

In 1884, Plant consolidated the Waycross and Florida Railroad, along with several railroads in Florida, into the SF&W.

In the same year, Plant bought the Brunswick and Western Railroad. He allowed it to operate independently until 1901 when it was absorbed into the SF&W.

Atlantic Coast Line Railroad bought the Plant System (including the SF&W) in 1902.

The Ocilla, Pinebloom, and Valdosta Railroad (OP&V), originally called Fitzgerald, Pinebloom & Valdosta, was a logging road and occasional common carrier owned by the Gray Lumber Company and later by the Henderson Lumber Company. The 52-mile Lax-Pinebloom-Nashville line was completed in 1901-09. In 1906, the OP&V sold the section south of Pinebloom to the Douglas, Augusta, and Gulf Railway, DA&G.

The Georgia and Florida Railway was organized in 1906 for the purpose of purchasing, building, and operating railroads in Georgia and Florida. Between 1906 and 1911, Mr. Skelton Williams acquired six lines. Of the six lines, acquired two were in Berrien County: the 87-mile DA&G (Hazlehurst-Nashville and Barrows Bluff-Broxton); and the 12-mile Nashville-Sparks.

The DA&G continued to operate the tracks north of Pinebloom. In 1910, the DA&G became an extension of the OP&V. Between 1906 and 1910 Mr. Williams connected his various acquisitions with three new lines. One of the new lines was the 12-mile Nashville and Sparks Railroad.

The railroad entered receivership in 1915 but remained intact. In 1919, the G&F acquired the Augusta Southern (Augusta-Sandersville), over which it had obtained track age rights between Keysville and Augusta.

By leasing the Midland Railway in 1924, the G&F was able to add a branch line to Statesboro. It connected with the main line at Stevens Crossing.

After a reorganization in 1926, the G&F was renamed the Georgia and Florida Railroad.

In 1954, the Valdosta-Madison line was sold to new owners, who renamed it the Valdosta Southern Railroad. In 1958, the last remaining section of the Broxton branch was abandoned.

Southern Railway acquired the G&F in 1963 but did not stop the slow dismemberment. It abandoned the section of line between the Nashville-Sparks section of the Moultrie branch in 1967-68. In 1971, Southern merged the remnants of the G&F into its subsidiary Central of Georgia Railway.¹⁷

Today, many of the railways that once paralleled US82/520 in Berrien County are abandoned or dismantled. The current railway system coursing through Berrien County starts in Valdosta, Georgia and ends in Willacoochee, Georgia. This rail system is in a state of disrepair. Nonetheless, state agencies and local organizations are working collectively to preserve this rail system. Loosing this local rail system will increase the cost of transporting materials to and form manufacturing facilities.

Alapaha

The area now known as Alapaha was originally a Cherokee Indian village. The Cherokees inhabited this area long before the white settlers came. They named the place Alapaha, which stands for "Smiling Sunshine or Laughing Water," Alapaha, remained a Cherokee village as late as the 1780's.

¹⁷ http://www.railga.com



The 1881 Brunswick & Albany Railroad depot at Alapaha now serves as city hall in this Berrien County town.

The first white settlers began arriving in Alapaha around 1820 or 1830. They built their first houses in a crude fashion which consisted of poles covered with bark and cane. More wrote

settlers began moving to Alapaha in the 1870's because of the land grants, the sawmill and the arrival of the B & W (Brunswick and Western) Railroad. Once the railroad arrived, Alapaha was then called either "The Station" or" Alapaha Station," The B & W Railroad was originally built from Waycross to Alapaha. The railroad terminated in Alapaha and the railroad company built a roundhouse and train depot there. The Town of Alapaha soon sprang up with buildings, houses, stores and warehouses. In 1899, the original train depot was replaced with a larger and nicer depot which still stands today and is used as the Alapaha City Hall.

The fact that the tracks ended in Alapaha made that town really grow and prosper. Not only did the trains bring products to merchants and businesses in Alapaha but farmers and manufacturers used it as a drop-off point where the train would pick up goods and transport them elsewhere for sale. Alapaha grew into a large marketplace and retained this status for many years. It was not until the very early 1900's that the railroad began expanding its lines westward creating new markets, many of which were more convenient locations than Alapaha.

Today, Alapaha is once again a growing community. Its business district still exists in the original location with the abandoned railroad bed running through the center of town. The

town maintains the railroad right-of-way as a linear park. Alapaha has preserved several historic buildings, including the old depot, which has been converted into a sheltered public gathering area and a city hall, which includes a historical museum. Alapaha also retains some residential neighborhoods that are important historic resources. These neighborhoods lie to the north, south and west of downtown. There are many historic churches and homes south of downtown that are valuable historic resources. The area also includes an old vernacular colored school that was built sometime in the 1920's. The building, though in poor condition, is very interesting in that the original structure has never really incurred any changes.

Alapaha contains a large number of historic resources, many of which are grouped together in neighborhoods. The groups of historic resources may be eligible for the National Register of Historic Places.

Enigma

The Brunswick and Western Railroad did have a route that ran through the city on its way to Tifton, Georgia. A small downtown business district sprang up along the east-west route of the Brunswick and Western Railroad. Many of the original structures that sprang up around the east-west route are no longer in existence.

Nashville

The Town of Nashville was incorporated as a city in 1892. Since the time of its incorporation, Nashville has grown steadily. It started with a few wooden buildings housing offices and stores and a few houses.

During the late 1800's and early 1900's, the Town of Nashville served as the transportation hub for Berrien County and the surrounding area. The rail lines emerging from the Town of Nashville were like spokes of a wooden wagon wheel, connecting and supporting a diverse railway industry and system.

Rail lines from the City of Alapaha, Sparks, Valdosta, and Willacoochee ran through the Town of Nashville. The Nashville to Sparks line was 11.5-miles in length. The line extended from Sparks and connected to Moultrie; the Nashville to Valdosta line is approximately 25-miles in length and is still in operation; the Alapaha to Nashville rail line is approximately 12 miles in length; and the Willacoochee to Nashville rail line is approximately 18-miles in length and is part of the Nashville to Valdosta line that is still operational.

The Town of Nashville in the early 1900's was typical of a small southern railway town. It consisted of a small downtown business district that sprang up along the east-west and north-south routes of the many different railway companies that transported goods and passengers to distant destinations. Many of the original structures that sprang up around these routes are no longer in existence.

Ray City

What is not known is which came first the Georgia and Florida Railway (G&F) or Ray City. Nonetheless, the G&F Railway, in the early 1900's, had a route that ran through the city on its way to Valdosta, Georgia. A small downtown business district sprang up along the north-south route of the G&F Railroad. Many of the original structures that sprang up around the north-south route are no longer in existence.

Ray City first came into being as "Ray's Mill" because of a cornmeal and gristmill (water powered) that was owned and operated by T .M. Ray. Ray's Mill started with just the mill and grew only a small amount over the years. In 1909, it was decided that Ray's Mill should incorporate as a city. R.D. Swindle was appointed to serve as temporary mayor until an election could be held in January of 1910.

The main industries for Ray City in the early days were a sawmill, turpentine distillery, crosstie production, and farming. The farmers grew cotton until the boll weevil destroyed the crops. Soon, bright leaf tobacco was introduced and it replaced cotton as the major cash crop.

The G&F Railway enabled farmers, producers of forestry products, and naval store materials producers to transport their products cheaply and reliably to manufactures outside of the region and to ports worldwide.

Abandonment's:

Nashville to Sparks abandoned in 1967-68.

Alapaha to Nashville abandonment not known.

Willacoochee to Alapaha abandoned 1980's.

Existing:

Georgia and Florida Railway

Rural Resources

Farming in Berrien County has dominated the landscape from its earliest humble beginnings to present day. In the mid-eighteen hundreds cotton was the crop of choice for many farmers throughout the south. Cotton continue to be the main staple into the early 1900's. The arrival of the Boil Weaver in the early 1900's devastated cotton crops. This destruction induced the farmers to switch from cotton to bright tobacco as the staple crop. Tobacco continues to this day to be the main staple crop. However, Berrien County does has the distinction of being known as the Bell Pepper Capital of the World.

Nonetheless, information is limited about early rural life in Berrien County. No Plantations are listed in Berrien County. However, several homesteads are well known and are documented photographically such as the Swindle Family homestead of 1880-1893, the JW Sirmans homestead, and the John Studstill homestead of 1887-1889.

In Berrien County the railway systems has had the most influence because they afforded individuals reliable transportation for goods and travel. Automobiles at the turn of the century were not reliable and roads were converted wagon trails. Berrien County still has many miles of roads that need paving.

Berrien County is experiencing slow but steady growth. This gives Berrien County and its municipalities the opportunity to implement strategies to inventory and protect these valuable resources.

Other Historic, Archaeological and Cultural Resources

All counties in Georgia contain prehistoric and historic archaeological resources. However, some areas of the state have been more intensely investigated than others and therefore more is known about those areas than others. The main reason for this is that the State of Georgia does not have a formal statewide archaeological survey program. The large size of the state and the nature of archaeological resources (in the ground or under water) make costs of such surveys prohibitive. However, for more than 40 years the Department of Anthropology at the University of Georgia has served as a central file for archaeological information. The Office of Preservation of the Georgia Department of Natural Resources forwards archaeological information generated by its programs to the file: Therefore, the State Archaeological Site File at the University of Georgia constitutes the official inventory of archaeological resources for Georgia's historic preservation program. The file contains much information about the location and type of archaeological sites. Given that most of Georgia's history, pre-European settlement, is contained exclusively in the archaeological record, information about these resources must be protected. Archaeological sites susceptible to vandalism and looting, and therefore exact locations of these sites are kept confidential order to protect the resources.

The State has identified 26 archaeological sites within Berrien County, but this number is probably low when considering the county's long history and continuous habitation. If there is any doubt as to the existence of an archaeological site or one is found, the Georgia Department of Natural Resources should be contacted.

Assessment

Through research in Berrien County (including interviews, driving the roads and researching written material), it has been discovered that Berrien County, along with its cities, have had a very rich history. It began with fanning by the early settlers and changed in part to commercial enterprise in small towns with the coming of the railroads and mechanization. These towns and communities centered around different

moneymaking industries but all had at least one thing in common; they contained many commercial buildings, schools, churches and homes of significant historic importance. Not only can important historic buildings be found in the cities and towns but they can also be found spread throughout the county on farms and lots. It is not uncommon to find log structures in the county. Some of these structures continue to be used as homes, barns, outbuildings, and many are in jeopardy of being lost.

A place with so many significant historic structures such as Berrien County needs to take any measures possible to preserve these bits of history because once they disappear, they are gone for good. The first measure that should, be taken is the establishment of a historical society or body of people interested in the preservation of these resources. The next step would be to organize a detailed survey of all the historic resources in the county and the cities. This should lead to other measures like writing grants applications for specific preservation projects, National Register Nominations, workshops and promoting an overall awareness and new attitude towards our heritage and the resources associated with it. Some preservation measures that may assist in this effort are listed and explained below.

National Register of Historic Places

The National Register of Historic Places is a list of historic properties in the United States that are worthy of preservation. This official list is kept and maintained by the Department of the Interiors National Park Service. The National Register includes buildings, structures, sites, districts, and objects of historical significance.

To be listed on the National Register, a property must meet the "Criteria for Evaluation". These criteria require that a property be old enough to be considered historic (generally at least 50 years old) and that it still look and be pretty much the way it was in the past. In addition, the property must: (a) be associated with events that have made a significant contribution to the broad patterns of our history; or (b) that are associated with the lives of persons significant in our past; or (c) that embody distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or(d) that have yielded, or may be likely to yield, information important in prehistory or history.¹⁸

Listing on the National Register, helps preserve historic properties. It provides recognition of a property's historical significance. In. doing so, it identifies properties for planning purposes and ensures that they will be taken into account during the planning of state and federally assisted projects. Owners of National Register properties may qualify for federal historic preservation grants or tax benefits gained through the charitable

¹⁸ http://www.achp.gov/nrcriteria.html, October 17, 2003

contribution of preservation easements to nonprofit organizations. Owners of income producing properties listed on the National Register are eligible for federal tax credits for rehabilitation work meeting preservation standards.

Georgia Register of Historic Places

The Georgia Register of Historic Places is similar to the National Register except that it is only a listing of important historic properties for the State of Georgia. The Historic Preservation Section of the Georgia Department of Natural Resources administers this program. The Georgia Register does however; qualify a property owner to apply for State Tax Incentives. These incentives provide tJlle owner an 8-year freeze on property tax assessments on historic property, which has undergone substantial rehabilitation.

Federal Tax Incentives

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

State Tax Incentives

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

Georgia Historic Resources Survey

Before beginning to preserve the significant historic resources in our state, Georgians must first identify what there is in our communities that need preserving. The Georgia Historic Resources Survey, an ongoing, statewide survey program of older buildings and structures, does exactly that. This initial step plays an essential role in a community's preservation efforts and facilities wise decisions about preserving buildings.

There are many other preservation tools besides the ones previously described. Many of these exist in the form of preservation technical assistance and grants. Technical assistance on preservation issues can be obtained from the Preservation Planner at the Southeast Georgia RDC, the Georgia Department of Natural Resources Office of Preservation, the National Park Service, the Georgia Trust for Historic Preservation, the National Trust for Historic Preservation, schools and universities, some local governments, local preservation groups, and agencies as well as from some architects and engineers.

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

HISTORIC RESOURCES

The preservation of historic and archeological resources can have a positive impact on Berrien County's quality of life, visual appeal, tourism potential, downtown economics, and overall economic development potential. In addition, the preservation of historic properties and landscapes is an important aspect of maintaining a community's sense of place and pride. Continued interest in local heritage is also an important factor in retaining a community vision and understanding its past.

HISTORICAL SKETCH OF BERRIEN COUNTY

The area now known as Berrien County was not a part of the land granted to Oglethorpe and the Georgia Trustees by King George III of England when Georgia was colonized in 1733. It was acquired instead from the indian tribes which inhabited the area. The lands now comprising South Georgia extended from the Chattahoochee River on the west to present day Wayne County on the east. In 1818, the Georgia Legislature divided these new territories into three large counties: - Appling, Early, and Irwin. Berrien County was originally part of Irwin County, and then part of Lowndes County which was created in 1825. Berrien County was forn1ed out of Lowndes County in 1856.

People inhabited this area long before it was called Berrien County. In 1825, people from Emanuel, Bulloch and other older counties in Georgia, as well as some from South Carolina, began moving to the area. Other Georgia counties that people moved from include: Montgomery. Telfair, Tattnal, Irwin and Wayne counties. Some of the very early family' names to come to the area include: the Sirmans, Lees, Roberts, Knights and Giddens. Most of these names are still very prevalent in the county today.

Berrien County was named after John McPherson Berrien who was a famous politician. He was born in 1781 near Princeton, New Jersey. His father was Major John Berrien who was captain of the Georgia line in the Revolutionary War. His mother was Margaret McPherson, daughter of Captain John McPherson, who commanded the Britannia in the Provincial Navy.

John began his political career very young. After completing his studies at the early age of fourteen, he returned home to Savannah and worked with Joseph Clay, a distinguished attorney and Federal judge.

In 1799, at the age of 17, John was admitted to the Georgia Bar and began his practice of law. During the next few years, his career blossomed and in 1809, he was selected as Solicitor General of the Eastern Circuit and became the judge of that circuit in the same year. During his time as judge, the country became involved in a war with England in which John served.

In 1822, he was elected to the upper house of the Georgia Legislature and made chairman of the Judiciary Committee. In 1824, he became a United States Senator. He was instrumental in many important bills and in 1829, during the debate on his celebrated tariff protest, he was saluted as the "American Cicero."

Later, when General Jackson was elected President, John Berrien accepted a seat in his Cabinet as Attorney General. In June of 1831, he resigned this position to retire. He lived privately for the next ten years, but in 1841 Judge Berrien was again called to the United States Senate where he served for the next decade

In 1852, Senator Berrien resigned his seat in the Senate and retired again. In 1855, Judge Berrien performed his last political act when he presided over the deliberations as Chairman of the American Party Convention. Shortly thereafter, he passed away.

Shortly after his death, the Legislature named a newly formed county - Berrien - in his honor, emphasizing the popular wish that the memory of the man who had contributed so much to the glory of the Commonwealth of Georgia should be permanently held in the affections of the people.

The courthouse continues along with many other historic buildings to exist in Berrien County today. The county has a wealth of these types of resources.

BRIEF HISTORY AND INVENTORY

Nashville

Nashville came into existence when Berrien County was formed in 1856. It was located in the 10th Land District on Land Lot Number 189. Nashville was to be the county seat of Berrien County and was therefore located approximately near the center of the county.

Nashville is said to be named after Mr. Simon Nash. It is said that the people were debating what to name the town and some of them were sitting on the porch of a downtown shop when Simon Nash rode up. He had been drinking and jokingly suggested the name "Nashville." Though he was joking, the name seemed fitting and was immediately accepted

The following is a description of the Town of Nashville by Benjamin T. Allen who was an early resident of Nashville. Allen describes Nashville in the year 1867.

"The industries in and about Nashville in 1867 were for the most part farming. Taking the courthouse square as the center, there was a farm to the north, a farm to the east, a farm to the south, but to the west was not a farming district. On the farm north of the courthouse square a man by the name of Goodwin lived. As visitors to the Goodwin family, I became acquainted with Miss Turner (later Mrs.. Friar, mother of Editor Friar of the Douglas Enterprise, and still later, Mrs. Kendrick).

Mr. and Mrs. Bradford and their three maiden daughters lived to the east of the courthouse square. They owned ten or twelve acres of land in that direction, parallelogram in shape. On these, the three young women raised corn, cotton, sweet potatoes, sugar cane, rice and peas. They had their small herd of cattle, a few pigs, an ox, and chickens galore. In fact, they provided a handsome living for themselves and their parents.

This property afterwards became that of Dr. William P. Goodman. He built a wooden office building on the south corner, a wooden residence in the center, and on the north comer is the Hansel Hotel. This latter is a transformation of the old wooden courthouse which Dr. Goodman bought, moved to this corner and remodeled into a very comfortable small hotel.



Alapaha Colored School

T. Peeples and B. F. Whittington (Peeples & Whittington), the local firm of attorneys. Both members of the firm reared large families of children, all of whom have taken high rank as citizens, among them Judge Henry B. Peeples and Rev. B. F. Whittington. H. M. Tally as a drugstore and doctor's office occupied the other half of the building. Dr. Talley married a daughter of Judge H. T. Peeples and a sister of Judge H. B. Peeples, and they were the parents of Hon. J. N. Talley, now one of the most prominent attorneys of Macon, Georgia.

On the comer where the Peeples' brick block is now located was the wooden store in which my father conducted a mercantile business during the year 1867.

Across the street from the northwest comer of the courthouse square where the Tygart store is now located, was a wooden store building in which Mr. James Slater (father of William Slater who a few years later was drowned in Lake Iamonia, south of Troupville) did business. This building was used in later years during the regime of the Farmers' Alliance, as a farmer's co-operative store. While it was being so used, it was burned - one of the very few fires Nashville has ever experienced. A man by the name of Bussey, the manager of the business, was charged with the burning. Do not think he was ever prosecuted but he was forced to leave the county in disgrace.

There were two or three other wooden stores across the street from the west side of the courthouse square, but only one was occupied. It was opposite the southwest corner. J. B. Parramore (father of John H. Parramore, who developed into a mathematician and taught arithmetic in every section of this country) did a small business in this building."

Though the Town of Nashville had been in existence since the 1850's and was chosen in the beginning to be the county seat, it was not incorporates as a city until 1892. Since the time of its incorporation, Nashville has grown steadily. It started with a few wooden buildings housing offices arid stores and a few houses. Today, the city retains many buildings and structures from the turn of the century and some earlier. It also retains many homes built before the turn of the century. Nashville as many buildings of historical importance. Concentrations of historic buildings can be seen in and around Nashville. The buildings in these areas might be eligible for listing on the National Register of Historic Places either individually or in groups.

At present, there are four buildings in Berrien County listed on the National Register of Historic Places. The Berrien County Courthouse was listed as part of a multiple resource nomination of all historic courthouses in Georgia, which was done in 1977. The Berrien County Jail was listed in 1982. In 1995, the Harrison, William G., House was listed, and the Alapaha Colored School was list in 2002.¹⁹

Alapaha

The first white settlers began arriving in Alapaha around 1820 or 1830. They built their first houses in a crude fashion which consisted of poles covered with bark and cane. More wrote settlers began moving to Alapaha in the 1870's because of the land grants, the sawmill and the arrival of the B & W (Brunswick and Western) Railroad. Once the railroad arrived, Alapaha was then called either "The Station" or" Alapaha Station," The B & W Railroad was originally built from Waycross to Alapaha. The railroad terminated in Alapaha and the railroad company built a roundhouse and train depot there. The Town of Alapaha soon sprang up with buildings, houses, stores and warehouses. In 1899, the original train depot was replaced with a larger and nicer depot which still stands today and is used as the Alapaha City Hall.

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¹⁹ www.roadsidegeorgia.com/nrhp/berrien, October 17, 2003.

transport them elsewhere for sale. Alapaha grew into a large marketplace and retained this status for many years. It was not until the very early 1900's that the railroad began expanding its lines westward creating new markets, many of which were more convenient locations than Alapaha.

Today, Alapaha is once again a growing community. Its business district still exists in the original location with the abandoned railroad bed running through the center of town. The town maintains the railroad right-of-way as a linear park. Alapaha has preserved several historic buildings, including the old depot, which has been converted into a sheltered public gathering area and a city hall, which includes a historical museum. Alapaha also retains some residential neighborhoods that are important historic resources. These neighborhoods lie to the north, south and west of downtown. There are many historic churches and homes south of downtown that are valuable historic resources. The area also includes an old vernacular colored school that was built sometime in the 1920's. The building, though in poor condition, is very interesting in that the original structure has never really incurred any changes.

Alapaha contains a large number of historic resources, many of which are grouped together in neighborhoods. The groups of historic resources may be eligible for the National Register of Historic Places.

Ray City

Ray City first came into being as "Ray's Mill" because of a corn meal and grist mill (water powered) that was owned and operated by T .M. Ray. Ray's Mill started with just the mill and grew only a small amount over the years. In 1909, it was decided that Ray's Mill should incorporate as a city. R.D. Swindle was appointed to serve as temporary mayor until an election could be held in January of 1910.

In 1915, there was discussion among the residents about changing the name of the town because it implied that the place was just another sawmill. A contest. for a new name was started and the name Ray City was suggested by Mrs. R.D. Swindle. She received \$10 for the suggestion of the prize-winning name.

Sometime after 1915, a large lumber company decided to locate in Ray City. It ran for many years and changed ownership several times over that period. The sawmill closed down just before World War I. Some thought that closing the mill would cause Ray City to die, but this proved to be untrue.

The main industries for Ray City in the early days were a sawmill, turpentine distillery, cross tie production and farming. The farmers grew cotton until the boll weevil destroyed the crops. Soon, bright leaf tobacco was introduced and it replaced cotton as the major cash crop.

With the closing of the mill and the Great Depression, Ray City was hard hit. However, in 1940, Moody Air Force Base was established about 8 miles to the south and things

began to change. Jobs were created and some military personnel began moving to Ray City. This helped the economy but it never returned to the level of business that existed when the large mills were in operation.

Today, Ray City is a quiet town. A small downtown core exists with residential neighborhoods surrounding it. The town retains some historic buildings in its business district as well as some historic residential neighborhoods nearby.

Enigma

John Ball started the Town of Enigma sometime around 1878. He moved his family to the site, which was located on the Brunswick and Western Railroad, and started a turpentine business. Later a sawmill was opened and for many years, the town was called Gunn and Weston. Mr. Ball, though wanted a different name for the town and he applied for either of two names: Lax or Enigma. He was notified that another town had already been named Lax so he should name the town Enigma.

Over the years, Enigma grew slowly with a small number of homes, businesses, schools and churches being built. In 1906, the town was incorporated and the first mayor was P.G. Easters. By 1936, Enigma had electric lights and by 1955, the city had its own water system.

Enigma has been through some rough times over the years put remains today a small town in Berrien County. It is a quiet, peaceful place with a small downtown containing a fire department, bank and city hall along with a few other businesses. It also has some residential areas surrounding the downtown. Many of the buildings in downtown, as well as in the neighborhoods, are historic

ARCHAEOLOGY

All counties in Georgia contain prehistoric and historic archaeological resources. However, some areas of the state have been more intensely investigated than others and therefore more is known about those areas than others. The main reason for this is that the State of Georgia does not have a formal statewide archaeological survey program. The large size of the state and the nature of archaeological resources (in the ground or under water) make costs of such surveys prohibitive. However, for more than 40 years the Department of Anthropology at the University of Georgia has served as a central file for archaeological information. The Office of Preservation of the Georgia Department of Natural Resources forwards archaeological Site File at the University of Georgia constitutes the official inventory of archaeological resources for Georgia's historic preservation program. The file contains much information about the location and type of archaeological sites. Given that most of Georgia's history, pre-European settlement, is contained exclusively in the archaeological record, information about these resources must be protected. Archaeological sites susceptible to vandalism and looting, and therefore exact locations of these sites are kept confidential order to protect the resources.

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Georgia Historic Resources Survey

Before beginning to preserve the significant historic resources in our state, Georgians must first identify what there is in our communities that needs preserving. The Georgia Historic Resources Survey, an ongoing, statewide survey program of older buildings and structures, does exactly that. This initial step plays an essential role in a community's preservation efforts and facilities wise decisions about preserving buildings.

There are many other preservation tools besides the ones previously described. Many of these exist in the form of preservation technical assistance and grants. Technical assistance on preservation issues can be obtained from the Preservation Planner at the Southeast Georgia RDC, the Georgia Department of Natural Resources Office of Preservation, the National Park Service, the Georgia Trust for Historic Preservation, the National Trust for Historic Preservation, schools and universities, some local governments, local preservation groups, and agencies as well as from some architects and engineers.

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

GOAL 1

Identify, conserve and protect the broad range of historic resources in Greater Berrien.

Policy 1.1:

Areas, structures and districts of significant architectural and historic value should be so designated and approved by appropriate city and county authorities. Preservation techniques, including local designation through local historic district ordinance, should be encouraged. Additional techniques to support these activities include various state and federal programs including historic register listings, tax incentives and credit, and the Georgia Main Street Program.

Policy 1.2:

To develop a public awareness/education element to encourage participation in preservation activities.

Policy 1.3:

Greater Berrien should preserve and protect for future generations their scenic, cultural, historic landscapes, buildings and archaeological sites. Special management practices should be applied to those areas possessing unique natural, cultural or historic features.

GOAL 2

Establish and maintain conservation of areas where natural processes would be endangered by development (i.e. in floodplains, wetlands, groundwater recharge areas, drainage ways, etc.).

Policy 2-1

Areas where critical natural processes would be endangered by development should be avoided. The areas most directly impacted include drainage ways; floodplains, wetlands, and groundwater recharge areas.

Policy 2-2

An adequate minimum flow and water quality should be maintained in all rivers and streams to ensure a productive fish habitat and protection of aquatic life and scenic qualities.

Policy 2-3

Development should not pollute, exhaust or interfere with the natural replenishment cycles of groundwater.

Policy 2-4

State or federal agency rules and regulations mandating local enforcement programs should be accompanied with adequate staff and financial assistance to help local units in their implementation programs. These include local floodplain management requirements, soil and sedimentation control requirements, wetlands protection, river corridors, and similar laws designed to prevent degradation of the natural environment.

Policy 2-5

Development should not grossly impair the functioning of vital natural systems. Land use should be primarily determined by natural characteristics, suitability of the land, and the availability of urban services.

Housing Element

Inventory of existing Conditions

General Information

It is important to take a close look at the existing housing supply in Berrien County to determine the number and types of housing needed in the next 25 years. A tabular summary of state, county, unincorporated areas, and city-housing data is presented to familiarize the reader with comparable and contrasting housing data and trends.

Types of Housing Units

Interpreting housing statistics from the Census Bureau is complicated by changes in definitions and reporting standards. In 1970 and 1980, housing characteristics were presented only for year-round housing units. In 1990 and 2000, housing characteristics are shown for all housing units that include year-round units plus seasonal, migratory and recreational units. Also, note that the Bureau of the Census changed the way it reports seasonal, migratory and recreational units in 1990. Care should be utilized in interpreting these statistics.

Inventory Types of Housing in Berrien County

From 1980 to 2000, year round housing units increased to 1,987 units for all of Berrien County. Of this increase in units, 89.8% (1,775) were manufactured homes. During this same twenty-year period, 74 single-family homes and 131 multi-family units were added to the Berrien County housing supply.

Manufactured homes constituted 16.4% of the housing supply in 1980 and now in the 2000's represent 36.8% of all housing units. Thirty-percent or more of the housing units in Alapaha, Enigma, and Ray City are manufactured homes.

In 2000, manufactured housing constituted 12% of housing stock statewide. In Berrien County 36.8% of total housing stock is manufactured housing. Of the 36.8% of total housing stock located in Berrien County 44.6% of all manufactured housing is located in the incorporated cities of Berrien County.

The total housing units in the Southeast Georgia Regional Development Center's (SEGa RDC) region is 66,081. Of this number (66,081), 23,628 (35.8%) constitute manufactured housing in the region. Berrien County is similar to the SEGa RDC region in composition

of manufactured housing units. However, both Berrien County and the SEGa RDC region's percentage (36.8% and 35.8%) of manufactured housing stock is greater than the state's percentage (12%) of single–family housing units.

	14	010 111			
	Housing C	Characteristi	cs		
Units	1980	1990	2000	1980-200 Change	0 Change %
Berrien County					
Single Family Housing	4,054	3,757	4,128	74	1.8%
Manufactured Housing	839	1,769	2,614	1,775	211.6%
Georgia					
Single Family Housing	1,525,070	1,712,259	2,201,467	676,397	44.4%
Manufactured Housing	152,948	327,888	394,938	241,990	158.2%
SEGa RDC					
Single Family Housing	31,457	34,548	37,314	5,857	18.6%
Manufactured Housing	7,948	14,172	23,628	15,680	197.3%
Source: U.S. Bureau of Censu	is, 1980, 1990	, and 2000.			

Table H1

The incorporated areas of Berrien County clearly represent this trend. These incorporated areas single-family housing stock is increasing at a lesser rate than, in the majority of cases, multi-family units and manufactured homes.

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

In Berrien County, single-family housing (stick-built) units have dropped from 83.6% of the total housing units in 1980 to 63.2% in 2000. From 1980-2000, single-family housing has increased in the state of Georgia 44.4%. In the SEGa RDC's region in 2000, single-family housing accounted for 71.5% of housing stock.

In 2000, single-family housing units constituted 67.1% of housing stock statewide. In Berrien County 58.1% of total housing stock is single-family housing. Of the 58.1% of total housing stock located in Berrien County 48% of all single-family homes are located in the incorporated cities of Berrien County.

The total housing units in the Southeast Georgia Regional Development Center's (SEGa RDC) region is 66,081. Of this number (66,081), 37,314 (56.5%) constitute single-family housing in the region. Berrien County is similar to the SEGa RDC region in composition of single-family housing units. However, both Berrien County and the SEGa RDC

region's percentage (58.1% and 56.5%) of single-family housing stock is less than the state's percentage (67.1%) of single–family housing units.

Berrien County has added approximately 74 single-family homes and 1,775 manufactured homes annually since 1980. Manufactured homes have increased 1,775 units, an increase of 211.6% from 1980 to 2000. Statewide, the number of manufactured homes has increased 158.2% in the same twenty-year period. Multi-family units have risen by 59.5% from 220 to 351 units in the last twenty years. Over 84.6% of the multi-family units are located in the City of Nashville. Since 1980, the unincorporated areas have lost 35 multi-family units. This means that the Cities of Alapaha, Nashville, and Ray City have the majority of multi-family units in Berrien County.

Seasonal and recreational homes comprise 1.5% of all housing in the state of Georgia. In the unincorporated areas of Berrien County, less than 1% of housing is in the "seasonal and recreational" category. The incorporate areas of Berrien County contain approximately 99% of the homes in the "seasonal and recreational" category. "Seasonal and recreational" housing comprises 8.9% of housing in the City of Alapaha; 7.1% in the City of Enigma; 2.1% in the City of Nashville; and 10.5% in the City of Ray City.

Migratory housing comprises less than 1% of all housing in the state of Georgia. This trend is reflected in the Berrien County area. According to US Census figures, the City of Nashville contains approximately 99% of migratory housing in Berrien County. US Census numbers indicate that no migratory housing is available in the unincorporated areas of Berrien County.

According to the Berrien County Code Enforcement and Zoning Division, the amount of migratory housing is greater than the US Census indicates. Based on locate knowledge and best estimates approximately 45 migratory homes exist in Berrien County.

	State of Georg	ia mousing	Characteria	JUICS		
Units				1980-2000 Change		
Umits	1980	1990	2000		%	
Total Units	2,012,640	2,638,418	3,281,737	1,269,097	63.1%	
Single Family	1,525,070	1,712,259	2,201,467	676,397	44.4%	
Multi-Family	334,622	598,271	681,019	346,397	103.5%	
Mobile Homes	152,948	327,888	394,938	241,990	158.2%	
Seasonal/Recreation						
al		33,637	50,064	16,427	48.8%	
Migratory		617	1,290	673	109.1%	

Table H2State of Georgia Housing Characteristics

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

Berrien County Housing Characteristics

Units				1980-200	0 Change
Units	1980	1990	2000	Change	%
Total Units	5,113	5,858	7,100	1,987	38.9%
Single Family	4,054	3,757	4,128	74	1.8%
Multi-Family	220	332	351	131	59.5%
Mobile Homes	839	1,769	2,614	1,775	211.6%
Seasonal/Recreational		51	137	86	168.6%
Migratory		16	45	29	181.3%

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

Table H4The City of Alapaha Housing CharacteristicsUnits1980-2000 Change198019902000 Change

C mus	1980	1990 2000 Change 323 323 56 199 181 -35 19 17 5 105 125 86 4 29 25 1 0 -1	%		
Total Units	267	323	323	56	21.0%
Single Family	216	199	181	-35	-16.2%
Multi-Family	12	19	17	5	41.7%
Mobile Homes	39	105	125	86	220.5%
Seasonal/Recreational		4	29	25	625.0%
Migratory		1	0	-1	-100.0%
Courses U.C. Damager of Con-	1000	1000 and	3000		

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

Table H5Enigma Housing Characteristics

Units				1980-20	00 Change
Units	1980	1990	2000	Change	%
Total Units	244	266	365	121	49.6%
Single Family	212	179	175	-37	-17.5%
Multi-Family	4	1	0	-4	-100.0%
Mobile Homes	28	70	190	162	578.6%
Seasonal/Recreational		1	26	25	2500.0%
Migratory		1	0	-1	-100.0%

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

	1 (66)11 / 111	e nousing	, characte	Institus	
Units				1980-20	00 Change
Units	1980	1990	2000	Change	%
Total Units	1,879	2,030	2,121	242	12.9%
Single Family	1,555	1,368	1,439	-116	-7.5%
Multi-Family	132	286	298	166	125.8%
Mobile Homes	192	376	384	192	100.0%
Seasonal/Recreational	1		45	45	4400.0%
Migratory		0	15	15	100.0%
Common U.C. Downson of Com		000 and 200	00		

Table H6Nashville Housing Characteristics

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

	Ray Cit	ty Housing	g Characte	ristics	
Units				1980-20	00 Change
Units	1980	1990	2000	Change	%
Total Units	294	279	351	57	19.4%
Single Family	231	172	190	-41	-17.7%
Multi-Family	17	22	22	5	29.4%
Mobile Homes	46	85	139	93	202.2%
Seasonal/Recreational		2	37	35	1750.0%
Migratory		0	0	0	0.0%

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

Inventory of Age and Condition of Housing Stock

The housing table (H7) and chart (H1) for Berrien County and its cities show Greater Berrien County to have a higher percentage of housing "built before 1939" than the whole state of Georgia in 1980, 1990, and 2000. The number of homes "built before 1939" in Greater Berrien County has declined 39.9% since 1980 to 2000. A large number of the homes in Greater Berrien County "built before 1939" have been maintained and passed on to succeeding generations. Nashville in 2000 is the only city that has a similar percentage (6%) as Georgia in the "built before 1939" category. The other cities in Greater Berrien County have an average of 14% of homes "built before 1939."

Housing Built Before 1939

				1980-2000) Change
	1980	1990	2000	Change	%
Georgia	296,662	212,938	192,972	-103,690	-35.0%
Berrien	855	788	514	-341	-39.9%
Alapaha	62	81	40	-22	-35.5%
Enigma	61	48	52	-9	-14.8%
Nashville	188	164	127	-61	-32.4%
Ray City	76	70	54	-22	-28.9%
Source: U.S.	Bureau of	Census, 1	980, 1990	, and 2000.	



Chart H1 % of Homes Built Before 1939

Comparing the housing category "lacking complete plumbing' the percentage descent in the City of Enigma (90.0%) and Ray City (100.0%) mirrors that of the State (94.7%). However, there are 113 units which lacks complete plumbing and 72 (63.7%) of these units are located in the unincorporated areas. The City of Ray City has eliminated substandard housing, but the age of housing stock, out-dated electrical, and heating systems combined with deterioration promote the necessity to seek rehabilitation program funds. Field surveys have earmarked target areas in Alapaha, Enigma, Nashville, Ray City and the unincorporated portion of Greater Berrien. When compared to the SEGa RDC region as a whole Berrien County has the third lowest percentage of homes "lacking complete plumbing".

Percentage of Homes Lacking Complete Plumbing Facilities 1980-2000 Change 1980 1990 2000 Change %

	1980	1990	2000	Change	%	
Georgia	1.8%	1.1%	0.9%	-0.9%	-50.0%	
Berrien	3.3%	2.3%	1.0%	-2.3%	-69.7%	
Alapaha	8.2%	2.4%	3.4%	-4.8%	-58.5%	
Enigma	11.0%	4.1%	1.0%	-10.0%	-90.9%	
Nashville	2.9%	1.1%	1.2%	-1.7%	-58.6%	
Ray City	2.3%	0.0%	0.0%	-2.3%	-100.0%	

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

Chart H2 % of Homes Lacking Complete Plumbing Facilities



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

		Geo	orgia Housing Units		
				1980-2000 (Change
	1980	1990	2000	Change	%
Units Built before 1939	296,662	212,938	192,972	-103,690	-35%
Units Lacking Complete Plumbing Facilities	35,769	28,462	29,540	-6,229	-17%
Units Lacking Kitchen Facilities	75,618	28,462	31,717	-43,901	-58%

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

<u>Table H11</u> Berrien County Housing Units

				1980-2000 Change		
	1980	1990	2000	<u>Change</u>	%	
Units Built before 1939	855	788	514	-341	-39.9%	
Units Lacking Complete Plumbing Facilities	171	138	72	-99	-57.9%	
Units Lacking Kitchen Facilities		177	130	-47	-26.6%	

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

<u> Table H12</u>

Alapaha Housing Units

-			1980-2000 Change	
1980	1990	2000	Change	%
62	81	40	-22	-35.5%
22	8	11	-11	-50.0%
	5	30	25	500.0%
	62	62 81 22 8	62 81 40 22 8 11	1980 1990 2000 Change 62 81 40 -22 22 8 11 -11

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

Table H13

Enigma Housing Units

					0 Change
	1980 1990 2000			Change	%
	61	48	52	-9	-14.8%
Units Built before 1939					
Units Lacking Complete Plumbing Facilities	27	11	4	-23	-85.2%
Units Lacking Kitchen Facilities		18	10	-8	-94.2%

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

<u>Table H14</u> Nashville Housing Units

				1980-200	00 Change
	1980	1990	2000	Change	%
	188	164	127	-61	-32.4%
Units Built before 1939					
Units Lacking Complete Plumbing Facilities	55	24	26	-29	-52.7%
Units Lacking Kitchen Facilities		62	89	27	43.5%

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

				1980-20	000 Change
	1980	1990	2000	Change	%
Units Built before 1939	76	70	54	-22	-28.9%
Units Lacking Complete Plumbing Facilities	7	0	0	-7	-100.0%
Units Lacking Kitchen Facilities Source: U.S. Burea	u of Census, 1	0 980, 1990, and 2	1 2000.	1	100%

Table H15 Ray City Housing Units

Inventory of Owner and Renter Units

Owner occupied units has risen by 1.8% from 64.8% to 66.6% between 1980 and 2000. This same trend has occurred in Georgia. Common to rural Georgia is the placement of a manufactured home as a permanent residence. Berrien County is no exception. The level of personal income allows the residents to purchase an affordable manufactured home and this has triggered the rise of owner occupancy in Berrien County. The affordability of manufactured homes has halted the decline in number of owner occupied housing in the incorporated areas of the county.

In Berrien County (Table H2), rental occupancy has correspondingly dropped by 13.1% between 1980 and 2000. There have been several shifts in population and the number of renter occupied has increased slightly. Overall, the number of renter occupied units gained from 1,336 to 1,528 (14.4%). Two-thirds of all rental units are located within the cities.

Rental units are mostly located within cites in South Georgia due to the fact that infrastructure is available to support high-density residential development. The incorporated areas of Berrien County do not extend infrastructure development out into the unincorporated areas of the county.

Table H15-H24 presents information pertaining to housing characteristics in an easily digestible format. This affords individuals the opportunity to observe local trends and compare them to state trends.

When comparing tables H16 and H17 Berrien County had a 42.6 % increase in owner occupied units and a 65.4% increase in owner vacancy rate from 1980-2000. The State of Georgia had a 66.8% increase in the owner occupied units and a 24% decrease in owner vacancy rate. In Berrien County, the renter occupied units increased by 14.4% and a 13.1% decrease was noted in renter vacancy rates. Where as the State of Georgia had a

49% increase in renter occupied units and a 30.7% decrease in the renter vacancy rates. The numbers indicates that growth in Berrien County mirrors that of the State of Georgia.

Between 1980 and 2000 the number of statewide the number of statewide vacant housing units rose from 140,988 to 275,368, a 95.3% increase. In 2000, Georgia had a homeowner vacancy rate of 1.9% and a renter vacancy rate of 8.5%. Berrien County had a homeowner vacancy rate of 2.15% and a renter vacancy rate of 11.47%. The high rate of owner occupancy has stabilized the housing market in Berrien County and it is mirroring the state rates. The communities of Alapaha, Enigma, Nashville, and Ray City range from .47% to 3.44% for owner vacancy rates and 2.97% to 13.30% for renter vacancy rates. The high rate of owner occupancy has stabilized the housing market in these local municipalities.

	<u>Tab</u>	<u>le H16</u>			I
	State of Georgia Ho	ousing Chara	cteristics		
Units				1980-200	0 Change
Ollits	1980	1990	2000	Change	%
Owner Occupied Units	1,216,459	1,536,759	2,029,154	812,695	66.8%
Owner Vacancy Rate		2.5%	1.9%	-0.6%	-24.0%
Renter Occupied Units	655,913	829,856	977,215	321,302	49.0%
Renter Vacancy Rates		12.2%	8.5%	-3.7%	-30.7%
Source: U.S. Bureau of	f Census, 1980, 199	0, and 2000.			
	<u>Tabl</u>	<u>e H17</u>			
-	Berrien County Ho	using Charac	teristics		
			10	80-2000 CI	nange

Derrien	County In	Justing Chu	acteristics		
Units				1980-200	0 Change
Onits	1980	1990	2000	Change	%
Owner Occupied Units	3,318	3,804	4,733	1,415	42.6%
Owner Vacancy Rate		1.30%	2.15%	0.9%	65.4%
Renter Occupied Units	1,336	1,345	1,528	192	14.4%
Renter Vacancy Rates		13.20%	11.47%	-1.7%	-13.1%
Source: U.S. Bureau of Census	s, 1980, 199), and 2000.			

The entry of Anapana Housing Characteristics									
Units				1980-200	0 Change				
Onits	1980	1990	2000	Change	%				
Owner Occupied Units	175	218	211	36	20.6%				
Owner Vacancy Rate		0.90%	0.47%	-0.4%	-47.8%				
Renter Occupied Units	78	65	60	-18	-23.1%				
Renter Vacancy Rates		13.20%	9.09%	-4.1%	-31.1%				
Source: U.S. Bureau of Census, 1980, 1990, and 2000.									

<u>Table H18</u> The City of Alapaha Housing Characteristics

	Table	H19				
	Enigma Hous	sing Cha	racteristi	ics		
Units		1980	1990	2000		
Owner Occupied Units		183	160	2000 226		
Owner Vacancy Rate		0.90%	1.20%	3.42%	6	
Renter Occupied Units		37	70	98		
Renter Vacancy Rates		9.80%	2.80%	2.97%	6	
Source: U.S. Bureau of Cen	sus, 1980, 1990), and 20	00.			
	<u>Table</u>	eH20				
Ν	ashville Hous	sing Cha	racteristi	cs		
Units	1980	19	90 200	0		
Owner Occupied Units	1,067	1,0	84 1,15	57		
Owner Vacancy Rate		2.1	0% 1.78	8%		
Renter Occupied Units	661	68	84 704			
Renter Vacancy Rates		15.9	0% 13.3	30%		
Source: U.S. Bureau of Cens	sus, 1980, 1990), and 20	00.			
		<u>le H21</u>				
R	ay City Housi	ing Char	acteristic		000 000	
Units	1000	1000	200			00 Change
	1980	1990	200		Change	%
Owner Occupied Units	161	152	16	-	7	4.3%
Owner Vacancy Rate	00	1.90%			1.55%	81.6%
Renter Occupied Units	80	85	13	U	50	62.5%

When comparing tables H22 - H24 Berrien County had a 24.6% increase in the Owner to

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

Renter Vacancy Rates

Renter Ratio, a 46.2% increase in Owner Vacancy Rate, and 12.9% decrease in Renter Vacancy Rate. The State of Georgia had a 11.9% increase in the Owner to Renter Ratio, a 24% decrease in Owner Vacancy Rate, and 30.3% decrease in Renter Vacancy Rate. The numbers indicates that growth in Berrien County mirrors that of the State of Georgia.

15.00%

8.45%

-6.6%

-43.7%

Cost of Housing Inventory

Table H25 provides insight into the cost of owning and renting housing in Georgia. Median values for owner-occupied housing and median rent for rented units reported in 1980, 1990, and 2000 Censuses are listed. Note that these figures are estimates provided by owners and renters filling out census questionnaires.

In addition, 25th percentile and 75th percentile values as reported in the 2000 Census are provided. Combined with the median (e.g. the "middle" value), useful insights into the cost of housing can be obtained. Note that these dollar values are in the "actual dollars" of the year reported, not in "constant dollars" that removes the effects of inflation.

Table H26 shows median values of owner-occupied housing from 1990-2000 in the SEGa RDC Region, Berrien County, and Georgia increasing at a similar rate. Thirty percent of household income is a generally accepted maximum that should have to be spent on housing costs. Renters spend nearly 20% of total household income on housing cost, a smaller percentage than homeowners. Homeowners spent nearly 35% of total income on housing cost. When compared to the SEGa RDC, Berrien County was very similar in housing cost. The citizens of Berrien County, when compared to the whole of Georgia, pay 40% less in rent, 33% less in monthly housing cost, and 37% less for a home.

			Table H22			
		Housing	Occupancy C	omparison		
		198	80 – 2000 Cha	ange		
	1980	%	1990	%	2000%	%
	Owner		Owner		Owner	
Units	То		То		То	
	Renter		Renter		Renter	
	Ratio		Ratio		Ratio	
Georgia	1.85/1	NA	1.85/1	0.0%	2.07/1	11.9%
Berrien	2.48/1	NA	2.82/1	13.7%	3.09/1	24.6%
Co.						
Alapaha	2.24/1	NA	3.35/1	49.5%	3.51/1	56.7%
Enigma	4.94/1	NA	2.85/1	-42.3%	2.31/1	-53.2%
Nashville	1.61/1	N/A	1.58/1	-1.8%	1.64/1	1.9%
Ray City	2.01/1	N/A	1.78/1	-11.4%	1.29/1	-35.8%
Source: U.S. Burea	u of Census, 1980	. 1990. 2000.				

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

		0	Table H23 Occupancy Co 80 – 2000 Cha	-		
	1980	%	1990	%	2000%	%
	Owner		Owner		Owner	
Units	То		То		То	
	Renter		Renter		Renter	
	Ratio		Ratio		Ratio	
Georgia	N/A	2.5%	1.9%	-24.0%	N/A	2.5%
Berrien						
Co.	N/A	1.3%	1.9%	46.2%	N/A	1.3%
Alapaha	N/A	0.9%	0.05%	-94.4%	N/A	0.9%
Enigma	N/A	1.0%	2.7%	164.7%	N/A	1.0%
Nashville	N/A	2.1%	2.6%	23.8%	N/A	2.1%
Ray City	N/A	1.9%	5.0%	163.2%	N/A	1.9%
Source: U.S. Bures	u of Consus 108	1 1000 2000				

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

Table H24 Housing Occupancy Comparison 1980 – 2000 Change 980 % 1990 % 2000

	1980	%	1990	%	2000%	%
	Renter		Renter		Renter	
Units	Vacancy		Vacancy		Vacancy	
	Rate		Rate		Rate	
Georgia	N/A	12.2%	8.5%	-30.3%	N/A	12.2%
Berrien Co.	N/A	13.2%	11.5%	-12.9%	N/A	13.2%
Alapaha	N/A	13.2%	9.10%	-31.1%	N/A	13.2%
Enigma	N/A	2.8%	3.0%	7.1%	N/A	2.8%
Nashville	N/A	15.9%	13.3%	-16.4%	N/A	15.9%
Ray City	N/A	15.0%	8.5%	-43.3%	N/A	15.0%

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

Table H25

Housing Characteristics 1980-2000 Change 1990 % 1980 2000 Owner % % Units Owner Owner Median Median Median Value Value Value Georgia 0.0% 308.5% 481.3% 23,100 71,278 111,200 SEGa RDC 23,350 0.0% 39,400 68.7% 48,100 205.9%

70,700

291.0%

<u>Table H26</u> Housing Characteristics 1990-2000 Change									
	1990 Owner Median Value	%	2000 Owner Median Value	%					
Georgia	71,278	0.0%	111,200	156.0%					
SEGa RDC	39,400	0.0%	60,722	154.1%					
Berrien County	39,600	0.0%	70,700	178.5%					
Alapaha	33,100	0.0%	65,000	196.3%					
Enigma	31,000	0.0%	51,800	167.1%					
Nashville	38300	0.0%	64,700	169.0%					
Ray City	31,500	0.0%	59,500	189.0%					
Source: U.S. Bureau of Census, 1990, and 2000.									

Table H27 Housing Characteristics

Units	2000 Home Median Value	2000 Owner Median Monthly Cost	2000 Median Gross Rent
Georgia	111,200	1,039	613
SEGa RDC	60,722	694	346
Berrien County	70,700	698	369
Alapaha	65,000	645	242
Enigma	51,800	634	415
Nashville	64,700	682	362
Ray City	59,500	721	440
Source: U.S. Bureau	u of Censu	s, 1990, and	2000.

Table H28 Surrounding Counties Housing Characteristics

Atkinson	46,700	590	288
Units	2000 Home Median Value	2000 Owner Median Monthly Cost	2000 Median Gross Rent

65,400	701	
	721	370
60,900	715	404
58,100	704	343
62,200	759	394
87,600	851	495
82,600	818	431
	58,100 62,200 87,600	58,10070462,20075987,600851

PROJECTIONS OF HOUSING UNITS BY TYPE: 2005-2025

	Berrien	Alapaha	Enigma	Nashville I	Ray City
2005					
All Units	<i>,</i>			2,163.05	358.46
Single Family	4,228.00	177.38	174.13	1,470.66	194.18
Multi-Family	343.00	16.63	1	304.56	22.22
Mobile Homes	2,665.00	127.75	224.20	387.84	142.06
2010					
All Units	7,395.19	320.30	489.81	2,205.99	416.08
Single Family	4,321.02	173.48	173.25	1,503.01	198.45
Multi-Family	350.55	16.26	2	311.26	22.44
Mobile Homes	2,723.63	130.56	264.56	391.72	145.18
2015					
All Units	7,607.89	369.00	537.56	2,249.82	423.86
Single Family	4,416.08	169.66	172.39	1,536.08	202.82
Multi-Family	358.26	15.90	3	318.10	22.67
Mobile Homes		133.43	312.18	395.64	148.38
2020					
All Units	7,774.16	364.70	593.89	2,294.57	431.81
Single Family		165.93	171.53	1,569.87	207.28
Multi-Family		12.40	4	325.10	22.89
Mobile Homes		136.37	368.37	399.59	151.64
Multi-Family Mobile Homes 2020 All Units Single Family Multi-Family	358.26 2,783.55 7,774.16 4,513.23 366.14	15.90 133.43 364.70 165.93 12.40	3 312.18 593.89 171.53 4	318.10 395.64 2,294.57 1,569.87 325.10	22.67 148.38 431.81 207.28 22.89

2025

All Units 7,944.09 361.32 660.34 2,339.60 439.94 Single Family 4,612.52 162.28 170.67 1,604.41 211.84 **Multi-Family** 9.68 5 23.12 374.19 331.60 139.37 434.67 154.98 Mobile Homes 2,907.37 403.59 Source: Southeast Georgia Regional Development Center

Assessment of Current and Future Needs

The housing element has been analyzed using all information available to give a thorough view of housing in Berrien County. US Census information was compared to available local sources of information. The US Census when compared to local information was very similar.

Assessment of Housing Types

The numbers tell use that Berrien County is changing extemporary. After conducting several windshield surveys, interviews with members of local government, and realtors, it was discovered that Berrien County is becoming a bedroom community for some of the counties that are contagious to its borders.

The southern and western parts of Berrien County are experiencing growth due in part to a spillover effect. In the southern part of the county, Lowndes County is contagious to its border; and in the western part, Tift County is contagious to Berrien County's border. According to table H28 if you are citizen of Lowndes and Tift Counties you pay 16.3% less in owner cost if you live in Berrien County and if you are a renter you pay 20.3% less in Berrien County. Enigma is the western most city in Berrien County an is approximately 10 miles or a 15 minute commute from Tift County; and Ray City is the southern most city in Berrien County an is approximately 10 miles or a 15 minute commute from Tift county; and Ray City is the southern most city in Berrien County. This analysis lends credence to the fact that 44.7% of the workforce in Berrien County commutes to other counties for employment. This trend will increase the need for rental housing stock. When compared to the surrounding counties Berrien County has affordable and adequate housing for its residents.

Another contributing factor is how other counties are regulating growth. The surrounding counties have more sophisticated code enforcement and zoning rules and regulations, and the majority of these regulatory tools have been in place for several years. Berrien County does have code enforcement and zoning division, which performs exceptionally well with limited resources, however, the county is in the infancy stage of developing and enforcing the rules and regulations.

These contributing factors do influence growth in Berrien County. The question that most be asked is how will local governments deal with this increase with limited resources.

According to local subject matter experts, the majority of available lands that is suitable for housing has been built-upon in Berrien County.

Single-family homes that are on the market are being purchased and converted into rental properties. This trend will continue until the market is saturated with rental homes and it is no longer profitable.

According to table, H1 the amount of manufactured homes has increased from 1980-2000 by 211.6% in Berrien County. Manufactured housing having similar quality, lower cost per square foot, availability, and less stringent requirements for financing affords low to moderate-income family the opportunity to become homeowners. The decline of traditional single-family housing in Berrien County can be contributed directly to manufactured housing. Low to moderate income families in Berrien County are choosing manufactured housing as an alternative to more costly traditional single family housing.

According to projections, table H29, an overall increase in the number of housing units is expected to occur during the twenty- year planning period. This increase will occur for two reasons: (1) the county's population is projected to experience significant growth; (2) average household size is steadily declining and will likely continue to decline during the planning period. Currently, adequate housing and types of housing exists for the county's population. However, many local governments have recognized the need for improved quality in low income housing to maintain safety and a higher quality of life. The key to this improvement in quality often lies in consistent and active enforcement of existing building codes and regulations. In order to be able to house the impending population growth, the region's local governments must also ensure that the needs of low income, elderly and special needs residents can be met.

Assessment of Age and Condition of Housing Stock

According to the 2000 US Census, 76% of the available housing in Berrien County has been built between the years of 1939-1995. After conducting windshield surveys, interviewing local governments, and realtors the following conclusions were drawn concerning housing in Berrien County. Older homes in Berrien County appear on average to be maintained, thus providing for reasonable housing conditions. These homes are being converted to rental properties.

Ray City in Berrien County has eliminated substandard housing. In the City of Enigma, older homes are being converted to rental properties. Older owner-occupied homes in Enigma appear to be on average well maintained.

The projected growth rate for housing in the county is roughly proportional to the projected population growth rate. Areas with faster projected population growth also have been projected to maintain faster housing stock growth. Therefore, adequate numbers of housing units should be available to the region's future population. If the average number

of persons per household begins to drop more drastically, however, a higher rate of housing stock growth will be needed. Mobile homes will continue to comprise a large portion of the region's housing stock, ensuring that affordable housing will also be available. The growth of multi-family units is projected to continue to be slow throughout the planning period.

Housing is not managed adequately throughout the county. Few local governments enforce sufficient zoning, building codes, and subdivision regulations. This results in the existence of substandard housing, which is allowed to go unchecked. Many areas contain slum conditions because property owners are not regulated properly in the leasing of substandard housing units.

The county has addressed the environmentally sensitive areas with the passage of the Part V Environmental Ordinances and by having qualified code enforcement personnel. This effort of the county ensures that these areas are protected from housing development.

The current housing strategies reflect the county's desire to have and maintain affordable and safe housing for its residents. Many local governments have enforceable building codes and regulations and consistently enforce them. Many of the local governments proposal to enact further environmental protection regulations as they relate to housing development. The establishment of zoning, historic preservation, and the upgrade and maintenance of low-income housing are being discussed by many of the local governments. These items present the possibility of coordination between the county and local municipalities. Because so many local governments have similar agendas concerning housing development, cooperation concerning zoning, building regulations, environmental protection regulations, and historic preservation could give local governments the advantage of being strengthened by adopting similar policies.

It is recommended that Berrien County and its municipalities consider having a joint Code Enforcement and Zoning Department and a Joint Planning Commission. It is not whether the county and its municipalities want growth or not growth, growth is happening. The fact is that Berrien County is less costly to live-in than some neighboring counties has encourage individuals that are capable of purchasing single-family housing units to convert them to rental properties. At present, the majority of growth in Berrien County has been market driven.

It is recommended also that Berrien County and its municipalities consider employing a planner. The reason for a planner is to plan short-term and long term. Berrien County and its municipalities can with good planning can establish areas and/or development priorities. The municipalities within Berrien County need to encourage development in designated growth areas by annexing the territory and extending infrastructure to those designated areas. This is not being support at this time.

Infill development must be encouraged if municipalities are unwilling to annex and encourage development in designated growth areas. A careful study is need to determine if areas

Future Housing Demands and Trends in Berrien County

It has been suggest by some housing analysts that after the year 2000, the aging of the U.S. population would cause a downturn in the housing market. These housing have argued that as the nation population ages, the number of potential homebuyers should shrink, causing major price and sales activity declines.

The prime first-time homebuyers are currently those born between 1965 and 1979 - the Baby Bust Generation. This group is smaller than its predecessor generation, the Baby Boom. But while the starter home market may weaken as the Baby Bust moves through into its first-time home buying years, there are new special, or niche, markets - seniors, immigrants and minorities - developing that will counteract the negative impacts of the smaller Baby Bust Generation. Many of these potential homeowners will choose starter homes for their housing choice. A growing senior and minority population, as well as the influx of immigrants, represent potential new homeowners who will offset, at least partially, an otherwise decline in housing demand.¹

IMMIGRANTS AND HOMEOWNERSHIP

Recent years have witnessed the largest influx of immigrants to the U.S. in over 70 years. If the current rate of immigration continues through the rest of this decade, immigration in the 1990s will have reached a record-setting 10 million persons.

These foreign-born U.S. residents will form households, and those households will buy homes. Most immigrants enter the rental market when they move to the U.S., but as they establish financial security, they tend to become homeowners. It takes several years before recent immigrants make the move to homeownership. In 1996, the ownership rate of recent arrivals was only 14.7 percent, compared to 67.4 percent for native-born households. However, the longer an immigrant household remains in this country, the more likely it is to make the move to homeownership rates after six years of residence: the homeownership rate for foreign-born naturalized citizens is 66.9 percent.

SENIORS

The Baby Boom population is aging. Currently, nearly 21 million households are headed by individuals over the age of 65. By 2010, that number will increase to

¹ http://www.garealtor.com/february1999.htm, January 9, 2004.

over 25 million. Indeed, the age distribution of the U.S. population will change significantly over the first decade of the 21st century. The result will be a large number of older householders - those aged 65 and over.

If these "aging" Baby-Boomers mimic the behavior of current seniors, the majority of them will reside in single-family detached dwellings. The American Housing Survey (AHS) and the Health and Retirement Study (HRS) indicate that regardless of age or wealth, the vast majority of seniors - 74.9 percent - reside in single-family detached dwellings. The HRS also asked respondents planning to move to state their likely tenure status after they move. Of those planning to move, 63 percent stated that they planned to either buy or build their next residence; 28.1 percent planned to rent; 8.1 percent planned to move in with someone else (generally a relative).

With the aging of the population, the seniors housing market will continue evolving into one of the most active housing markets. Several demographic facts will drive the dynamics of this market niche. Most seniors who do move stay within their local market area. Most seniors are quite active and will be looking to buy new single family detached homes when they relocate. (This is contrary to perceived notions that most seniors move into retirement homes.) Their preferences will, however, differ from the traditional single-family housing. In many instances, seniors will be looking for homes that are easy to maintain (often single story) and near popular vacation/recreation areas. The statistics lend credence to the belief that those approaching retirement today have both the financial ability and desire to remain homeowners.

RACIAL AND ETHNIC DIVERSITY IN THE HOUSING MARKET

High immigration levels over the last two decades have resulted in substantial growth in the Hispanic and Asian population. These trends will cause the future U.S. housing market to be an increasingly diverse marketplace. While the White (non-Hispanic) population will still be the majority racial group, its rate of increase will slow dramatically. The population of Asian/Pacific Islanders will grow at the fastest rate, followed by Hispanics.

The U.S. Census Bureau projects that the non-Hispanic White population will increase from nearly 189 million in 1990 to 202 million by 2010. However, Asians and Pacific Islanders will increase at the fastest rate - from nearly 7 million to over14.4 million - over the same period. Hispanics will be the second-fastest growing group, increasing from 22.5 million in 1990 to over 41 million by 2010. The Black (non-Hispanic) population will increase from over 29 million to over 37 million.

The Census Bureau forecasts that in 2010, Hispanic households will grow to nearly 11.8 million and account for 10.4 percent of all households. At the same time, Asian households will increase to over 4.3 million, making up nearly 4.6

percent of the total. In addition, the number of American Indian households will rise to 907 thousand households.

IMPACT OF SPECIAL MARKETS ON HOUSING

These developing markets - immigrants seniors and minorities - will, at least partially, counteract any negative impacts of an aging population on the housing market. Immigration, while concentrated in certain metropolitan areas will have a profound impact on the rental and home buying markets, and some of those markets with large amounts of domestic out-migration are experiencing a tremendous influx of immigrants; these immigrants are potential homebuyers. Seniors, contrary to popular opinion, are likely to remain an important facet in the home buying market. They will choose homes that are easy to maintain and are near recreation areas. Finally, as the population becomes more racially and ethnically diverse, new potential homebuyers will develop.

GOALS AND IMPLEMENTATION

GOAL 1:

Ensure that all people within Greater Berrien have access to adequate and affordable housing.

Policy 1.1:

Housing development agenda in the Cities and Berrien County should address needs of the elderly, low and moderate income families, minorities, handicapped, and developmentally disabled persons.

GOAL 2:

Ensure in a equitable manner that existing residential structures and neighborhoods are preserved, improved and maintained.

Policy 2.1:

Housing development agenda should give priority to projects involved in preservation and maintenance of existing infrastructure: streets, walks, curbs, water, sewer and drainage systems, lighting and bridges.

Policy 2.2:

Neighborhood redevelopment projects should seek to conserve, rehabilitate, or relocate existing housing structures, in lieu of demolition, whenever it is feasible.

Policy 2.3:

The cities and county are encouraged to adopt, enforce, revise and update building codes where applicable as to permit new concepts in building technology.

Policy2.4:

Low interest loans and tax reduction activities or other alternatives should be developed to promote rehabilitation of existing housing.

COMMUNITY FACILITIES ELEMENT

RAY CITY GOVERNMENT

The City of Ray City is located in the southeast sector of Berrien County on GA Hwy 37, has an estimated population of 746 and encompasses two square miles. A mayor and four city council members govern the city. Ray City owns, manages, and maintains the Senior Citizens building located at 200-A Patten Avenue. A new municipal building was built adjoining the old city hall, which provides office space for the mayor, council members, clerk, and police department. Old city hall was remodeled and is used for council meetings and monthly court.

Ray City is a member of the Berrien County Chamber of Commerce and member of a joint city/county recreation board and joint Berrien County Housing Authority. Besides the Senior Citizen, building the City owns the library, old city hall, police station, street maintenance department, and municipal building.

CITY OF ALAPAHA GOVERNMENT

The City of Alapaha encompasses one square mile and is located on Hwy 82 & Hwy 129. A mayor and five council members serving two-year terms govern the City of Alapaha. Employed and/or owned by the City of Alapaha are city clerk, Public Works Department, Street Department, police department, library, and the Alapaha Depot Museum.

CITY OF ENIGMA GOVERNMENT

The City of Enigma has an estimated population of 869 and is the size of a 2-mile circle. A mayor and four council members govern Enigma. The City owns City Hall, police department, fire department, and street maintenance department.

CITY OF NASHVILLE GOVERNMENT

A mayor and six council members govern the City of Nashville with one seat being vacant at current time. City of Nashville owns and operates the library, City Hall, Community Center, Housing Authority, Conference Center, Extension Service, Chamber of Commerce, police department, fire department, street departments, and water and sanitation departments. Nashville's Street Department employs five full-time workers.

BERRIEN COUNTY GOVERNMENT

Berrien County is governed by a three-man commission, which includes a chairman, and vice chairman. Berrien County has a courthouse, police department, clerk, sheriff, and road department.

Water Supply and Treatment

City of Ray City

The City of Ray City offers water and sewer services to its residents. They currently serve 396 customers.

City of Alapaha

City of Alapaha offers water and sewer services to its residents. They currently serve approximately 300 customers.

City of Enigma

City of Enigma only offers water services to its residents, sewer services are by private septic tanks. The City currently serves approximately 425 customers with water.

City of Nashville

City of Nashville currently provides sewer and water services to 2200 customers.

Berrien County

Portable water is obtained from deep and shallow wells throughout the unincorporated areas of the county.

Private septic tanks provide sewage disposal for dwellings and businesses located in the County.

Solid Waste Management

City of Ray City

Ray City has a contract with Onyx Waste of Valdosta Georgia. Onyx provides the waste containers for both residential and commercial customers and the collection of Ray City's solid waste. Ray City does all billing and collection for solid waste services from their customers and reimburses Onyx each month for their cost of collection services. All MSW collected in Ray City is disposed of at the Pecan Row Landfill in Lowndes County, Georgia.

City of Alapaha

Alapaha is contracted with Onyx Waste of Valdosta Georgia who provides the waste containers for both residential and commercial customers and provides collection services for these customers. Onyx bills the City of Alapaha for their services and the City of Alapaha bills and collects fees for collection and disposal of solid waste from both the residential and commercial accounts. All City of Alapaha MSW is disposed of at the Pecan Row Landfill in Lowndes County, Georgia.

City of Enigma

The City of Enigma provides curbside collection and disposal of solid waste for residents and commercial accounts. The City bills and collects for these services.

City of Nashville

The City of Nashville is contracted with Onyx Waste of Valdosta Georgia who provides the waste containers for both residential and commercial customers and provides collection services for these customers. Onyx bills the City of Nashville for their services and the City of Nashville bills and collects fees for collection and disposal of solid waste from both the residential and commercial accounts. All City of Nashville MSW is disposed of at the Pecan Row Landfill in Lowndes County, Georgia.

Berrien County

The unincorporated areas of Berrien County's waste needs are serviced by contract to Rest EZ Waste Services. Rest EZ provides curbside collection for all residents that request this service, they also provide containers and pickup service for commercial customers, and operate one manned site for disposal of solid waste in the county. All MSW collected by Rest EZ is disposed of at the Atkinson County SR 50 Landfill in Willacoochee, Georgia.

Public Safety

City of Ray City

The Ray City Police Department consists of one full-time and one part-time employee. All dispatching is done by Berrien County and prisoners are housed in the Berrien County jail. Ray City has a volunteer fire department, which is located in the middle of town. The Ray City VFD consist of 20 volunteers with a Class 8 rating and three trucks.

City of Alapaha

The City of Alapaha's police department is located in City Hall and employs one fulltime and one part-time officer. They have no dispatcher and prisoners are housed in the Berrien County jail. The City of Alapaha has a 13 member, Class 8 rating volunteer fire department. The AVFD distributes a small bag of fruit to each household at Christmas.

City of Enigma

The City of Enigma's police department is located in City Hall and employs one full and one part-time officer. Both the City of Enigma and Berrien County do dispatching. Prisoners are housed either in Nashville or Tifton, Georgia. The Enigma VFD consists of 15 to 16 volunteers with a Class 7 rating. The EVFD is located on Main Street and has two trucks.

City of Nashville

The Police Department is located in City Hall and has 15 full-time officers and 4 dispatchers. Prisoners are housed in the County jail. The City of Nashville Fire Department has three paid and 17 volunteers with a Class 7 rating. The Nashville Fire Department is located at City Hall and employ three trucks, Jaws of Life, and one County truck. Besides the Police Department and Fire Department, the City of Nashville has a 911 system, EMS, and Search & Rescue.

Berrien County

Berrien County has a sheriff, 13 full-time and one part-time officers, and four dispatchers. The sheriff's department has three full-time administrative employees.

Prisoners are housed in the County jail located at 500 County Farm Road. Jail personnel consist of one Jail Administrator, two office administrative personnel, and 18 full-time and one part-time jailers.

Hospitals and Other Public Health Facilities

The City of Nashville is home to the only hospital, the Berrien County Hospital, which serves all of Berrien County. City of Nashville is home to approximately eight medical doctors, County Health Department, Health Plus, and Berrien County DFACS. The Cities of Alapaha, Enigma, and Ray City have to travel outside of their respective city limits to either Nashville or neighboring counties to find medical services. City of Nashville also provides Meals on Wheels, Aging Services, and Visiting Nurses.

There are currently no nursing home facilities in Berrien County.

With a growing elderly population in Berrien County and the Cities of Alapaha, Ray City, Enigma, and Nashville setting goals to utilize the services the SEGaRDC offers on Aging would greatly benefit not only the seniors in the community but all the community.

City of Alapaha does have a satellite ambulance that is dispatched by Berrien County.

The City of Enigma has one homeless shelter "The Fortress".

Recreation

City of Ray City

The City of Ray City is part of a joint city/county Recreation Board. They do have local representation on the Board but the Board itself has control of recreation instead of the cities controlling their own recreational activities. They have two baseball fields; one that includes lights.

City of Alapaha

Alapaha has no recreation facility, but is part of the joint Berrien County Recreational Board. They have a gymnasium and one park, which are not lighted.

City of Enigma

The City of Enigma is also part of the joint Berrien County Recreational Board. They have one park with a walking track to offer for recreation.

City of Nashville

City of Nashville is a member of the joint Berrien County Recreational Board. Recreational activities include Little League, football game, canoeing in the Alapaha River, fishing in the Alapaha River, women's club, primitive camping and fishing at Patrick's Paradise State Park, and the local teenagers cruising the local hang outs.

Educational Facilities

City of Ray City

The City of Ray City owns and operates a pre-K program offering education for fouryear-olds, and is in its 10th year of operation. Grades K-12 attend the consolidated Berrien County school system in the City of Nashville.

City of Alapaha

The City of Alapaha offers a Head Start Program, GED classes, and Yes Center Branch. Schools for grades K-12 are consolidated in City of Nashville.

City of Enigma

Students may choose to either attend Berrien County Schools located in City of Nashville or to attend schools in Tift County.

City of Nashville

The Board of Education is located in City of Nashville and the Elementary, Primary, and High School for the entire County is located here. City of Nashville also provides; Pre-K both public and private, Head Start, Day Care, Yes Center,

Nashville Adult Literacy, Alternative Center, Open Bible Private School, DUI School, Hunter Safety classes, Voluntary Fire training, Pesticide, Herbicide Certification classes, and Quick Start is available through Valdosta Tech.

Libraries and Other Cultural Facilities

Ray City has a library with one part-time employee. The library is located in the old school and is open four days a week and a half day on Saturday. Computer classes are offered to the public.

City of Alapaha has a small public library housed in the Alapaha Depot Museum.

City of Enigma does not have a library.

City of Nashville has a city library.

Other utilities in Berrien County such as; cable and Internet, phone, and electricity are furnished by Mediacom(cable and internet), Alltel (phone), and GA Power. There are a great number of churches with diverse denominations located throughout Berrien County, and the Cities of Alapaha, Ray City, Enigma, and Nashville.

City of Nashville publishes a newspaper.

ASSESSMENT

General Government Facilities

The City of Ray City facilities are deemed adequate for the short term planning period and will be reevaluated during the following planning periods.

The City of Alapaha facilities are deemed adequate for the short term planning period and will be reevaluated during the following planning periods.

The City of Enigma facilities are deemed adequate for the short term planning period and will be reevaluated during the following planning periods.

The City of Nashville facilities are deemed adequate for the short term planning period and will be reevaluated during the following planning periods.

Berrien County facilities are deemed adequate for the short term planning period and will be reevaluated during the following planning periods.

Recreation

The Cities of Ray City, Alapaha, Enigma, and Nashville all have some type of ball field, walking track, and/or park, but there is no structured recreational programs offered to the community. Improving and adding recreational programs through the joint city/county, Recreational Board will be a short-term goal for the future planning period.

Adding more recreational activities for the youth of the community will help to deter crime, and improve the drop out rate. Keeping youth active with recreational sports and involved in community activities gives them less time to become bored and seek out less desirable alternatives. Empowering youth through community activities and services can encourage them to set goals of staying in school to become better educated, become community leaders staying in their home town to help improve the quality of life for the citizens of the county.

More support is needed for the elderly population in Berrien County. Adding and improving activities at all the Senior Citizen Centers located in the County, availability of recreational activities, retirement homes, and involvement in community activities and local government will not only improve the seniors lives but will added valuable input into the community.

Hospitals and Other Public Health Facilities

A concern with the City of Enigma was that medical, law, and fire department are not always able to find addresses or locations when necessary. The E911 system that is being incorporated countywide should help to improve this matter.

Despite the fact that the City of Nashville has several private doctors, a health clinic, and the only hospital, the rest of the Cities; Enigma, Ray City, and Alapaha do not and their citizens must drive at least 10 to 12 miles to acquire medical services. Surrounding areas such as Valdosta, and Tifton area are accessible but would include adding another 15 to 30 minutes to the driving time according to where in the county you are located.

Short-term goals should include establishing medical/doctor satellite offices for these cities so that the health care of their citizens especially the elderly are addressed.

Public Safety

Even though the Cities of Ray City, Nashville, Enigma, and Alapaha feel that its law enforcement staff is adequate for the immediate planning period, a short-term goal for the Cities of Ray City, Enigma and Alapaha should be seeking funds to increase their law enforcement services throughout their community by possibility increasing their staff.

A similar goal can be implemented for Ray City, Enigma, and Alapaha to increase their fire department services and/or increasing the staff to better serve their community and improve safety.

Solid Waste Management

Ray City, City of Alapaha, and City of Nashville all have contracts with Onyx of Valdosta Georgia and feel that their current and future solid waste needs will be met by this arrangement. The Pecan Row Landfill where these cities solid waste is disposed of has more than adequate capacity to meet their disposal needs throughout this planning period.

City of Enigma collects it is own solid waste and deems this arrangement adequate for this planning period. The Atkinson County Landfill where Enigmas solid waste is disposed of has the remaining capacity supplemented with a permitted vertical and soon to be permitted lateral expansion to adequately serve their disposal needs for this planning period.

Berrien County contracts with Rest EZ and finds this arrangement adequate for this planning period. The Atkinson County Landfill where Enigmas solid waste is disposed of has the remaining capacity supplemented with a permitted vertical and soon to be

permitted lateral expansion to adequately serve their disposal needs for this planning period.

Yard waste is picked up curbside in the City of Nashville for a fee, the same is true for City of Enigma.

Water Supply and Treatment

Ray City offers water and sewer to 396 customers. Services are not adequate at present time and are not expected to be adequate for any future increase in population, business, and industry growth. The City operates two wells and has one 100,000 gallon elevated storage tank. The wells are located behind the City Hall and at the City Park at 206 Patten Avenue. There are nine miles of distribution lines and the average daily use amounts to 55,000 gallons. The sewer system generally includes 6 and 8 inch gravity sewer lines, with appropriately sized force mains to lift effluent from specific basins back into the gravity flow system. The existing oxidation pond will be abandoned and a new site. A much needed short-term goal will be expansion and improvement of the existing sewer services.

The City of Alapaha has 7 employees and provides water and sewer services to approximately 300 customers. There has been no current expansion of the system but a CDBG grant is allowing improvement to the water lines by replacing old clay pipes with PVC pipes. Oxidation pond IT&D grant aerorators have been installed and the process is slated to soon begin removal of the sludge. The City feels that current services are adequate and will be adequate for possible future increase in population, and business and industry growth. The sanitary sewer collection system generally includes 22,000 l.f. of six, eight and ten inch gravity sewer lines, with appropriately sized force mains utilized to lift sewage from specific basins back into the gravity flow system. The system employs four lift stations. All sewerage effluent is treated in the 3.5-acre oxidation pond located north of U.S. 82 in the northwest quadrant of the city. The Alapaha sanitary sewer system is permitted to handle nearly 90,000 gallons per day. The system currently has a reserve treatment capacity of 25 percent. Everyone within the corporate limits of Alapaha has access to sanitary sewer service. The Alapaha sewage collection and treatment system will, with normal maintenance, be adequate for the twenty-year planning period. The system has three 250 gallon per minute wells located on East Pait Street, North Henry Street, and one mile south of corporate limits on west side of Ga. 129. The water is treated with chlorine and fluorides at the south well and the East Pait Street well. The North Henry Street well is exclusively used to supply water for agricultural uses.

The Georgia Department of Natural Resources has permitted Alapaha for an annual daily average withdrawal of 190,000 gallons. The City has a total of 100,000 gallons of elevated storage capacity off Brunswick Street in the Recreation Park.

City of Enigma offers only water services to its residents and feels this current service is adequate for the planning period. A short-term goal would be to install public sewer system. The water system has two wells that collectively can generate 504,000 gallons per
day. The water is chlorinated at the well sites and is stored in one elevated storage tank that has a capacity of 75,000 gallons. The city is permitted to use 200,000 gallons per day and their average daily use is 150,000 gallons.

City of Nashville currently provides sewer and water services to 2200 customers, no expansion has been done and present services are deemed adequate but future services are not. Expanding and improving future water and sewer services should be a goal in both the City of Nashville's short-term and long-term work program. The City of Nashville owns and operates a municipal water distribution system. The present system uses two wells, one on Industrial Boulevard and the other on Washington Avenue. The system stores water in two elevated storage tanks - one 300,000 gallon tank on the west side adjacent to well no. 5 and the other a 500,000 gallon tank located between Stevens and Decatur Streets and north of Washington Avenue. With normal maintenance, the Nashville water distribution system should adequately serve the city throughout the twenty-year planning period. The City of Nashville owns and operates a public sewage collection and treatment system services are available to all the residents in the City.

Transportation Network

Berrien County has excellent access to transportation due to the ideal location between Valdosta and Tifton, their close proximity to I-75, and "Corridor Z" runs through Berrien connecting one end of the state to the other. Add a good school system, low crime rate, historical points of interest, recreation, good quality of people, and relatively low taxes and it becomes an excellent choice for people, businesses and industries in which to locate.

Berrien County to grow and provide the best services available for their citizens will need to improve the infrastructure within the county. Road conditions not only need to improve but also more paved roads are needed. Better roads mean better transportation, which will bring more people, businesses and industries into the community. Improved roads providing easy access to and from the major transportation, routes located in close proximity of the county will be a major incentive to businesses and industries considering them as a location to place a new business.

Their respective public works departments maintain roads in Enigma, Ray City, Alapaha, and Nashville.

The Tifton airport and the Valdosta-Lowndes County Airport are located within less than one hour of Berrien County.

Education Facilities

Berrien County has a good school system in place, but additional educational opportunities would enhance the work force, keep the youth workforce of the county

from leaving by providing a highly skilled work force and attracting the types of businesses and industries that require the more highly skilled workforce. Berrien could work with its local colleges and technical schools to provide these classes and training opportunities. Education and training for local residents will help to improve the quality of life for its residents. Employers will have knowledgeable employees, who will improve their productivity, which in turn benefits the company and when the company benefits so will the community.

Libraries and Other Cultural Facilities

The Satilla Library System is deemed adequate for the current planning period and will be reevaluated every 5 years or so as needed.

Goals & Implementation

Goal 1	Provide the public with the best possible passive and active public Recreational facilities.
Policy 1.1	Develop a recreational plan for the cities/county.
Policy 1.2	Plan and program recreational facility programs in accordance with the needs and preferences of all city/county residents.
Policy 1.3	Pursue state and federal grant funds for the development of recreational facilities.
Goal 2	Continue to maintain and expand existing water and sewer facilities as required to efficiently meet increasing demands.
Policy 2.1	Analyze the ability of existing infrastructure to handle all new development.
Policy 2.2	Maximize the use of existing infrastructure for sanitary sewer/water service.
Policy2.3	Monitor the location and number of on-site septic systems throughout the county.
Goal 3	Maintain transportation networks, planning for housing, seniors, Economic outlet, etc.
Policy 3.1	Continue systematic paving of heavily populated dirt roads.
Policy 3.2	Repave existing city and county roads as needed.

Existing Land Use

EXISTING LAND USE

Consideration of existing land use is very important to planning future growth patterns for any community. For Greater Berrien County, existing land use patterns and densities have been inventoried and this information will provide community leaders with information needed to develop goals and strategies for future growth patterns, as well as protect/preserve vulnerable natural and historic resources while respecting individual property rights. Existing land use patterns have a direct impact on a county or city's future growth, and the preparation and analysis of existing land use maps and data are important in understanding land use relationships within/between the respective cities and county.

BERRIEN COUNTY, (IN GENERAL)

Berrien County is a primarily rural county located in south central Georgia and is bordered by Lowndes, Lanier, Cook, Tift, Irwin, Coffee and Atkinson counties. The City of Nashville is located in the south-central portion of the county and serves as the county seat. The cities of Alapaha and Enigma lie in the northern portion of the county and Ray City is located in the southern portion of the county. Greater Berrien County, which includes its four incorporated municipalities, has a land area in excess of 292,000 acres.

The county's overall land use pattern generally reflects a rural agrarian based economic system in which four small communities developed as service centers for the outlying farming and forestry uses. Each of the four incorporated cities-Nashville, Alapaha, Enigma, and Ray City-developed adjacent to the extensive tram railroad system which initially was developed to serve the logging industry which developed in the rural south after the Civil War. Rail service played major roles in the founding of the four cities, as all had rail service until the closure of the Seaboard Rail Lines's east-west route through northern Berrien County in the 1970's.

The presence of large rural land subdivisions, totally unassociated with the rural farm economy, has occurred largely within the past twenty years as local transportation systems improved and automobiles became available to most every American household. The absence of a local planning program and appropriate regulatory measures has greatly contributed to the sprawling pattern now evident throughout much of rural Berrien County.

Major transportation routes which serve the county includes US 82 which traverses the northern portion of the county on an east/west axis, US 129 linking the county from Valdosta, Lowndes County, Georgia north into Irwin County, and Georgia routes 37, 64, 76 and 125. Rail service is afforded the county seat of Nashville by the Norfolk Southern System and provides service between Valdosta and Douglas, Georgia. Table 3-6 shows a tabulation of <u>all</u> land use acreages. These numbers represent totals for both the unincorporated portions of Berrien County and the cities of Nashville, Alapaha, Enigma

and Ray City <u>combined</u>. Greater Berrien County contains over 20,380 acres of developed non-agricultural land.

BERRIEN COUNTY (Unincorporated)

There are large amounts of agricultural farmland spread among forested areas in all portions of the county. There are also many small clusters of urban development as well as a scattering of individual urban uses throughout the county. These clusters and individual uses may range from less than one acre to nearly 2,700 acres in size.

Unincorporated Berrien County consists of about 286,723 acres, which is about 97.9% of the county. In the unincorporated portion, 266,303 acres (92.8%) are devoted to agriculture or forestry uses. Most of the farmland is located on higher elevations between the floodplains of the numerous rivers and streams. Since these floodplain areas are suitable to neither agricultural nor urban development, farmers have learned over the course of time to leave these areas undisturbed and use them as valuable natural windbreaks. Many of the small streams have been dammed to create small ponds for irrigation purposes and these have been included in the agricultural acreage.

Berrien County's native tree stands are mostly limited to floodplains and those areas along the perimeter of floodplains. There are also large areas of commercial forestry throughout the county. The largest concentrations of these are located in the eastern half of the county and adjacent to the Alapaha River.

Developed non-agricultural lands in unincorporated Berrien County consist of more than 17,414 acres, which is 6.1% of the total unincorporated area. However, this represents approximately 85% of the total 20,380 acres of developed non-agricultural lands in the entire county. The developed lands in rural Berrien County, if clustered into a community form, would encompass an area 8.4 times larger than the total developed properties found in the county seat of Nashville.

While some limited extra-territorial water service extensions adjacent to the incorporated cities has allowed residential developments on lots less than one acre, the vast majority of unincorporated Berrien County's residential growth has developed on tracts in excess of one acre, ranging as large as 20 acres. Larger lot outlying residential subdivisions have generally developed utilizing individual wells and septic tanks. Today, in excess of 6,117 acres are developed to residential land uses in unincorporated Berrien County. These developments represent over 35% of the county's developed lands. This pattern of extensive rural subdivisions has emerged in Berrien County in the past 20 years, and has scattered urban growth into the rural environment, often with a minimum of amenities. Unpaved streets, poor drainage, and development on marginal soils plague many of the new rural developments.

Commercial land uses in rural Berrien County total nearly 65 acres, which represents less than one half of one percent of the developed land area of the county. In addition to scattered country stores serving the rural county, county-line package stores are also evident on the boundary lines with adjacent dry counties. Several commercial uses are interspersed among residential developments, a sign of the county's hesitance to enact use control regulations.

Industrial land uses in Berrien County generally are found adjacent to the city industrial areas, as in Amoco-Mills near Nashville and Moore Lumber Company near Alapaha, or are scattered throughout the rural areas. Industrial land uses total some 735 acres and include a sand mine near Bannockburn in eastern Berrien County, rural agri-industrial uses, and numerous junkyards interspersed around the rural countryside. This land use category, which includes the landfill west of the Allenville community, represent 4.2% of the county's developed land area.

Public/Institutional land uses in Berrien County total 3,066 acres, or 17.6% of the county's developed land area. In addition to numerous churches and cemeteries, this land use category includes the West Berrien Elementary School and several community centers. The largest tract dedicated to a single land use throughout Berrien County is included in the category, and is the Alapaha Range Grazing Unit, Coastal Plain Experiment Station, a 2,779-acre experimental agricultural facility owned by the University of Georgia College of Agriculture. This facility was established in 1942, and lies south of Alapaha adjacent to US 129.

Parks/Recreation/Conservation land uses total some 1,102 acres, or 6.3% of the county's developed land use. These uses include a 15-acre site devoted to a private shooting preserve in the New Lois community, and the 1,087-acre Georgia Department of Natural Resources owned Paradise Lakes public fishing area along US 82 west of Enigma. It should be noted that there are no county-owned park facilities in unincorporated Berrien County.

Transportation/Communication/Utilities land totals 6,329 acres, or 36.4% of the county's developed land area. This category includes several utility substations, railroad rights-of-way, and sewer lift stations. By far, the single greatest use in this land use category is for public rights-of-way, which totals some 6,308 acres. This constitutes a 9.86 square mile area, which must undergo continual maintenance by state or local officials.

Berrien County's total developed land area is 17,415 acres, or 6.1% of the unincorporated county's total land area. Agricultural properties total 167,771 acres, or over 58% of the county's total land area. Forested acreage totals 98,532 acres, or 34% of the county's total land area.

Unused/Undeveloped properties total 3,004 acres and mostly includes the undeveloped portions of several major residential land subdivisions.

CITY OF NASHVILLE

Nashville is by far the largest city of Berrien in terms of both population and urban development. The city is located in the southern center of Berrien County. Nashville is principally accessed by US 129 and Georgia Routes 125, 76, and 168. The city is 12 miles east of Interstate 75 via GA 76 into neighboring Cook County. Nashville's street system is a standard grid pattern oriented around the Court House Square with the major federal and state routes intersecting at or near the central business/court house square. Newer residential developments on the city's southwest side have adopted a curvilinear street pattern.

The city's commercial core surrounds the courthouse square and is largely confined to this area and the north-south commercial corridor to the south adjacent to Davis and Jefferson Avenues. Industrial land uses are generally clustered in two areas-the planned industrial park east of the city adjacent to the Berrien County Airport and southeast of the city adjacent to the Norfolk Southern Railroad. Residential land uses comprise the majority of the city's land uses, and the development pattern reflects adjustments to avoid environmentally sensitive land areas and/or areas without water and sewer services due to topographic limitations.

Nashville's corporate limits have increased 19% since 1970 and now consist of approximately 2,949 acres, which is about 700 acres larger than Enigma. Developed non-agricultural lands in Nashville total more than 2,069.9 acres, which is 70.2% of the total city land area. This indicates that future development sites are becoming scarce given the soils and other natural development constraints. Map 3-12 shows a graphic depiction of the land use patterns and

Of the developed land, residential land uses total 753.2 acres, which is 36.4% of the developed land area and 25.5% of the total city land area. Twenty years ago, residential uses totaled 472 acres and were 43% of the developed lands and 19% of the total city land area. Most of the present day development is single- family conventional housing, with 18.5% of the housing stock being mobile homes. The older residential developments are located near the downtown and on the east and southeast sides and are intermixed with a wide variety of other uses. The more homogenous neighborhoods are located on the west and southwest sides of Nashville.

Nashville's commercial land uses total 87.2 acres, which is 4.2% of the developed lands and 3.0% of the city's total land area. Back in 1970, commercial land uses totaled 52 acres and made up 4.2% of the developed land area. This 35-acre gain in twenty years shows the commercial sector has not changed a whole lot, consequently the central business area has remained intact and no new shopping malls have been developed in Nashville. The close proximity to Tifton and Valdosta and other urban service centers, and the availability of vehicular access has reduced the need for major increases in commercial land uses.

Industrial land use in Nashville consists of nearly 227.5 acres, which is 11% of the developed land area and 7.7% of the total city land area. Most of this is in the form of

major manufacturers of boats, carpet yarn, and textiles, and for the most part is located in industrial parks. Twenty years ago there was only 57 acres devoted to industrial land uses and represented only 4.7% of the total developed land area.

Public/Institutional land uses total 364.5 acres, which amounts to 17.6% of the developed lands and 12.4% of the city's total land area. Approximately half of this acreage is for government offices and facilities such as the County Farm, Berrien County Courthouse, Nashville City Hall, Jail and Fire Station, etc. Most of the remaining acreage in this category is for the several schools, churches, and cemeteries. Other significant uses in this category include the Berrien County Hospital and the Berrien County Library.

The Parks/Recreation/Conservation land use category totals 68.3 acres and represents 3.3% of the developed land area and 2.3% of the total city land area. All of this acreage is in the form of local parks and public recreation facilities such as the ball fields at the County Farm and various parks located throughout the City of Nashville within walking distance of most residential neighborhoods.

The Transportation/Communication/Utilities land use category totals 569.2 acres and represents 27.5% of the developed land area and 19.3% of the city's total land area. Most of this acreage is for street rights-of-way, the airport, and all the railroad rights-of-way including the switching areas, which serve the industrial sectors of Nashville.

Agriculture/Forestry lands total 570.2 acres, which is 19.3% of the city's total land area. Most of the agricultural lands are located in the northwest quadrant with smaller tracts in the southwest and northeast quadrants. The majority of the forestry tracts are located in the southeast quadrant of the city. Most of these agricultural/forestry lands are prime farmland soils and consideration should be given to preserve these lands for agricultural/forestry uses for future generations.

Undeveloped/Unused land totals 308.9 acres, which is 10.5% of the city's total land area. Part of this category is made up of undeveloped residential lots in platted subdivisions. There is another large tract west of the industrial park and airport. There appears to be adequate land area available for future land uses if infilling occurs in the residential areas and wise land use decisions allocate other uses to appropriate sites.

CITY OF ALAPAHA

The City of Alapaha is located in the northern portion of Berrien County on US 129 and US 82. The corporate boundaries form an approximate square with an area of 646 acres. The existing street system generally follows the grid system, augmented to the east/northeast, which reflects the town's development along the east-west rail corridor, which initially served the city. This abandoned corridor, now a greenway, is the most dominant land use feature in the community, as commercial and industrial land uses clustered adjacent to this former important transportation facility. Additional commercial and industrial uses have developed along US 82 in recent years as its impact on the community became more prevalent.

The greatest percentage of developed land in the City of Alapaha, 177.3 acres, is devoted to residential land uses. These residential areas represent 54.6% of the city's developed land area and 27.5% of the city's total land area. The pattern of Alapaha's residential development is relatively compact around the center of town with city utilities being extended to newly urbanizing areas, which are adjacent to existing residential development. The majority of Alapaha's residential areas are single-family conventional units, however mobile homes now make up over 30% of the total housing stock. There are 21 multi-family units located in Alapaha. The majority of the city's residential properties are in sound physical condition.

Alapaha has 9.3 acres of land devoted to commercial usage, which represents 2.9% of the developed land area and 1.4% of the city's total land area. There is a recognizable central business area and three commercial tracts located on US 82. Most of the retail stores and shops provide convenient commercial products and services.

Industrial land use in Alapaha totals 16.6 acres, which represents 5.1% of the developed land area and 2.6% of the city's total land area. The industrial uses utilize forest products and are located along the former railroad and the South Georgia Parkway (US 82).

Public and Institutional land use accounts for 23.2 acres and includes the public school, several churches, the Alapaha Station City Hall and the Fire Station, and the Alapaha Post Office. This land use category represents 7.1% of the developed land and 3.6% of the total city land area.

The Transportation/Communication/Utilities land usage total 80.7 acres, and this amounts to 24.9% of the developed land and 12.5% of the city's total land area. This land use category includes all street and road rights-of-way, the city's wastewater treatment lagoon, and several smaller utility service locations.

Parks/Recreation/Conservation land usage totals 17.6 acres, which is 5.4% of the total developed land area and 2.7% of the city's total land area. This land use category shows a greenway from the west corporate boundary to the eastside. This provides access for all residents to a walking trail, the Alapaha Station, and the recreational ball field park and its facilities.

The city's Forest and Agriculture land uses total 271.4 acres and surround the urbanized areas on all sides. These land uses account for 42% of the city's total land area.

Undeveloped/Unused lands, which include unused residential and commercial properties and some abandoned uses, account for 7.7% of the city's total land area. These areas will allow Alapaha to infill and grow throughout the 20-year planning period.

CITY OF ENIGMA

The City of Enigma is located in the extreme northwestern portion of Berrien County on US 82, about one mile from the Tift County line. U.S. Highway 82 is the only state or federal route serving the city, as all other routes are part of the county road network. The corporate boundaries of the city form an approximate circle with an area of approximately 2,112 acres (a one-mile radius). Having an area equal to the original incorporated area of the City of Nashville, Enigma's early development clustered along Main Street, just north of the east-west rail line, which traversed the city? Today's small downtown area is all that remains of the city's original commercial center, and the community's remaining development is largely residential land uses clustered adjacent to the service extensions of the city's water system. More recent commercial development has clustered adjacent to US 82, which traverses the city on an east/west axis through the northern portion of the city.

The greatest percentage of developed land in the City of Enigma, 241.8 acres, is devoted to residential land uses. These residential areas represent 66.8% of the city's developed land and 11.1% of the city's total land area. The pattern of residential development is relatively compact around the center of the circle with concentrations to the northwest around the former school and to the southeast. The most recently developed area leap-frogged vacant lands to the extreme western edge and set in motion lots for mobile homes.

Enigma has 3.9 acres of land devoted to commercial usage, which represents 1.1% of the city's developed land and 0.2% of the total land area. The commercial tracts are split between the center of the city and on the north side of US 82. The commercial uses mostly offer convenience retail sales.

Industrial land use in Enigma totals 3.8 acres, which amounts to 1.1% of the developed land area and 0.2% of the city's total area. These uses include two auto graveyards and an auto body repair shop.

Public and Institutional land use accounts for 6.6 acres, which is 1.8% of the city's developed land area and 0.3% of the total land. This includes churches, City Hall and the Fire Station.

Parks/Recreation/Conservation land usage totals 7.7 acres and includes the former school buildings, picnic shelter and tennis/basketball court. The land acreage amounts to 2.1% of the developed area and 0.4% of the city's total land area.

The Transportation/Communication/Utilities land use category totals 98 acres, second only to residential land usage. This category includes all street and road rights-of-ways, and the city water utility facilities. It amounts to 27.1% of the developed land and 4.5% of the city's total land.

The land usage devoted to Agriculture and Forest is 1,305.8 and 435.2 acres respectively. Together this amounts to 80.2% of the total land area in Enigma. Therefore the vast majority of Enigma is used for agricultural and forestry purposes.

The Undeveloped/Unused land use category includes unused residential and commercial properties and other abandoned uses. This land use category totals 68.2 acres or 3.1% of the total city land area.

CITY OF RAY CITY

The City of Ray City is located in the extreme southern portion of Berrien County. Ray City's corporate limits form a circle with a total land area of 503 acres (one-half mile radius). The City is served by US 129, and Georgia State Routes 37, 64, and 125. Ray City's overall development pattern was strongly influenced by the building of a north/south railroad line through the city, and the railroad intersection with Georgia 37, an early state highway, formed the city's downtown area. Largely void of industrial land use, residential development radiates from the downtown core in all directions, except to the city's southeast quadrant. Held out by local landowners, this quadrant appears to be well suited for future development.

The greatest proportion of Ray City's developed land area, some 135.9 acres representing 64.8% of the developed land, is devoted to residential land uses. The majority of the city's residential land uses are located in the northwest and southwest quadrants of the city. Housing types include single-family dwellings, manufactured and mobile homes. The housing stock also includes two one-story apartment complexes. Ray City's residential land uses represent 27% of the total land area.

Ray City has approximately 3.3 acres devoted to commercial land use and this is scattered along US 129 and GA 125, and amounts to 1.6% of the developed land and 0.6% of the city's total land area. The range of commercial land usage is convenience commercial and basic retail services.

Industrial land use in Ray City totals 0.1 acre and this amounts to less than 0.1% of developed and total land area. Immediately south of the corporate limits is an industrial enterprise, but it not included in the Ray City totals.

Public and Institutional land uses total nearly 16.4 acres, which represents 7.8% of the developed land uses and 3.3% of the total city area. The largest land use in this category is the public school properties, but it also includes churches, City Hall and the Fire Station. This land use category represents 3.3% of the total city land area.

Transportation/Communication/Utilities total 37.7 acres or 18.0% of developed lands and 7.5% of the total city land area. The majority of these acres are devoted to public street and road rights-of-way and the city utilities, including sewage ponds.

Parks, Recreation, and Conservation land usage totals 16.3 acres and represents 7.8% of the developed land and 3.3% of the total city land area. This land use category includes the city's park, senior center and cemeteries.

The city's agricultural and forested properties, which total 269.5 acres, represent 53.6% of the total city land area. The majority of this agricultural and forested lands are found in the southeast quadrant and lesser amounts in all other quadrants. Many of these properties are prime farmland and should be preserved for future generations.

Undeveloped and Unused properties, totaling 23.8 acres, represent 4.7% of the total city land area. In Ray City, this land use category includes vacant lots in residential areas, abandoned industrial tracts and railroad spurs, and a few dilapidated commercial sites.

MAP 7-1 CITY OF ALAPAHA EXISTING LANDUSE





MAP 7-2 BERRIEN COUNTY EXISTING LANDUSE

MAP 7-3 CITY OF ENIGMA EXISTING LANDUSE



MAP 7-4 CITY OF NASHVILLE EXISTING LANDUSE



MAP 7-5 CITY OF RAY CITY EXISTING LANDUSE









Map 8-2 Berrien County Future LandUse



Map 8-3 City of Enigma Future LandUse





Map 8-5 City of Ray City Future LandUse



FUTURE LAND USE PLANS

FUTURE LAND USE PLANS

A future land use plan reflects the consensus of community and county values that are inherent in goal and policy statements. It is designed to provide a summary of recommended growth patterns, which are depicted on the respective future land use maps. For Berrien County and the Cities of Nashville, Alapaha, Enigma, and Ray City, the recommendations are designed to reflect goals and policies with strong emphasis on local government's provision of basic services: water, sewer and transportation. These plan concepts propose land use patterns which take advantage of existing and planned infrastructure. This prevents undue hardship on local governments to provide unnecessary infrastructure improvements or additions. When growth is planned in a logical and straightforward manner and takes advantage of public investments, there will be positive benefits for all with an increase in long-term economic stability.

GREATER BERRIEN FUTURE LAND USE (IN GENERAL)

The concepts discussed in this section will apply to the future land use plans of Berrien County and the Cities of Nashville, Alapaha, Enigma, and Ray City.

The Goals and Policies define and emphasize a distinct separation between an Urban Service Area (USA) and a Rural Service Area (RSA). Greater Berrien, for future land use purposes, is divided into these two major service areas. The USAs represent the community growth centers where there is already existing or planned infrastructure and concentrated urban services to accommodate urban style development. All future urban development should locate in these urban service areas. The RSA comprises all of the remaining portions of the unincorporated county. This area should retain a dominantly rural character.

Within the major service areas, there also exists sub areas for the various Activity Centers and a special Commercial Agriculture Area; all of which are described in the Goals and Policies. In general, from a countywide perspective, the Urban Service Area (USA) and its activity centers represent three levels of existing or proposed urban density. The Downtown Activity Center (DAC) will maintain the highest density, followed by the Urban Activity Center (UAC), and then the remaining portion of the USA, which includes all the neighborhoods. Within the Rural Service Area (RSA), there is a special Commercial Agriculture Area (CAA), which is based upon the presence of concentrated prime farmland and prime forestland soils. Exclusive agriculture, agribusiness, and commercial forestry uses will be promoted in the CAAs.

Greater Berrien contains an extreme abundance of existing vacant uses and subdivided lands which far exceed the anticipated needed acreage for development throughout the 20-year planning period. Therefore, infill development at appropriate locations will be encouraged and regarded as a priority for any new development.

Many areas with Greater Berrien contain environmentally sensitive features, which must be considered when making development decisions. Therefore, all

new developments or redevelopment shall be subject to the following constraints: floodplains, wetlands, soil suitability, and groundwater recharge areas. These constraints shall be reviewed on a site-by-site basis and shall take precedence when making development or land use approvals/decisions. The future land use maps should be consulted when reviewing land use changes or proposed development and redevelopment. However, land use designations on the future land use maps are for general purposes and will be considered secondary to these development constraints.

BERRIEN COUNTY (Unincorporated) FUTURE LAND USE

In general, Berrien County contains a dominant pattern of active agriculture/forestry uses which will continue through the 20-year planning period. The City of Nashville represents the county's center of urban activity, and the Cities of Alapaha, Enigma, and Ray City are smaller satellite communities within Berrien County. Over the years, to varying degrees, all of these have exhibited slow growth in urban intensity and this pattern is projected to continue through the planning period. There is an abundance of vacant land in all parts of the county (both urban and rural areas) and those lands located in urban areas should be developed first since infrastructure improvements already exist to serve them. Therefore, future land use designations for unincorporated portions of Berrien County are generally the same as existing with most vacant lands given a future land use designation appropriate to their surroundings.

The Urban Service Area (USA) portion of unincorporated Berrien County are located around the perimeters of the cities' boundaries where there are already public water and sewer services available or nearby. Many of these areas are county enclaves completely surrounded by the city limits, in most cases partially surrounded by annexed right-of-way.

Most of the unincorporated Berrien County will fall into a Rural Service Area (RSA) since there are no major proposed public water and sewer services outside the existing cities. However, within the RSA there are large areas designated as Commercial Agricultural Area (CAA). These will promote exclusive development for agriculture, agribusiness and commercial forestry in an effort to protect the valuable natural resource (prime farmland and forestland soils) from intrusion and destruction. All agriculture and forestry uses should utilize best farming methods and procedures and locate where soil conditions, drainage, etc., is best suited for their use. Other development constraints such as wetlands and groundwater recharge areas should also dictate their location. Non-agriculture/forestry uses will encouraged to locate outside the CAA areas.

There are several large platted subdivisions for residential use within the rural area. Some are not suitable for development due to poor soil suitability, wetlands, or groundwater recharge areas, and these should revert back to their original agriculture/forest usage. The county will eventually pursue adoption of land subdivision regulations which can address this issue.

Future Commercial, Industrial, and Public/Institutional uses in particular should locate in either a USA. Consequently, there are no <u>additional</u> uses in these categories shown on the future land use map outside the county's USA areas.

Future Parks/Recreation/Conservation uses include existing uses plus an added "protected river corridor" along the Alapaha River (as mandated by Georgia Law).

Future Transportation/Communication/Utilities uses will remain the same as existing. Due to projected slow growth and encouraged concentrated of new development in designated USAs, no other significant expansions of the road system are anticipated in the unincorporated area through the 20-year planning period. Existing public rights-of-way within the county USA and RSA (in conformance with the functional classification system) should be paved in accordance with proper urban standards and all public rights-of-way will continue to be maintained.

NASHVILLE FUTURE LAND USE

In general, Nashville's future land use pattern will be similar to its existing pattern with most vacant lands being shown as developed according to surrounding existing uses. Nashville will continue to be the main urban center and focal point for all major commercial, industrial, and governmental growth for all of Berrien County.

Nashville's Urban Service Area (USA) corresponds with that of its existing and proposed water and sanitary sewer service areas. Nashville's Downtown Activity Center (DAC) corresponds with the visually recognizable central business district which in a large part is limited to those properties and developments adjacent to the Courthouse square. This area, largely commercial in nature, will continue to be the urban core of the city with the highest density of commercial land uses.

Outside of Nashville's Downtown Activity Center, the existing and proposed future land use patterns contain three Urban Activity Centers (UAC) - one commercial and two industrial. These Urban Activity Centers contain a commercial activity center stretching southward from the city's DAC to GA 37/GA 129 intersection, and two large industrial Urban Activity Centers, one to the east and the other at the city's southeast corporate boundaries.

Within Nashville's USA, there are more than sufficient acreages of vacant undeveloped land or abandoned uses to accommodate projected growth during the 20-year planning period. These vacant lands are in all parts of the city and are adjacent to all land use categories. Therefore, these vacant lands will receive first priority for new development in any of the land use categories. The recommended pattern for infill development is depicted on the future land use map.

Future residential land use will generally mirror that of existing residential except for those marginal areas within UACs that are shown as future commercial or industrial. New residential development will continue in the large developing subdivisions along the city's east-northeastern and southwestern quadrants. Several of these subdivisions are less than 50% built out and most of the existing vacant platted lots should be developed before additional large subdivisions are approved. An additional area which appears to have prime residential opportunities is the city's northwest quadrant, which has ample water and sewer services available through recent system upgrades. Future commercial development should locate in the city's Downtown Activity Center or in the commercial Urban Activity Center lying south of the city's DAC. Only through the clustering of commercial growth and development can Nashville hope to compete with larger regional centers located in Douglas to the east, Tifton to the west, and Valdosta to the south. Opportunities for commercial use and reuse abound in these two commercial centers.

Future industrial land use is recommended to be confined to two (2) compact areas based on existing major concentrations of industrial land uses. The first area is the cluster of industrial activities located due east of the city along Highway 65. Anchored by the airport, this industrial park is nearing capacity and the area south of GA 65 is currently receiving intensive study as a planned expansion of this industrial Urban Activity Center. The second industrial Urban Activity Center is anchored by the Norfolk Southern Railroad and lies in the southeast quadrant of the city limits and is adjacent to unincorporated county lands. The scattered pattern of single industrial sites and uses depicted on the city's existing land use map should be strongly discouraged as it represents both poor public and private investments, almost always disruptive to adjacent residential and commercial areas.

Future Public/Institutional land uses are generally depicted as existing and include four major school sites, as well as the governmental uses located west of the DAC and on the County Farm facility located in the southwest quadrant of the city.

Future Parks/Recreation/Conservation areas are depicted as existing land uses. Should additional lands be converted to P/R/C usage, they should lie adjacent to existing facilities.

Future Transportation/Communications/Utilities will remain generally as existing. Existing vacant subdivisions already contain the necessary road systems to serve platted lots. All existing public rights-of-way will be maintained and all of those located in Nashville's Urban Service Area will be paved.

Future agriculture and forestry uses are largely depicted as existing. These areas should be protected from urban encroachment for as long as possible in order to promote infill development.

ALAPAHA FUTURE LAND USE

Alapaha is situated in a centralized location with access to US 82 in northern Berrien County and functions as a minor service center for much of the surrounding rural area. The City of Alapaha has exhibited growth and redevelopment and it will continue to grow throughout the planning period. Alapaha's industrial and commercial development is dependent on wood and fiber resources. Moderate growth is projected and the largest industrial employer is seeking annexation to the city's east side.

Alapaha's Urban Service Area (USA) covers a relatively compact area and corresponds with its existing water and sanitary sewer service areas. The Downtown Activity Center (DAC) corresponds with Alapaha's visually recognizable central business district and it contains numerous historic buildings.

This DAC will be fostered as the urban core of the town with the highest density of uses. There are two Urban Activity Centers (UAC) which contain other intensive forms of urban development. One such UAC contains the existing industrial sector on the east and northeast side of Alapaha and includes the area to be annexed. The second UAC encompasses the US 82 developmental corridor within the Town of Alapaha.

Alapaha's Rural Service Area (RSA) surrounds the USA and contains one Commercial Agricultural Area (CAA) on the northwest side where there is a presence of concentrated prime farmland and forestland soils. Elsewhere in the RSA, existing agriculture and forestry uses should be protected from intrusion of urban uses.

Future residential development is encouraged to utilize existing vacant or abandoned properties on infill lots in existing residential areas. Vacant residential properties that are within the water and sanitary service area should be developed, and future land developers should construct water and sewer services adjacent to existing serviced areas.

Future commercial uses are encouraged to utilize existing abandoned properties as first priority, especially in the DAC. Additional commercial uses are then anticipated in the highway corridor Urban Activity Center.

Future industrial uses are the same as existing industrial uses located in the eastern Urban Activity Center.

Future Transportation/Communication/Utilities and Public/Institutional land uses are depicted as existing on the future land use map. All portions of the town contain existing rights-of-way which are sufficient for future development. All public rights-of-way will continue to be maintained and all of those located in the USA will be paved. Any additional P/I uses should locate within future commercial areas.

Future Parks/Recreation/Conservation land uses are also depicted as existing with a minor addition to the city park.

ENIGMA FUTURE LAND USE

In general, Enigma is a small bedroom community competing with a large urban center to the west (Tifton) and is a community who has been adversely affected by the lack of a public sanitary sewer system and changing market forces.

Enigma's Urban Service Area (USA) is based on the premise that the city will provide municipal sanitary sewer service to its water customers within the next five years. Otherwise, the USA designation will be changed to a Neighborhood Activity Center (NAC). Sanitary sewer will need to extend north of US 82, but it will be extremely costly to service the extreme western and southeastern subdivisions due to their scattered locations which will necessitate lift stations and forced mains. Given the preceding constraints the USA boundary corresponds to the existing water service area. In the past, there was a very small downtown, but this has been abandoned or converted to Public/Institutional uses namely, the City Hall, Police Station and Fire Station. The city will look for opportunities to rebuild/revitalize its former downtown area. All future growth of residential, commercial, industrial and public/institutional uses should occur as an infill strategy within the designated Urban Service Area. Enigma's only industrial building is vacant and the city continues to prospect for a new industrial employer. The now vacant school structures are being studied for inclusion on the national register and reuse plans include a community building and senior center. The existing park will be upgraded and maintained throughout the planning period. Agriculture and forestry uses within the Rural Service Area exhibit concentrations of prime farm and forest soils .

RAY CITY FUTURE LAND USE

Lying in south-central Berrien County and just north of Lowndes County on Georgia 125, the City of Ray City provides both public sewer and public water, and as such, is defined as an Urban Service Area (USA).

Future residential growth in Ray City should first be encouraged as infill of vacant lots that are already serviced by water and sanitary sewer services. There are ample acres of residential land located throughout the city to meet the future residential needs. Any new residential development should be required to locate adjacent to existing water and sanitary sewer service areas with extension costs being borne by the developer.

Commercial growth in Ray City should be directed to the conservation and reuse of the very small city's downtown commercial area which is proposed as a Downtown Activity Center (DAC). This policy of reinvestment and enhancement will support Ray City's appeal as a quiet residential community served by a small, but efficient business district.

Future industrial uses are the same as existing industrial land use.

Future Transportation/Communication/Utilities and Public/Institutional land uses are depicted as existing uses on the future land use map. All portions of the city contain existing rights-of-way which are sufficient for future development. All public rights-of-way will continue to be maintained and all those located within the Urban Service Area will be paved.

Future Parks/Recreation/Conservation land uses are also depicted as existing with the addition of a five-acre tract immediately east of the city park, and this area will be part of a conservation area.

Ray City's Rural Service Area (RSA) surrounds the Urban Service Area and contains some concentrations of prime farm and forest soils and are duly designated Commercial Agriculture Areas (CAA). The CAA contain exclusive agriculture and forestry related uses and these will be promoted for the future.

Berrien County, City of Alapaha, City of Enigma, City of Nashville, and City of Ray City

Report of Accomplishments

Berrien County: Report of Accomplishments

(Community Facilities		
Activity	Status	Explanation	
Construct an auditorium at new high school	Underway		
Construct a new county law enforcement center	Completed		
Consturct a new county administration building	Underway		
Construct a multipurpose recreation facility	Underway		
Landfill closure will be continued	Underway		
Plans to upgrade all non-compliance ADA buildings will be prepared and budgeted	Underway		
Road Paving Projects: PR 28 PR 422 PR 11 CR 312 PR 218	Completed		
Road Paving Projects: CR 27 CR 55 CR 364 CR 195	Underway		

Economic Development			
Activity	Status	Explanation	
Participate with the county-wide Chamber of Commerce and support Chamber work program priorities ; add land & infrastructure improvement at indsustrial parks	Underway		

	Housing	
Activity	Status	Explanation
Support cities efforts to upgrade housing conditions	Underway	

Land Use		
Activity	Status	Explanation
Amend or adopt codes and ordinances, where applicable, to address the environmetally sensitive resources identified in Part I. Adopt protection measures for groundwater recharge areas	Underway	

Enforce the State Construction Code. Identify and adopt wetlands protection measures	Underway
Prepare and adopt a subdivision control ordinance	Completed
Prepare and adopt a zoning ordinance which assists in implementing the Berrien County Future Land Use Plan	Completed
Amend/adopt appropriate ordinances to protect the Alapaha River Corridor per State law minimums	Underway
Request FEMA to prepare floodplain maps for the County	Underway

Natural and Historic Resources			
Activity	Status	Explanation	
Continue to participate on the Berrien Historical Foundation	Underway		
Conduct a countywide historic resource inventory costing \$12,000- 60% Federal- 40% Local	Not Accomplished	Tighten budget restraints make this project not economically feasable at this time	

Other Considerations			
Activity	Status	Explanation	
Intergovernmental Coordination: Coordinate with cities in a shared code enforcement program, i.e., Buildingcode, subdivision, zoning	Underway		
Continueparticipation in the Regional Solid Waste Management Authority	Underway		
Continue Participation inthe JOint Economic Development Authority	Underway		
Continue with annual clean-up program	Underway		

General Planning			
Activity	Status	Explanation	
Participate in all updates to the Greater Berrien Comprehensive Plan	Completed		
Prepare all grant/loan applications (CDBG, EDA, RD etc.) after conducting a needs assessment and public hearing to ascertain which project has highest priority	Underway		
Annually update the Short- Term Work Program	Underway		
Update the EMA "operational plan"	Underway		
Update the "official county roads" map	Underway		
Endorse and participate in the Greater Berrien Planning Commission to implement the 2015 Greater Berrien Comprehensive Plan	Completed		

Alapaha town: Report of Accomplishments

E	conomic Devel	opment	
Activity	Status	Explanation	
Continue to support the county-wide Chamber of Commerce and all its program priorities	Completed		

	Housing	
Activity	Status	Explanation
Investigate the feasibility of HOME/CHIP rehab programs	Underway	

	Land Use			
Activity	Status	Explanation		
Amend or adopt codes and ordinances, where applicable, to address the environmentally sensitive resources identified in Part I. Identify and provide protection measures for wetlands	Underway			
Adopt a zoning ordinance to implement the Alapaha Future Land Use Plan	Underway			
Enforce the State Construction Code	Completed			
Adopt a land subdivision ordinance	Underway			
Adopt the floodplain management ordinance and add the map to the Alapaha GIS system	Underway			
Add "as built" water and sewer system coverages to the Alapaha GIS system	Underway			
Street Paving Projects: No. 1 North George Street No. 2 South George Street No. 3 East Church Street No. 4 West Church Street No. 5 East Alexander Street No. 6 West Alexander Street No. 7 North Charles Street No. 8 South Jackson Street	Completed			

Natur	al and Historic I	Resources	
Activity	Status	Explanation	
Provide participation on the Berrien Historical Foundation	Underway		
Conduct a county-wide historic resources inventory costing \$12,000. 60% Federal 40% Local	Not Accomplished	Not economically feasible at this time	

C	Other Consider	ations	
Activity	Status	Explanation	
Intergovernmental Coordination: Develop interlocal agreements for shared code enforcement services.	Underway		

	General Plan	ining
Activity	Status	Explanation
Annually re-evaluate the Alapaha Short- Term Work Program	Underway	
Participate in all updates to the 2015 Greater Berrien Comprehensive Plan	Completed	
Prepare all grant/loan applications (CDBG, EDA,FmHA, etc.) after conducing a needs assessment and public hearing to ascertain which project has the highest prioritiy	Underway	
Continue to provide representation on the Greater Berrien Planning Commission	Underway	

Enigma town: Report of Accomplishments

E	conomic Devel	opment	
Activity	Status	Explanation	
Continue to support industrial enterprises in the manufacturing building	Completed		

	Housing	
Activity	Status	Explanation
Investigate the feasibility of the HOME/CHIP rehab programs	Underway	

	Land Use	9
Activity	Status	Explanation
Amend or adopt codes and ordinances wher applicable to address the environmentally sensitive resources indentified in Part I. Identify and provide	Underway	
Adopt a zoning ordinance to implement the Enigma Future Land Use Plan	Underway	
Adopt a land subdivision ordinance	Underway	
Prepare plans and construct a sanitary sewer collection and treatment system	Underway	
Pave Easters, Melody and Shelia Roads	Underway	
Investigate the feasible re-use of the school cafeteria for a community building/senior center	Underway	

Natu	ral and Historic	Resources	
Activity	Status	Explanation	
Provide participation on the Berrien Historical Foundation	Completed		
Conduct a county-wide historic resources inventroy costing \$12,000- 60% Federal-40% Local	Underway		
Prepare National Historic Register documentation for the school gymnasium and cafeteria buildings	Underway		

	Other Consider	ations	
Activity	Status	Explanation	
Intergovernmental Coordination: Investigate a shared code enforcement system with other units of government through an interlocal agreement	Underway		

	General Plan	ning
Activity	Status	Explanation
Annually reevaluatethe Enigma Short- Term Work Program	Underway	
Participate in all updates to the 2015 Greater Berrien Comprehensive Plan	Completed	
Prepare all grant/loan applications (CDBG, EDA, FmHA, etc.) after conducting a needs assessment and public hearing to ascertain which project has the highest priority	Underway	
Continue to be represented on the Greater Berrien Planning Commission	Underway	

Nashville city: Report of Accomplishments

(Community Fa	cilities
Activity	Status	Explanation
Invest in computer hardware/software to utilize GIS	Underway	
Continue to upgrade water system by looping water lines.	Underway	
Update water, sewer, natural gas and storm sewer system maps to include all "as built" lines and add coverages to the City's GIS system.	Underway	
Upgrade the storm sewer system city- wide and add retention ponds.	Underway	
Restart the Community Pride Program	Underway	
Complete construction of two softball fields, and a walking trail	Postponed	This is not a priority at this time and has been put on hold.
Continue participation in the LARP program of Georgia	Underway	
Pave, curb/gutter the following unpaved roads: 1) Wedgewood Chase 2) Carolina Trace 3) Shane Circle 4) Andy Street	Completed	

Ec	conomic Devel	opment
Activity	Status	Explanation
Support all Chamber of Commerce priorities; add land & infrastructure improvements at the industrial park.	Completed	

	Housing		
Activity	Status	Explanation	
Implement the HOME/CHIP new and rehab programs.	Underway		

Land Use			
Activity	Status	Explanation	
Amend or adopt codes and ordinances, wher applicable to address the environmentally sensitive resources identified in Part 1. Identify and provide protection measures for wetlands.	Underway		
Amend the zoning ordinance to implement the Nashville Future Land Use Plan.	Underway		
Conduct anexation studies to consolidate islands	Underway		

Natural and Historic Resources		
Activity	Status	Explanation
Continue partcipation inthe Berien Historical Foundation.	Underway	
Conduct a countywide historic resources inventory costing \$12,000- 60% Federal, 40% Local	Underway	

Other Considerations		
Activity	Status	Explanation
Intergovernmental Coordination: Coordinate code enforcement services with other units of government through interlocal agreements.	Underway	
Intergovernmental Coordination: Coordinate with Berrien County and other cities to develop a Greater Berrien Community Pride Program.	Underway	

General Planning		
Activity	Status	Explanation
Annually re-evaluate the Nashville Short-Term Work Program,	Completed	
Participate in all updates to the 2015 Greater Berrien Comprehensive Plan	Completed	
Prepare all grant/loan applications (CDBG, EDA, FmHA, etc.) after conducting a needs assessment and public hearing to ascertain which project has the highest priority.	Completed	
Continue to provide representation on the Greater Berrien Planning Commission.	Completed	

Ray City: Report of Accomplishments

Community Facilities		
Activity Status Explanation		
Construct a drive-through window at City Hall	Not Accomplished	There is not enough available space to allow for drive through window
Establish a community library in elementary school	Completed	
Continue participation in LARP of Georgia	Underway	
Construct a sidewalk on Jones Street	Not Accomplished	Lack of funds

Economic Development			
Activity	Status	Explanation	
Continue to participate in the county- wide Chamber of Commerce priorities	Underway		

Housing			
Activity	Status	Explanation	
Implement, if feasible the HOME/CHIP rehab programs	Underway		

Land Use		
Activity	Status	Explanation
Amend or adopt codes and ordinances where applicable, to address the environmentally sensitive resources identified in Part I. Identify and proveid protection measures for wetlands	Underway	
Amend the zoning ordinance to implement the Ray City Future Land Use Plan	Underway	
Adopt a land subdivision ordinance	Completed	

Natural and Historic Resources		
Activity	Status	Explanation
Provide particip0ation in the Berrien Historical Foundation	Completed	
Conduct a county-wide historic resources inventory costing \$12,000. 60% Federal 40% Local	Underway	
Restore covered bridea at "old school"	Completed	

Other Considerations			
Activity	Status	Explanation	
Intergovernmental Coordination: Consider feasibility of inter-local agreement for shared code enforcement	Underway		

Intergovernmental Coordination: Continue the annual city clean-up program	Underway	
Continue participation on Berrien County Recreation Authorityand assistance in recreation programs	Underway	

General Planning		
Activity	Status	Explanation
Annually re-evaluate the Ray City Short- Term Work Program	Completed	
Participate in all updates to the 2015 Greater Berrien Comprehensive Plan	Completed	
Prepare all grant/loan applications (CDBG, EDA, FmHA, etc.) after conductin a needs assessment and public hearing to ascertain which project has the highest priority	Underway	
Continue to update charter and codify ordinances	Underway	
Continue to participate with the Greater Berrien Planning Commission	Underway	

FY 2004 - FY 2008 SHORT-TERM WORK PROGRAMS

The purpose of the Short-Term Work Program is to provide a detailed listing of the various projects and programs recommended by Berrien County and the Cities of Alapaha, Enigma, Nashville and Ray City for implementation during the fiscal years covered in the <u>2025 Greater Berrien Comprehensive Plan</u>. By scheduling major county and city initiatives and capital expenditures in advance over a period of years, the five-year work programs will assist the county and the cities in undertaking activities to implement their individual plans and achieve their goals.

The Short-Term Work Program should be linked to and coordinated with the county and city annual operating budgets. The majority of the elements of the work program require direct county and city expenditures or indirect costs through allocation of county and city employees. Therefore, implementation of the Plan's goals, policies, and recommendations are tied to each annual operating budget. Attempts to implement the Plan should: (1) review recommendations in the Short-Term Work Program for the upcoming year; (2) revise the recommendations based on current information; and (3) transfer the recommended items that require local funding to the respective annual operating budget. With this approach, Greater Berrien will be able to systematically implement their comprehensive plan.

BERRIEN COUNTY FIVE-YEAR SHORT-TERM WORK PROGRAM

Community Facilities				
Activity	Years	Responsible Party	Cost Estimate	Funding Source
Construct a new auditorium at new high school	2004, 2008	Berrien County	\$500,000	CDBG
Construct a new county administration building	2004, 2008	Berrien County	\$1,000,000	n/a
Construct a multi-purpose recreation facility	2004, 2008	Berrien County	\$500,000	CDBG
Landfill closure will be continued	2004, 2008	Berrien County	\$40,000 annually	n/a
Plan to upgrade all non-compliance ADA buildings will be prepared and budgeted	2004, 2008	Berrien County	\$5-10,000 annually	n/a
Road Paving Projects: 1. CR27 \$300,000 2. CR55 \$180,000 3. CR364 \$45,000 4. CR195 \$25,000	2004, 2008	Berrien County, DOT	\$550,000	DOT
Road Paving Projects 1. CR50 2. CR57 3. CR254 4. CR1	2004, 2008	Berrien County, DOT	n/a	DOT
Resurfacing : CR360 CR354	2004, 2008	Berrien County	n/a	DOT

Berrien County: Short Term Work Program Update
Economic Development				
Activity	Years	Responsible Party	Cost Estimate	Funding Source
Develop a marketing plan of action for Economic Development	2004, 2008	Berrien Co., and the Cities of Alapaha, Enigma, Nashville, and Ray City	n/a	n/a
Participate with the county-wide Chamber of Commerce and support, Chamber work program priorities, add land and infrastructure at industrial park	2004, 2008	Berrien County	\$250,000	EIP
Improve street drainage and infrastructure using available grants and loans	2004, 2008	Berrien County	n/a	CDBG, USDA

Housing				
Activity	Years	Responsible Party	Cost Estimate	Funding Source
Support cities efforts to upgrade housing conditions	2004, 2008	Berrien County	n/a	n/a

Land Use				
Activity	Years	Responsible Party	Cost Estimate	Funding Source
Amend or adopt codes and ordinances where applicable to address environmentally sensitive resources. Adopt protection measures for groundwater recharge areas.	2004, 2008	Berrien County, RDC	\$2500	DCA Part C
Enforce the State Construction Code. Identify and adopt wetlands protection measures.	2004, 2008	Berrien County, RDC	\$3500	DCA Part C
Amend/adopt appropriate ordinances to protect the Alapaha River Corridor per State laws minimums	2004, 2008	Berrien County	n/a	n/a
Request FEMA to prepare floodplain map for the County	2004, 2008	Berrien County	n/a	FEMA

Natural and Historic Resources				
Activity Years Responsible Cost Funding Party Estimate Source				
Continue to participate on the Berrien Historical Foundation	2004, 2008	Berrien County	n/a	n/a

Other Considerations				
Activity	Years	Responsible Party	Cost Estimate	Funding Source
Intergovernmental Coordination: Improve communication between County and City governments	2004, 2008	Berrien County, Alapaha, Enigma, Nashville, Ray City	n/a	n/a
Intergovernmental Coordination: Coordinate with cities in a shared code enforcement program, i.e. Building Code, subdivision, zoning	2004, 2008	Berrien Co., Alapaha, Enigma, Nashville, Ray City	n/a	n/a

Intergovernmental Coordination: Continue participation in the Regional Solid Waste Management Authority	2004, 2008	Berrien County	n/a	n/a
Intergovernmental Coordination: Continue participation in the Joint Economic Development Authority	2004, 2008	Berrien County	n/a	n/a
Intergovernmental Coordination: Continue the annual clean-up program	2004, 2008	Berrien Co., Alapaha, Enigma, Nashville, Ray City	\$500 yearly	General Funds
Intergovernmental Coordination: Design mechanism to solicit and incorporate community input into projects and plans.	2004, 2008	Berrien County	n/a	General Funds

General Planning					
Activity	Years	Responsible Party	Cost Estimate	Funding Source	
Continue to participate in all updates of the Greater Berrien Comprehensive Plan, Solid Waste Plan, and Service Delivery Strategy Plan	2004, 2008	County	n/a	n/a	
Prepare all grant/loan applications (CDBG, EDA, RD etc.) after conducting a needs assessment and public hearing to ascertain which project has highest priority	2004, 2008	County	n/a	n/a	
Annually update the Short-Term Work Program	2004, 2008	County	n/a	n/a	
Continue to update the EMA `operational plan`	2004, 2008	County	n/a	n/a	
Continue to update the `official county roads` map	2004, 2008	County and SEGaRDC	n/a	n/a	
Continue and participate in the Greater Berrien Planning Commission to implement the 2025 Berrien County Comprehensive Plan	2004, 2008	Berrien County, Alapaha, Enigma, Nashville, Ray City	n/a	n/a	

Alapaha town: Short Term Work Program Update

Economic Development				
Activity	Years	Responsible Party	Cost Estimate	Funding Source
Continue to support the county-wide Chamber of Commerce and its program priorities	2004, 2008	City of Alapaha	\$100 annually	General Funds
Develop a marketing plan of action for economic development	2004, 2008	City of Alapaha	n.a	General Funds
Improve street drainage and infrastructure through available grants and loans	2004, 2008	City of Alapaha	n/a	CDBG, USDA

	Housing			
Activity	Years	Responsible Party	Cost Estimate	Funding Source
Investigate the feasibility of HOME/CHIP rehab programs	2004, 2008	City of Alapaha	n/a	n/a

Land Use					
Activity	Years	Responsible Party	Cost Estimate	Funding Source	
Amend of adopt codes and ordinances, where applicable to address environmentally sensitive resources. Identify and provide protection measures for wetlands	2004, 2008	City of Alapaha, RDC	\$3000	DCA Part C	
Adopt a zoning ordinance to implement the Alapaha Future Land Use Plan	2004, 2008	City of Alapaha, RDC	\$7500	DCA Part C	
Continue to enforce the State Construction Code	2004, 2008	City of Alapaha	n/a	Fees	
Adopt a land subdivision ordinance	2004, 2008	City of Alapaha, RDC	\$3000	DCA Part C	
Adopt the floodplain management ordinance and add map to the Alapaha GIS system	2004, 2008	City of Alapaha, RDC	\$2000	n/a	
Add `as built` water and sewer system coverage's to the Alapaha GIS System	2004, 2008	City of Alapaha, RDC	\$5000	n/a	

Natural and Historic Resources				
Activity	Years	Responsible Party	Cost Estimate	Funding Source
Provide participation on the Berrien Historical Foundation	2004, 2008	City of Alapaha	n/a	n/a

Other Considerations				
Activity	Years	Responsible Party	Cost Estimate	Funding Source
Intergovernmental Coordination: Improve communication between City and County	2004, 2008	Alapaha, Berrien Co., Enigma, Nashville, Ray City	n/a	n/a
Intergovernmental Coordination: Design mechanism to solicit and incorporate community input into projects and plans	2004, 2008	City of Alapaha	n/a	n/a
Intergovernmental Coordination: Develop interlocal agreements for shared code enforcement services.	2004, 2008	City and County	n/a	n/a

	General Plar	nning		
Activity	Years	Responsible Party	Cost Estimate	Funding Source
Annually re-evaluate the Alapaha Short- Term Work Program	2004, 2008	City of Alapaha	n/a	n/a
Participate in all updates to the Greater Berrien Comprehensive Plan	2004, 2008	City of Alapaha	n/a	n/a
Prepare all grant/loan applications (CDBG, EDA, FmHA, etc.)after conducting a needs assessment and public hearing to ascertain which project has the highest priority	2004, 2008	City of Alapaha	n/a	n/a
Continue to provide representation on the Greater Berrien Planning Commission	2004	City of Alapaha	n/a	n/a

Enigma town: Short Term Work Program Update

Ec	conomic Deve	lopment		
Activity	Years	Responsible Party	Cost Estimate	Funding Source
Continue to support industrial enterprises in the manufacturing building	2004, 2008	City of Enigma and Chamber of Commerce	n/a	n/a
Develop a marketing plan of action for economic development	2004, 2008	City of Enigma	n/a	n/a
Improve street drainage and infrastructure through available grants and loans	2004, 2008	City of Enigma	n/a	USDA, CDBG

Housing												
Activity	Years	Responsible Party	Cost Estimate	Funding Source								
Investigate the feasibility of the HOME/CHIP rehab programs	2004, 2008	City of Enigma	\$250,000	CHIP								
Revitalization and expansion of local housing	2004, 2008	City o f Enigma	n/a	n/a								

	Land Use	;		
Activity	Years	Responsible Party	Cost Estimate	Funding Source
Amend or adopt codes and ordinances, where applicable, to address environmentally sensitive resources. Identify and provide protection measures for wetlands	2004, 2008	City of Enigma, RDC	\$2500	DCA Part C
Adopt a zoning ordinance to implement the Enigma Future Land Use Plan	2004, 2008	City of Enigma, RDC	\$5,000	DCA Part C
Adopt a land subdivision ordinance	2004, 2008	City of Enigma, RDC	\$3,000	DCA Part C
Prepare plans and construct a sanitary sewer collection and treatment system	2004, 2008	City of Enigma	\$1,000,000	RD, CDBG
Pave Easters, Melody, and Shelia Roads	2004, 2008	City of Enigma	\$600,000	DOT, CDBG
Construct a water-supply well	2004, 2008	City of Enigma	\$100,00	RD
Investigate the feasible re=-use of the school cafeteria for a community building/senior center	2004, 2008	City of Enigma	\$75,000	CDBG

Natural and Historic Resources												
Activity	Years	Responsible Party	Cost Estimate	Funding Source								
Continue to provide participation on the Berrien Historical Foundation	2004, 2008	City of Enigma	n/a	n/a								
Prepare National Historic Register documentation for the school gymnasium and cafeteria buildings	2004, 2008	City of Enigma, RDC	n.a	SHPO								

Other Considerations

Activity	Years	Responsible Party	Cost Estimate	Funding Source
Intergovernmental Coordination: Investigate a shared code enforcement system with other units of government through an interlocal agreement	2004, 2008	Enigma, Alapaha, Berrien Co., Nashville, Ray City	n/a	n/a
Improve communication between cities and county	2004, 2008	Enigma, Alapaha, Berrien Co, Nashville, Ray City	n/a	n/a
Design mechanism to solicit and incorporate community input into projects and plans	2004, 2008	City of Enigma	n/a	n/a

	General Plan	ining		
Activity	Years	Responsible Party	Cost Estimate	Funding Source
Continue to annually evaluate the Enigma Short-Term Work Program	2004, 2008	City of Enigma	n/a	n/a
Continue to participate in all updates to the Greater Berrien Comprehensive Plan	2004, 2008	City and County	n/a	n/a
Prepare all grant/loan applications (CDBG, EDA, FmHA, etc.) after conducting a needs assessment and public hearing to ascertain which project has the highest priority	2004, 2008	City of Enigma	n/a	n/a
Continue to be represented on the Greater Berrien Planning Commission	2004, 2008	City of Enigma	n/a	n/a

Intergovernmental Coordination

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 have profound impacts on the success of implementing the local government's comprehensive plan. The purpose of this element is to assess the adequacy and suitability of existing coordination mechanisms to serve the current and future needs of the community and articulate goals and formulate a strategy for effective implementation of community policies and objectives that, in many cases, involve multiple governmental entities.

Inventory

Adjacent Local Government The Berrien County Board of Commissioners, Ray City, City Council, Enigma City Council, Nashville City Council, and Alapaha City Council use a simple approach to coordination by regular communication among the entities via phone, FAX, or email. When necessary planned meetings are held with each entity being represented by its Chairman, Mayor, City or County Clerk, or Council member. All local entities work together as needed for the better of their county and its citizens and all share interest in all components of the Comprehensive plan. The County Commission would be the primary responsible for coordination.

School Boards

Berrien County has only one school board and they coordinate via phone, Fax, or email, and with planned meetings with the local government entities. The Board of Education would be the primary responsible for coordination.

Independent special districts

Berrien County does not have any independent special districts of any kind.

Chamber of Commerce

Ray City, Enigma, Alapaha, Nashville, and Berrien are all members of the Berrien County Chamber of Commerce and all pay dues. Each entity is supposed to be represented on the board and at all meetings. To date this is not the case for the majority of the government entities represented in the county. Short-term goal needs is a representative from each entity included on the Chamber Board at all meetings and economic development planning.

Berrien County Recreational Board

City of Alapaha, City of Ray City, and City of Enigma are part of a joint Berrien County Recreational Board with the City of Nashville, and Berrien County. As a short-term and long-term goal, they need a representative on the board and needs to facilitate interaction with their representative so that they in return have plenty of interaction with the recreation board.

Watershed Protection Plan

Berrien County has no Water Supply Watersheds as defined by the Department of Natural Resources Rules for Environmental Planning Criteria.

Georgia's Drinking Water System Capacity Development Program

The Berrien County area is served by municipal and individual wells. According to the 2002 Georgia County Guide, public water service providers supplied 50.5% of the water utilized in the County. The remaining 49.5% are served by individual wells. In 2000, 8,200 individuals consumed .85 million gallons per day or 103.66 gallons per individual. The total water consumption rate for the county was 12.90 Million Gallons Per Day (MGD). 7.43 million gallons of water were withdrawn form aquifers daily and 5.47 million gallons were withdrawn daily from surface sources.

River Basin Management Plan

The Georgia General Assembly passed the "Mountain and River Corridor Protection Act" in 1991 which requires local governments to adopt corridor protection plans for certain designated rivers affecting or bordering their jurisdiction. In Berrien County, the only river affected by this Act is the Alapaha River.

Water Management Plan for Coastal Georgia

Coastal areas are not present in Berrien County.

Appalachian Regional Commission

This is not applicable to Berrien, the City of Alapaha, City of Nashville, City of Enigma, and City of Ray City.

Coastal Management Program

This is not applicable to Berrien, the City of Alapaha, City of Nashville, City of Enigma, and City of Ray City.

Governor's Greenspace Program

Berrien County is not a member of this program.

Service Delivery Strategy

The Berrien County Delivery Strategy (1) provides an accurate depiction of the agreed upon strategy, (2) promotes the most efficient, effective and responsive delivery of services, (3) provides that water and sewer fees for extraterritorial services are reasonable and not arbitrarily higher, (4) provides that extraterritorial water and sewer extensions will be consistent with all applicable land use plans and ordinances, (5) ensures that cost of services provided primarily for the benefit of unincorporated area residents are paid for by unincorporated area revenues and (6) provides a process for resolving land use disputes arising over annexation.

Assessment

Each government entity should have equal representation on the joint recreational board and equal representation and input in the Chamber of Commerce. All government entities pay dues to the Chamber.

City of Alapaha has a new mayor who is resigning due to the fact he has moved out of the City limits. A special election will be held in either March or June of 2005 to replace him.

Alapaha has a gymnasium and park that is not lighted. As a short-term goal plan to incorporate lighting in the park and to explore future use and ways to expand those uses. Alapaha City Clerk identified one of their Councilman who has expresses a interest in and is willing to be a willing participant in pursuing expansion and improvements for their park.

Another goal for Alapaha for recreation is public involvement. Get the public involved by incorporating some of the following ideals:

Water pistol fight day Plant a seed Walks 5k prizes for everyone Free Zone for mud puddle Make attractive to people Make space accessible to people Citizen partner/ adopt a grandparent/ adopt a grandchild

City of Alapaha needs to use the Legend of Hogzilla as a drawing card for tourism. National Geographic has dug up the bones and ran test to prove the authenticity of Hogzilla, and will air their results on a show in early 2005. this will be national coverage which can be used to their advantage. It is also special and unique only to their community.

One of City Enigma's biggest concerns is that medical, law, and fire departments have had a hard time being able to locate the addresses or locations when necessary. Berrien is in the process of E911 addressing and at this time have maps and are City of Enigma needs to look at them carefully to make sure all roads in the city are marked and named correctly. Enigma has as its diversity fishing(fishing rodeo) and logging as being something that is commonplace to the Enigma area but to someone from somewhere else it would be new and unique. Expanding what facilities are at Patrick's Paradise would add to the availability of recreational activities.

Enigma like Ray City and Alapaha, short-term and long-term goals should include finding ways to get community involvement with the running if the community itself. this includes finding strategies and activities that attract community volunteers. Activities listed above for City of Alapaha can also be incorporated in Enigma.

Enigma needs representation on the joint recreational board and on the Chamber of Commerce . Close interaction is necessary not only with these two boards but also with the representative that Enigma chooses to place on the board.

Ray City needs to find ways for recruitment of volunteers to help with their Senior Citizen activities by expanding their staff. They also need to expand their recreational facilities and activities using some the same activities mentioned above. They also need to seek funds to expand their public safety services such as law enforcement. A long term goal could be incorporating an industrial park, and planning a celebration to kick off the beginning of Bike and Ped.

Involvement in other areas:

- ✤ Welcome Wagon
- Quarterly Filers
- Calendars
- News Letters
- Senior Citizens network
- Regional Waste Workshop (haulers, county, and cities)
- Teaching life skills and After school care

Other Goals

- City Swap
- Seek additional funding to increase service areas such as extra police
- Leadership programs
- Industrial Park
- Acquire land for expansion and affordable/low cost housing

- GOAL 1 Improve coordination mechanism between local governments, Independent Authorities and school board.
- Policy 1-1 Incorporate intergovernmental planning board.
- **Policy 1-2** Regional review of Comprehensive Plan on annual basis and at five-year update.
- Policy 1-3 Appoint liaison from each government
- Policy 1-4 Group work sessions
- **GOAL 2** Incorporate intergovernmental agreements between government entities
- Policy 2-1 Service Delivery Strategy, Comprehensive Plan, and Solid Waste Plan
- **GOAL 3** Revitalize, support, represent, and interact with Chamber of Commerce
- Policy 3-1 Adopt an active board
- Policy 3-2 Facilitate economic development
- Policy 3-3 Introduce diversification

Berrien County Comp Plan

Population

This chapter addresses Berrien County's population characteristics and trends and provides the foundation for other elements of the Plan. The following aspects are addressed below:

- Inventory of Existing Conditions
 - **o** Total Population
 - \circ Households
 - Age Distribution
 - Racial Composition
 - **o** Educational Attainment
 - Income
- Assessment of Current and Future Conditions
 - **o** Total Population
 - Households
 - Age Distribution
 - Racial Composition
 - **o** Educational Attainment
 - \circ Income

Inventory

Table 1-1

Total Population

	1980	1985	1990	1995	2000	2005	2006	2007	2008	2009	2010	2015	2020	2025
	Number	Number												
BERRIEN	13,570	13,952	14,163	15,365	16,245	16,557	16,625	16,689	16,773	16,854	16,925	17,263	17,686	18,178
ALAPAHA	760	786	811	747	682	695	698	701	704	708	711	725	742	763
ENIGMA	596	600	604	737	869	886	889	893	897	902	905	923	946	972
NASHVILLE	4,499	4,641	4,782	4,740	4,697	4,787	4,807	4,825	4,850	4,873	4,894	4,991	5,114	5,256
RAY CITY	557	581	604	675	746	760	763	766	770	774	777	793	812	835
GEORGIA	6,484,440	5,962,720	6,506,530	7,323,980	8,229,820	8,784,650	8,895,580	9,008,670	9,122,070	9,235,630	9,349,660	9,940,380	10,550,700	11,185,100

Source: Woods & Poole Economics, Inc. www.georgiaplanning.com/dataviews (1/9/04) Calculations for City Population Estimates done by SEGARDC using formula provided by Georgia Planning Website. Interpolation; Ratio Method for Data Estimation

Table 1-2

Numerical and Percentage Change 5-Yr

	1980-1985	1980-1985	1985-1990	1985-1990	1990-1995	1990-1995	1995-2000	1995-2000	2000-2005	2000-2005	2005-2010	2005-2010	2010-2015	2010-2015
	Number	%												
BERRIEN	382	2.82%	211	1.51%	1,202	8.49%	880	5.73%	312	1.92%	368	2.22%	338	2.00%
ALAPAHA	26	3.36%	26	3.25%	-65	-7.95%	-65	-8.64%	13	1.92%	15	2.22%	14	2.00%
ENIGMA	4	0.67%	4	0.67%	133	21.94%	133	17.99%	17	1.92%	20	2.22%	18	2.00%
NASHVILLE	142	3.15%	142	3.05%	-43	-0.89%	-43	-0.90%	90	1.92%	106	2.22%	98	2.00%
RAY CITY	24	4.22%	24	4.05%	71	11.75%	71	10.52%	14	1.92%	17	2.22%	16	2.00%
GEORGIA	-521,720	-8.05%	543,810	9.12%	817,450	12.56%	905,840	12.37%	554,830	6.74%	565,010	6.43%	590,720	6.32%

Table 1-3

Numerical and Percentage Change 10-Yr

	1980-1990	1980-1990	1990-2000	1990-2000	2000-2010	2000-2010	2010-2020	2010-2020
	Number	%	Number	%	Number	%	Number	%
BERRIEN	593	4.37%	2,082	14.70%	680	4.19%	761	4.50%
ALAPAHA	51	6.71%	-129	-15.91%	29	4.19%	32	4.50%
ENIGMA	8	1.34%	265	43.87%	36	4.19%	41	4.50%
NASHVILLE	283	6.29%	-85	-1.78%	197	4.19%	220	4.50%
RAY CITY	47	8.44%	142	23.51%	31	4.19%	35	4.50%
GEORGIA	22,090	0.34%	1,723,290	26.49%	1,119,840	13.61%	1,201,040	12.85%

Chart 1-1 Percentage Change of Total Population 5 Year Span





Chart 1-1 Percentage Change of Total Population 10 Year Span

TABLE 1 - 4

	1980	1990	2000
Greater Berrien	7,113	7,682	9,241
Nashville	4,499	4,561	4,697
Alapaha	760	782	682
Enigma	596	574	869
Ray City	557	554	746
Georgia	5,457,566	6,478,216	8,186,453
United States	224,810,192	248,032,624	281,421,920

Source: 2000 U.S. Census Data

Chart 1-3 COUNTY POPULATION BREAKDOWN





Source: Data U.S. Census 1980, 1990 & 2000 Decennial Years

Seasonal Population

	1980	1985	1990	1995	2000	2005	2006	2007	2008	2009	2010	2015	2020	2025
	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
BERRIEN	N/A	N/A	123	223	313	386	400	413	426	440	452	512	570	627
ALAPAHA	N/A	N/A	10	38	61	89	95	101	107	113	119	149	182	216
ENIGMA	N/A	N/A	2	32	62	82	86	89	93	96	100	114	128	141
NASHVILLE	2	28	54	78	100	124	129	133	138	143	148	172	198	224
RAY CITY	N/A	N/A	4	42	79	107	112	117	123	128	132	155	176	196
GEORGIA	N/A	N/A	82,951	103,549	125,549	142,074	145,328	148,604	151,872	155,130	158,385	174,862	191,500	208,447

Formula (Total Population/Total Units)*Seasonal = Seasonal Population Source: Housing Portion of Comp Plan

Table 1-6

Housing Projection Estimates (Total Units)

	1980	1985	1990	1995	2000	2005	2006	2007	2008	2009	2010	2015	2020	2025
	Number													
BERRIEN	5,113	5,486	5,858	6,479	7,100	7,721	7,845	7,969	8,094	8,218	8,342	8,963	9,584	10,205
ALAPAHA	267	295	323	323	323	323	323	323	323	323	323	323	323	323
ENIGMA	244	255	266	316	365	415	424	434	444	454	464	514	563	613
NASHVILLE	1,879	1,955	2,030	2,076	2,121	2,167	2,176	2,185	2,194	2,203	2,212	2,258	2,303	2,349
RAY CITY	294	287	279	315	351	387	394	401	409	416	423	459	495	531
GEORGIA	2,012,640	2,325,529	2,638,418	2,960,078	3,281,737	3,603,397	3,667,728	3,732,060	3,796,392	3,860,724	3,925,056	4,246,716	4,568,375	4,890,035

Seasonal Units

	1980	1985	1990	1995	2000	2005	2006	2007	2008	2009	2010	2015	2020	2025
	Number													
BERRIEN	N/A	N/A	51	94	137	180	189	197	206	214	223	266	309	352
ALAPAHA	N/A	N/A	4	17	29	42	44	47	49	52	54	67	79	92
ENIGMA	N/A	N/A	1	14	26	39	41	44	46	49	51	64	76	89
NASHVILLE	1	12	23	34	45	56	58	60	63	65	67	78	89	100
RAY CITY	N/A	N/A	2	20	37	55	58	62	65	69	72	90	107	125
GEORGIA	N/A	N/A	33,637	41,851	50,064	58,278	59,920	61,563	63,206	64,848	66,491	74,705	82,918	91,132

Source: U.S. Census Bureau, 1980, 1990 and 2000 Interpolation; Rate of Change Method

	1980-1990	1990-2000	2000-2010	2010-2020
	Number	Number	Number	Number
BERRIEN		190	139	118
ALAPAHA		51	58	63
ENIGMA		60	38	28
NASHVILLE	52	45	49	49
RAY CITY		74	54	43
GEORGIA		42,597	32,836	33,115

Seasonal Population Numerical Change

Table 1-9

Seasonal Population Percentage Change

	1980-1990	1990-2000	2000-2010	2010-2020
	Number	Number	Number	Number
BERRIEN		154.22%	44.34%	26.03%
ALAPAHA		509.68%	94.00%	52.87%
ENIGMA		2626.12%	60.76%	28.34%
NASHVILLE	2162.83%	83.93%	48.74%	33.32%
RAY CITY		1716.23%	68.23%	32.71%
GEORGIA		51.35%	26.15%	20.91%

TABLE 1-10

Unit	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
Berrien County	4,690	5,068	5,180	5,726	6,289	6,521	6,736	6,928	7,078	7,199
Alapaha	442	478	488	540	593	615	635	653	667	679
Enigma	804	869	888	981	1,078	1,118	1,155	1,188	1,213	1,234
Nashville	2,694	2,911	2,975	3,289	3,612	3,745	3,869	3,979	4,065	4,135
Ray City	731	790	807	892	980	1,016	1,050	1,080	1,103	1,122
Georgia	1,886,550	2,124,630	2,380,830	2,684,490	3,022,410	3,265,030	3,501,380	3,727,580	3,929,140	4,108,410

HOUSEHOLDS & HOUSEHOLD PROJECTIONS

Source: County and State Data: Woods & Poole Economics, Inc. 1980 - 2025. Source: City Data: U.S. Census 2000

Calculations for City Population Estimates done by SEGARDC using formula provided by Georgia Planning Website.

Ratio Method for Data Estimation

Table 1-11

Average Household Size

Unit	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
Berrien County	2.88	2.72	2.68	2.65	2.56	2.52	2.50	2.48	2.49	2.52
Alapaha	3.45	3.26	3.21	3.18	3.07	3.02	3.00	2.97	2.99	3.02
Enigma	3.52	3.33	3.28	3.24	3.13	3.08	3.06	3.03	3.04	3.08
Nashville	3.33	3.15	3.10	3.06	2.96	2.91	2.89	2.87	2.88	2.91
Ray City	3.48	3.28	3.23	3.20	3.09	3.04	3.02	2.99	3.01	3.04
Georgia	2.83	2.73	2.66	2.65	2.65	2.61	2.59	2.59	2.60	2.63

Source: County and State Data: Woods & Poole Economics, Inc. 1980 - 2025. Source: City Data: U.S. Census 2000

Calculations for City Population Estimates done by SEGARDC using formula provided by Georgia Planning Website.

Ratio Method for Data Estimation

CHART 1-4: AVERAGE HOUSEHOLD SIZE County vs. State



Chart 1-5 Census Trend



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Percentage Change per Decade

Unit	1980-1990	1990-2000	1980-2000
Berrien County	-6.94%	-4.48%	-11.11%
Alapaha	-6.94%	-4.48%	-11.11%
Enigma	-6.94%	-4.48%	-11.11%
Nashville	-6.94%	-4.48%	-11.11%
Ray City	-6.94%	-4.48%	-11.11%
Georgia	-6.01%	-0.38%	-6.36%

Age Distribution

Dowion Country										
Berrien County										
Category	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
Total	13,570	13,952	14,163	15,365	16,245	16,557	16,925	17,263	17,686	18,178
Age 0 to 4	1,034	1,084	1,102	1,170	1,152	1,120	1,178	1,221	1,243	1,264
Age 5 to 9	1,161	1,085	1,082	1,194	1,228	1,158	1,133	1,183	1,233	1,272
Age 10 to 14	1,151	1,074	1,073	1,137	1,274	1,232	1,178	1,137	1,191	1,267
Age 15 to 19	1,309	1,212	1,165	1,187	1,190	1,276	1,247	1,182	1,146	1,218
Age 1-19 Total	4,655	4,455	4,422	4,688	4,844	4,786	4,736	4,723	4,813	5,021
Age 20 to 24	1,099	1,106	985	1,039	982	1,079	1,169	1,130	1,102	1,059
Age 25 to 29	1,010	1,119	1,083	1,046	1,113	995	1,071	1,158	1,135	1,131
Age 30 to 34	998	1,047	1,066	1,172	1,143	1,144	1,020	1,099	1,186	1,167
Age 35 to 39	812	918	946	1,086	1,227	1,078	1,087	972	1,056	1,151
Age 20-39 Total	3,919	4,190	4,080	4,343	4,465	4,296	4,347	4,359	4,479	4,508
Age 40 to 44	760	864	1,024	1,088	1,188	1,228	1,071	1,085	969	1,059
Age 45 to 49	681	704	814	1,000	1,036	1,153	1,193	1,045	1,066	964
Age 50 to 54	658	672	746	911	1,040	1,031	1,140	1,184	1,050	1,075
Age 55 to 59	629	678	683	787	898	1,078	1,051	1,165	1,217	1,068
Age 40-59 Total	2,728	2,918	3,267	3,786	4,162	4,490	4,455	4,479	4,302	4,166
Age 60 to 64	712	700	613	710	746	857	1,028	1,000	1,120	1,166
Age 65 to 69	554	544	535	508	644	661	769	919	913	1,029
Age 60-69 Total	1,266	1,244	1,148	1,218	1,390	1,518	1,797	1,919	2,033	2,195
Age 70 to 74	439	476	492	499	484	546	569	662	806	807
Age 75 to 79	319	341	355	373	383	377	431	458	544	665
Age 80 to 84	143	190	229	255	277	269	275	315	341	411
Age 85 & Over	101	138	170	203	240	275	315	348	368	405
Age 70 + Total	1,002	1,145	1,246	1,330	1,384	1,467	1,590	1,783	2,059	2,288

Source: Woods & Poole Economics, Inc.

Age Distribution

Georgia										
Category	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
Total	5,484,440	5,962,720	6,506,530	7,323,980	8,229,820	8,784,650	9,349,660	9,940,380	10,550,700	11,185,100
Age 0 to 4	417,573	462,892	509,724	564,539	598,333	629,796	675,480	721,705	755,185	788,614
Age 5 to 9	444,041	445,018	484,180	549,787	618,937	618,801	651,151	699,206	747,703	783,179
Age 10 to 14	469,192	449,708	470,386	535,548	611,096	634,784	635,440	668,960	719,099	769,983
Age 15 to 19	530,203	494,338	497,016	527,453	599,430	640,815	663,636	665,377	701,697	755,194
Age 1-19 Total	1,861,009	1,851,956	1,961,306	2,177,327	2,427,796	2,524,196	2,625,707	2,755,248	2,923,684	
Age 20 to 24	518,679	549,089	525,733	566,012	595,128	624,594	662,165	688,120	698,366	741,237
Age 25 to 29	486,187	568,397	588,876	574,038	645,194	643,840	671,118	710,678	742,508	761,249
Age 30 to 34	453,402	523,674	587,927	657,821	661,277	669,690	664,440	691,898	733,944	766,525
Age 35 to 39	358,864	455,948	532,934	630,653	703,095	673,886	679,825	673,572	703,097	746,989
Age 20-39 Total	1,817,132	2,097,108	2,235,470	2,428,524	2,604,694	2,612,010	2,677,548	2,764,268	2,877,915	
Age 40 to 44	293,454	370,742	488,733	568,750	658,771	700,712	671,606	677,823	671,654	701,808
Age 45 to 49	266,613	299,351	373,916	499,312	576,162	664,201	705,387	677,093	683,511	677,376
Age 50 to 54	261,690	261,803	294,833	380,024	509,698	575,764	662,872	704,653	678,406	685,617
Age 55 to 59	247,547	256,891	258,514	293,678	377,413	491,146	552,804	637,135	678,382	654,334
Age 40-59 Total	1,069,304	1,188,787	1,415,996	1,741,764	2,122,044	2,431,823	2,592,669	2,696,704	2,711,953	
Age 60 to 64	217,108	238,786	239,108	250,358	287,032	361,290	469,792	530,572	613,266	654,941
Age 65 to 69	189,475	200,473	217,166	225,989	237,578	266,946	337,160	440,566	498,495	577,912
Age 60-69 Total	406,583	439,259	456,274	476,347	524,610	628,236	806,952	971,138	1,111,761	
Age 70 to 74	142,746	158,626	170,625	190,018	199,784	204,236	230,559	293,005	384,749	437,920
Age 75 to 79	94,529	112,632	129,325	140,888	158,098	163,627	168,596	192,212	246,871	327,045
Age 80 to 84	53,139	65,843	80,565	96,162	104,441	116,093	121,522	126,831	146,243	189,841
Age 85 & Over	39,994	48,505	56,970	72,955	88,356	104,426	126,107	140,974	147,547	
Age 70 + Total	330,408	385,606	437,485	500,023	550,679	588,382	646,784	753,022	925,410	165,312

Source: Woods & Poole Economics, Inc.

~28% ~28% /11%/9% 8%/9% ¥9% /11%/ ****31% \35%\ 1980 - Inside Ring 1990 - Second Ring 2000 - Third Ring 2010 - Fourth Ring 2020 - Fifth Ring 20% 23% 26% \26%\ 29% 24% 29% 27% 26% ×25%

Chart 1-6 Berrien County Age Distribution

□ Age 1-19 Total
 □ Age 20-39 Total
 □ Age 40-59 Total
 □ Age 60-69 Total
 □ Age 70 + Total



Chart 1-7

□ Age 1-19 Total
 □ Age 20-39 Total
 □ Age 40-59 Total
 □ Age 60-69 Total
 □ Age 70 + Total

Age Distribution

Alapaha										
Category	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
Total	760	786	811	747	682	618	553	489	424	360
Age 0 - 4	72	69	66	60	53	47	40	34	27	21
Age 5 - 13	111	114	116	100	84	68	52	36	20	4
Age 14 - 17	69	66	63	58	52	47	41	36	30	25
Age 0-17 Total	252	249	245	217	189	161	133	105	77	49
Age 18-20	40	38	36	33	29	26	22	19	15	12
Age 21 - 24	41	47	52	44	36	28	20	12	4	0
Age 25 - 34	114	118	121	103	84	66	47	29	10	0
Age 18-34 Total	195	202	209	179	149	119	89	59	29	12
Age 35 - 44	90	85	80	84	88	92	96	100	104	108
Age 45 - 54	69	73	77	80	83	86	89	92	95	98
Age 55 - 64	73	88	103	91	78	66	53	41	28	16
Age 35-64 Total	232	246	260	255	249	244	238	233	227	222
Age 65 & Older	82	90	97	96	95	94	93	92	91	90

Source: City Data: U.S. Census 2000

Calculations for City Population Estimates done by SEGARDC using formula provided by Georgia Planning Website.

Age Distribution

Enigma										
Category	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
Total	596	600	604	737	869	1,002	1,134	1,267	1,399	1,532
Age 0 - 4	48	35	21	61	101	141	181	221	261	301
Age 5 - 13	77	77	76	115	154	193	232	271	310	349
Age 14 - 17	49	49	48	51	53	56	58	61	63	66
Age 0-17 Total	174	160	145	227	308	390	471	553	634	716
Age 18-20	28	24	20	20	19	19	18	18	17	17
Age 21 - 24	34	32	30	38	46	54	62	70	78	86
Age 25 - 34	79	81	83	114	144	175	205	236	266	297
Age 18-34 Total	141	137	133	171	209	247	285	323	361	399
Age 35 - 44	74	81	87	102	117	132	147	162	177	192
Age 45 - 54	66	47	28	60	92	124	156	188	220	252
Age 55 - 64	66	94	121	95	68	42	15	0	0	0
Age 35-64 Total	206	221	236	257	277	298	318	350	397	444
Age 65 & Older	76	83	90	83	75	68	60	53	45	38

Source: City Data: U.S. Census 2000

Calculations for City Population Estimates done by SEGARDC using formula provided by Georgia Planning Website.

Age Distribution

Nashville										
Category	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
Total	4,499	4,641	4,782	4,740	4,697	4,655	4,612	4,570	4,527	4,485
Age 0 - 4	416	412	408	353	297	242	186	131	75	20
Age 5 - 13	622	641	660	678	695	713	730	748	765	783
Age 14 - 17	369	335	300	294	287	281	274	268	261	255
Age 0-17 Total	1,407	1,388	1,368	1,324	1,279	1,235	1,190	1,146	1,101	1,057
Age 18-20	234	222	210	197	183	170	156	143	129	116
Age 21 - 24	279	266	252	230	208	186	164	142	120	98
Age 25 - 34	665	682	698	669	640	611	582	553	524	495
Age 18-34 Total	1,178	1,169	1,160	1,096	1,031	967	902	838	773	709
Age 35 - 44	524	538	552	601	650	699	748	797	846	895
Age 45 - 54	440	403	365	467	568	670	771	873	974	1,076
Age 55 - 64	443	565	687	568	448	329	209	90	0	0
Age 35-64 Total	1,407	1,506	1,604	1,635	1,666	1,697	1,728	1,759	1,820	1,971
Age 65 & Older	510	580	650	686	721	757	792	828	863	899

Source: City Data: U.S. Census 2000

Calculations for City Population Estimates done by SEGARDC using formula provided by Georgia Planning Website.

Age Distribution

Ray City										
Category	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
Total	557	581	604	675	746	817	888	959	1,030	1,101
Age 0 - 4	56	46	36	53	70	87	104	121	138	155
Age 5 - 13	77	89	101	101	101	101	101	101	101	101
Age 14 - 17	39	37	34	45	56	67	78	89	100	111
Age 0-17 Total	172	172	171	199	227	255	283	311	339	367
Age 18-20	31	30	28	31	33	36	38	41	43	46
Age 21 - 24	43	39	35	43	51	59	67	75	83	91
Age 25 - 34	88	88	87	96	105	114	123	132	141	150
Age 18-34 Total	162	156	150	170	189	209	228	248	267	287
Age 35 - 44	58	59	60	94	128	162	196	230	264	298
Age 45 - 54	53	64	74	67	60	53	46	39	32	25
Age 55 - 64	51	62	73	64	54	45	35	26	16	7
Age 35-64 Total	162	185	207	225	242	260	277	295	312	330
Age 65 & Older	61	69	76	82	88	94	100	106	112	118

Source: City Data: U.S. Census 2000

Calculations for City Population Estimates done by SEGARDC using formula provided by Georgia Planning Website.



Table 1-8 Cities over Decades

Racial Composition

Berrien County: Population										
Category	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
White Population	NA	NA	12183	13087	13914	14012	14112	14124	14225	14340
Black Population	NA	NA	1644	1811	1845	1982	2164	2373	2577	2833
Native American	NA	NA	27	55	42	42	43	45	41	40
Asian & Pacific Islander	NA	NA	29	68	60	62	83	111	121	140
Hispanic, any Race	103	123	280	344	384	459	523	610	722	825

Source: Woods & Poole Economics, Inc.

Table 1-20

Racial Composition

Georgia: Population										
Category	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
White Population	NA	NA	4560990	4907310	5224740	5447930	5656900	5864510	6061640	6248400
Black Population	NA	NA	1747470	2037470	2371860	2552580	2748340	2952350	3153610	3354970
Native American	NA	NA	12865	17558	17782	18662	19451	19794	19876	20210
Asian & Pacific Islander	NA	NA	75156	124552	178198	232076	298184	374452	461398	565024
Hispanic, any Race	38483	47403	110050	237093	437240	533399	626778	729280	854199	996475

Source: Woods & Poole Economics, Inc.

Racial Composition

Alapaha town: Population by Race											
Category	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025	
TOTAL Population	760	786	811	747	682	618	553	489	424	360	
White	595	470	345	297	248	200	151	103	54	6	
Black	163	315	466	447	428	409	390	371	352	333	
American Indian Eskimo or Aleut	0	0	0	1	1	0	0	0	0	0	
Asian or Pacific Islander	0	0	0	0	0	0	0	0	0	0	
Other	2	1	0	0	0	0	0	0	0	0	
Persons of Hispanic Origin	9	20	30	15	0	0	0	0	0	0	

Source: City Data: U.S. Census 2000

Calculations for City Population Estimates done by SEGARDC using formula provided by Georgia Planning Website.

Racial Composition

Enigma town: Population by Race											
Category	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025	
TOTAL Population	596	600	604	737	869	1002	1134	1267	1399	1532	
White	576	538	499	588	676	765	853	942	1030	1119	
Black	19	55	90	90	90	90	90	90	90	90	
American Indian Eskimo or Aleut	0	2	3	2	0	0	0	0	0	0	
Asian or Pacific Islander	0	2	4	7	9	12	14	17	19	22	
Other	1	5	8	45	81	118	154	191	227	264	
Persons of Hispanic Origin	3	13	22	63	103	144	184	225	265	306	

Source: City Data: U.S. Census 2000

Calculations for City Population Estimates done by SEGARDC using formula provided by Georgia Planning Website.

Racial Composition

Nashville city: Population by Race											
Category	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025	
TOTAL Population	4499	4641	4782	4740	4697	4655	4612	4570	4527	4485	
White	3854	3880	3906	3737	3567	3398	3228	3059	2889	2720	
Black	628	748	868	941	1013	1086	1158	1231	1303	1376	
American Indian Eskimo or Aleut	3	6	8	11	13	16	18	21	23	26	
Asian or Pacific Islander	5	3	0	11	22	33	44	55	66	77	
Other	9	5	0	22	43	65	86	108	129	151	
Persons of Hispanic Origin	40	34	27	51	74	98	121	145	168	192	

Source: City Data: U.S. Census 2000

Calculations for City Population Estimates done by SEGARDC using formula provided by Georgia Planning Website.
Racial Composition

Ray City: Population by Race										
Category	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
TOTAL Population	557	581	604	675	746	817	888	959	1030	1101
White	483	474	464	517	570	623	676	729	782	835
Black	70	97	123	139	155	171	187	203	219	235
American Indian Eskimo or Aleut	1	5	9	5	1	0	0	0	0	0
Asian or Pacific Islander	2	5	8	6	4	2	0	0	0	0
Other	1	1	0	4	7	11	14	18	21	25
Persons of Hispanic Origin	5	3	0	6	12	18	24	30	36	42

Source: City Data: U.S. Census 2000

Calculations for City Population Estimates done by SEGARDC using formula provided by Georgia Planning Website.

Interpolation; Rate of Change Method

Racial Composition

Berrien County: Population								
Category	1990	%	2000	%	2010	%	2020	%
TOTAL Population	14163		16245		16925		17686	
White Population	12183	86.02	13914	85.65	14112	83.38	14225	80.43
Black Population	1644	11.61	1845	11.36	2164	12.79	2577	14.57
Native American	27	0.19	42	0.26	43	0.25	41	0.23
Asian & Pacific Islander	29	0.20	60	0.37	83	0.49	121	0.68
Hispanic, any Race	280	1.98	384	2.36	523	3.09	722	4.08

Table 1-26

Racial Composition

Georgia: Population								
Category	1990	%	2000	%	2010	%	2020	%
TOTAL Population	6506531		8229820		9349653		10550723	
White Population	4560990	70.10	5224740	63.49	5656900	60.50	6061640	57.45
Black Population	1747470	26.86	2371860	28.82	2748340	29.40	3153610	29.89
Native American	12865	0.20	17782	0.22	19451	0.21	19876	0.19
Asian & Pacific Islander	75156	1.16	178198	2.17	298184	3.19	461398	4.37
Hispanic, any Race	110050	1.69	437240	5.31	626778	6.70	854199	8.10

Educational Attainment

Alapaha			
Category	1980	1990	2000
TOTAL Adult Population 25 & Over	428	381	417
Less than 9th Grade	NA	112	53
9th to 12th Grade (No Diploma)	NA	148	84
High School Graduate (Includes Equivalency)	NA	138	180
Some College (No Degree)	NA	24	58
Associate Degree	NA	19	16
Bachelor's Degree	NA	12	21
Graduate or Professional Degree	NA	25	5

Source: US Census 2000

Table 1-28

Educational Attainment

Enigma			
Category	1980	1990	2000
TOTAL Adult Population 25 & Over	361	319	490
Less than 9th Grade	NA	111	63
9th to 12th Grade (No Diploma)	NA	112	130
High School Graduate (Includes Equivalency)	NA	128	185
Some College (No Degree)	NA	35	55
Associate Degree	NA	11	29
Bachelor's Degree	NA	12	23
Graduate or Professional Degree	NA	0	5

Source: US Census 2000

Table 1-29

Educational Attainment

Nashville			
Category	1980	1990	2000
TOTAL Adult Population 25 & Over	2,582	2,302	2,994
Less than 9th Grade	NA	626	401
9th to 12th Grade (No Diploma)	NA	675	734
High School Graduate (Includes Equivalency)	NA	951	810
Some College (No Degree)	NA	333	525
Associate Degree	NA	129	166
Bachelor's Degree	NA	148	181
Graduate or Professional Degree	NA	90	177

Source: US Census 2000

Educational Attainment

Ray City			
Category	1980	1990	2000
TOTAL Adult Population 25 & Over	311	294	452
Less than 9th Grade	NA	84	37
9th to 12th Grade (No Diploma)	NA	81	108
High School Graduate (Includes Equivalency)	NA	121	137
Some College (No Degree)	NA	57	114
Associate Degree	NA	15	24
Bachelor's Degree	NA	8	25
Graduate or Professional Degree	NA	4	7

Source: US Census 2000

Table 1-31

Educational Attainment

Berrien			
Category	1980	1990	2000
TOTAL Adult Population 25 & Over	7,779	8,782	10,451
Less than 9th Grade	2,556	1,795	1,231
9th to 12th Grade (No Diploma)	2,029	1,941	2,319
High School Graduate (Includes Equivalency)	2,174	3,047	3,615
Some College (No Degree)	NA	995	1,822
Associate Degree	NA	342	478
Bachelor's Degree	NA	449	559
Graduate or Professional Degree	NA	213	427

Source: US Census 2000

Table 1-32

Educational Attainment

Georgia			
Category	1980	1990	2000
TOTAL Adult Population 25 & Over	3,081,513	4,012,329	5,185,965
Less than 9th Grade	730,846	481,679	393,197
9th to 12th Grade (No Diploma)	613,975	683,833	718,152
High School Graduate (Includes Equivalency)	878,923	1,189,740	1,486,006
Some College (No Degree)	NA	682,350	1,058,692
Associate Degree	NA	198,951	269,740
Bachelor's Degree	NA	518,433	829,873
Graduate or Professional Degree	NA	257,201	430,305

Source: US Census 2000

Education Statistics

Berrien County							
Category	1995	1996	1997	1998	1999	2000	2001
H.S. Graduation Test Scores (All Components)	0.86	0.74	0.63	0.61	0.6	0.67	0.5
H.S. Dropout Rate	0.094	0.127	0.109	0.1	0.1	0.08	0.06
Grads Attending Georgia Public Colleges	0.36	0.382	0.401	0.27	0.36	NA	NA
Grads Attending Georgia Public Technical Schools	0.033	0.079	0.095	0.17	0.2	0.15	NA

Source: Georgia Department of Education

Table 1-34

Education Statistics

Georgia							
Category	1995	1996	1997	1998	1999	2000	2001
H.S. Graduation Test Scores (All Components)	0.82	0.76	0.67	0.68	0.66	0.68	0.65
H.S. Dropout Rate	0.0926	0.086	0.073	0.07	0.07	0.07	0.06
Grads Attending Georgia Public Colleges	0.35	0.3	0.302	0.39	0.38	0.37	0.36
Grads Attending Georgia Public Technical Schools	0.054	0.062	0.071	0.07	0.06	0.07	0.09

Source: Georgia Department of Education

Berrien: Average Household Income										
Category	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
Mean Household Income (Current \$)	NA	NA	25,119	27,523	30,423	33,350	36,289	39,181	42,141	49,623

Source: Woods & Pool Economics, Inc.

Table 1-36

Georgia: Average Household Income											
Category	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025	
Mean Household Income (Current \$)	NA	NA	33,259	35,692	42,158	44,169	52,533	54,203	63,964	59,049	

Source: Woods & Pool Economics, Inc.

Table 1-37

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

Source: Woods & Pool Economics, Inc.

Table 1-38

Berrien: Per Capita Income										
Category	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
Income per Capita (1996 \$)	10,753	13,199	15,770	16,956	18,392	19,212	20,103	21,186	22,327	23,554

Source: Woods & Pool Economics, Inc.

Alapaha town: Household Income Dist	ribution		
Category	1980	1990	2000
TOTAL Households	253	282	280
Income less than \$5000	58	45	NA
Income \$5000 - \$9999	43	31	62
Income \$10000 - \$14999	54	36	33
Income \$15000 - \$19999	39	20	14
Income \$20000 - \$29999	21	58	70
Income \$30000 - \$34999	16	26	23
Income \$35000 - \$39999	9	28	16
Income \$40000 - \$49999	4	19	19
Income \$50000 - \$59999	1	9	18
Income \$60000 - \$74999	1	0	11
Income \$75000 - \$99999	4	8	8
Income \$100000 or more	2	2	6

Source: U.S. Bureau of the Census

Table 1-40

Enigma town: Household Income Distr	ibution		
Category	1980	1990	2000
TOTAL Households	208	249	329
Income less than \$5000	41	41	NA
Income \$5000 - \$9999	39	52	36
Income \$10000 - \$14999	36	34	49
Income \$15000 - \$19999	32	19	48
Income \$20000 - \$29999	27	43	64
Income \$30000 - \$34999	11	13	24
Income \$35000 - \$39999	9	11	24
Income \$40000 - \$49999	5	17	26
Income \$50000 - \$59999	3	11	19
Income \$60000 - \$74999	2	0	19
Income \$75000 - \$99999	3	6	4
Income \$100000 or more	2	2	16

Source: U.S. Bureau of the Census

Nashville city: Household Income Dist	ribution		
Category	1980	1990	2000
TOTAL Households	1,540	1,785	1,834
Income less than \$5000	330	255	NA
Income \$5000 - \$9999	270	226	346
Income \$10000 - \$14999	312	228	252
Income \$15000 - \$19999	225	161	151
Income \$20000 - \$29999	151	321	272
Income \$30000 - \$34999	83	111	83
Income \$35000 - \$39999	56	126	117
Income \$40000 - \$49999	35	124	250
Income \$50000 - \$59999	14	107	106
Income \$60000 - \$74999	10	58	111
Income \$75000 - \$99999	26	36	66
Income \$100000 or more	27	32	80

Source: U.S. Bureau of the Census

Table 1-42

Ray City: Household Income Distributi	ion		
Category	1980	1990	2000
TOTAL Households	195	236	306
Income less than \$5000	38	35	NA
Income \$5000 - \$9999	33	40	71
Income \$10000 - \$14999	42	43	32
Income \$15000 - \$19999	26	30	32
Income \$20000 - \$29999	18	43	39
Income \$30000 - \$34999	8	10	25
Income \$35000 - \$39999	7	7	34
Income \$40000 - \$49999	6	10	27
Income \$50000 - \$59999	2	12	20
Income \$60000 - \$74999	1	5	12
Income \$75000 - \$99999	4	1	12
Income \$100000 or more	9	0	2

Source: U.S. Bureau of the Census

Berrien County: Household Income Dis	stribution		
Category	1980	1990	2000
TOTAL Households	4,652	5,243	6,263
Income less than \$5000	972	651	NA
Income \$5000 - \$9999	819	594	830
Income \$10000 - \$14999	934	640	670
Income \$15000 - \$19999	676	637	550
Income \$20000 - \$29999	473	1,018	1,077
Income \$30000 - \$34999	243	398	460
Income \$35000 - \$39999	173	350	459
Income \$40000 - \$49999	115	392	800
Income \$50000 - \$59999	47	281	388
Income \$60000 - \$74999	28	106	463
Income \$75000 - \$99999	79	116	315
Income \$100000 or more	94	60	251

Source: U.S. Bureau of the Census

Table 1-44

Georgia: Household Income Distribution	on		
Category	1980	1990	2000
TOTAL Households	1,869,754	2,366,615	3,007,678
Income less than \$5000	302,864	186,997	NA
Income \$5000 - \$9999	319,679	209,826	304,816
Income \$10000 - \$14999	304,354	204,037	176,059
Income \$15000 - \$19999	265,302	209,850	177,676
Income \$20000 - \$29999	215,674	405,470	383,222
Income \$30000 - \$34999	153,940	186,974	187,070
Income \$35000 - \$39999	103,371	160,329	176,616
Income \$40000 - \$49999	62,868	260,968	326,345
Income \$50000 - \$59999	38,203	180,186	278,017
Income \$60000 - \$74999	27,517	162,055	315,186
Income \$75000 - \$99999	47,980	109,468	311,651
Income \$100000 or more	28,437	90,224	371,020

Source: U.S. Bureau of the Census

Geograp Identifi		Geographic Summary Level	Geographic Component	Geography	State	County	Median income in 1999 (dollars); Households	income in 1999 (dollars):	Per capita income in 1999 (dollars)	Median earnings in 1999 of full- time, year- round workers (dollars); Male	time, year- round workers	below poverty level; Percent of population for whom poverty status is determined: All	below poverty level; Percent of population for whom poverty status is determined; Related children	below poverty level; Percent of population for whom poverty status is determined; 65	Income in 1999 below poverty level; Percent of fomilies
04000US13	001	040	00	Georgia	13		42433	49280	21154	35791	26679) 13	16.7	13.5	9.9
05000US130	19 001	050	00	Berrien County	13	019	30044	34643	16375	25559	19790) 17.7	25.4	13	14.6

Source: US Census Fact Finder

Geography	State	Cou	inty County Subdivision	Central City	Median income in 1999 (dollars); Households	Median income in 1999 (dollars); Families	Per capita	in 1999 of full- time, year-round workers	Median earnings in 1999 of full- time, year-round workers (dollars); Female	Income in 1999 below poverty level; Percent of population for whom poverty status is determined; All ages	Income in 1999 below poverty level; Percent of population for whom poverty status is determined; Related children under 18 years	Income in 1999 below poverty level; Percent of population for whom poverty status is determined; 65 years and over	Income in 1999 below poverty level; Percent of families
Berrien County	13	019			30044	34643	16375	25559	19790	17.7	25.4	13	14.6
Alapaha CCD	13	019	90054		27422	32679	13962	25873	19125	10.8	14.5	17	9.8
Enigma CCD	13	019	91092		30205	31890	15479	28446	20710	17.6	23.7	12.5	12.9
Nashville CCD	13	019	92130		30196	35242	17317	24832	19808	18.9	29.2	12.3	15.5
Ray City CCD	13	019	92442		31159	35357	15466	25123	19638	17.7	21	13	16.3
Alapaha town	13	019	90054	01024	22422	27679	11925	26250	18800	21.3	31.6	33.3	21.5
Remainder of Alapaha CCD	13	019	90054	99999	31094	41607	15537	25833	19450	2.6	0	6.9	0.8
Enigma town	13	019	91092	27596	25268	27375	14498	22202	16964	24.2	30.4	19.5	20.9
Remainder of Enigma CCD	13	019	91092	99999	31769	34583	15902	30725	21424	14.7	/ 19.8	9.9	9.7
Nashville city	13	019	92130	54264	26228	33320	15007	22725	19533	25.8	40.6	15.3	20.6
Remainder of Nashville CCD	13	019	92130	99999	33640	36197	19738	25821	20166	12	15.5	9.2	10.7
Ray City city	13	019	92442	63728	25769	32614	12788	26354	17054	30	32.7	31.6	25.1
Remainder of									• • • • •				
Ray City CCD	13	019		99999	33158		16545	1	20948	12.8		5.4	
Alapaha town	13	019		01024	22422		11925		18800	21.3		33.3	
Enigma town	13	019		27596	25268		14498	1		24.2		19.5	
Nashville city	13	019		54264	26228		15007			25.8		15.3	
Ray City city	13	019		63728	25769	32614	12788	26354	17054	30	32.7	31.6	25.1

Assessment

An understanding of Berrien County and the Cities of Alapaha, Enigma, Nashville, and Ray City in terms of past, present and future trends, characteristics and distribution throughout the cities and unincorporated county, provides insight about needs for utilities, schools, housing, police and fire protection, emergency medical services, recreation and other services and facilities.

TOTAL POPULATION

Table 1-1 shows the population of Berrien County and its municipalities and the State of Georgia from 1980 to 2025. Berrien County and its municipalities fared better compared to the State's 8% loss in population during the first five years of the 1980's and even surpassed that State during the entire decade as seen in Tables 1-2 and 1-3 and Charts 1-1 and 1-2. During the 1990's everyone enjoyed a strong growth trend except for Alapaha and Nashville who suffered a loss in population during both halves of the decade; Nashville's loss being less than two percent compared to Alapaha's almost 16% downhill slide. The largest percentage of growth came from the City of Enigma nearly doubling its size during the 1990's with a 43.87% increase in population compared to the County's and State's increases of 14.70% and 26.49% respectively.

Table 1-4 and Chart 1-3 shows the breakdown of population within Berrien County. Over half the population of the county lives in Greater Berrien County (outside the city limits of any municipality), one third of the population lives within the boundaries of Nashville, the county seat, and the remainder being split between Alapaha, Enigma and Ray City. The percentages have remained relatively consistent during the past three Censuses. There does seem to be a trend beginning of citizens leaving Nashville and moving out to either a smaller town such as Enigma or Ray City or even to Greater Berrien County itself.

Over the next twenty years Berrien County is projected to grow at a steady rate of 2% every five years and the State is projected to grow at a rate of 6% every five years over the next twenty years. See Table 1-2. The municipalities follow the county's lead with a growth of approximately 2% every five years for the next twenty years.

In regards to Seasonal Population, the formula of (*Total Population/Total Units*)*Seasonal Units = Seasonal Population was used to find the seasonal population for Georgia, Berrien County and its municipalities. See Tables 1-5 thru 1-7. The percentage of change for seasonal population jumps astronomically in the 1980's for Nashville, 2162.83%, and then in the 1990's for the rest of the county, its municipalities and the State. Berrien County surpassed the State with its growth rate of 154.22% compared to the State's 51.35% in the 1990's as did all of Berrien County's municipalities. See Tables 1-8 and 1-9. All the Information needed to compile daytime population statistics was not available. Information on the number of those leaving the county to work was available, but not for those coming into the county for work or those that were day-trip visitors.

If Berrien County continues to increase its housing base and the job base in the county at the rate that it has over the past twenty years and continues to monitor the community facilities and watch for any unexpected downturns or influx in population then there should be no shortage in housing. The county does need to keep in mind that it is becoming a bedroom community for its neighboring counties where many of its residents go everyday to work. Not only does the county need to keep an eye on its population, but keep close tabs on the population of its neighbors.

HOUSEHOLDS

In the 2000 Census, Berrien County shows 6,289 households with an average household size of 2.56. See Tables 1-10 and 1-11. Over the past two Censuses the trend has been that the County's Household Average was greater than that of the State's, albeit less than a tenth, until this past Census when the State and the County switched places. See Chart 1-4. Over all, the trend from the past three Census compilations is one of decreasing average household size. See Chart 1-5. From 1980 to 1990 there was a drop of 6.94% across the board for Berrien County and it's municipalities; the State dropped only 6.01%. From 1990 to 2000 Berrien County and its municipalities saw a drop of 4.48% while the State only saw .38% of a drop. See Table 1-12. Over the past twenty years the State has fared better than Berrien County with only 6.36% drop in Average Household size compared to Berrien's 11.11% drop.

The trend of the municipalities shows a decline in household size over the past two decades. This trend seems to continue until around 2017 when the projected household size shows a small increase, which continues into the 2025 projected numbers. Only new projections calculated after the 2010 census will be able to bear out the forecast for increase in household size.

Using the current US Census numbers, the number of households per block group can be seen. The actual size of the block groups in addition to the number of households within those block groups should be taken into account when trying to find areas of greater household density per acre. A prime example is that of the five block groups surrounding the City of Nashville. Combined they have a land mass approximately a third of the size of the block group just below them. However, the number of households is that of a 2:1 ratio.

Over the next twenty years the average household stays steady at around 2.5 and the State follows suit holding steady at around 2.6. If the county and its neighbors continue this trend then there should be adequate housing available for residents.

AGE DISTRIBUTION

The Age Distribution between Berrien County and the State is consistent as can be seen numerically in Tables 1-13 and 1-14. The three largest divisions being those of the 0-19, 20-39 and 40-59 age groups. See Charts 1-6 and 1-7. Nashville and Ray City follow the same road as both the County and the State. However, Alapaha and Enigma fluctuate from the norm during the 2010 and 2020 projection estimates. See Tables 1-15 thru 1-18 and Chart 1-8. One reason for the fluctuation in Enigma and Alapaha may be that the as the 18-34 and the 35-64 groups increase so does that of the 0-17 age group as the previous two groups begin to have children.

Over the next twenty years Berrien County will be seeing a decrease in school age children of only about 1%. Taking into account that Nashville contains both primary schools and the only Middle and High School for the county and that there is a projected decrease then there should be no need to build additional schools unless buildings become old and outdated. An inventory of the school system and its buildings should be taken for future use.

The 60-69 and 70+ age groups are projected to increase over the next twenty years by 2% and 3% respectively. Health care and housing for the elderly should be a major consideration for the county and especially in the towns of Alapaha and Nashville where the greatest increase in the elderly is projected.

RACIAL COMPOSITION

In comparing Berrien County's Racial Composition with that of the State of Georgia the timeline had to begin in 1990 and not 1980 as information was not available for either 1980 or 1985. The four majority races in the State of Georgia are and will continue to be 1) White, 2) Black, 3) Hispanic and 4) Asian & Pacific Islander. Berrien County's three majority races are 1) White, 2) Black and 3) Hispanic. The State has a steady increase for all four races over the next twenty-five years, one race not really making a significant jump or decline. In Berrien, the Black and Hispanic Population mimic the State with a steady increase over the next twenty-five years. However, unlike the State the white population seems to hit a plateau for the next twenty years and then does not see any signs of increase until 2025. See Tables 1-19 thru 1-24.

The percentage of each race and either the increase or decrease seems to remain constant for the next twenty years as can be seen in Tables 1-25 and 1-26. Overall the county is predominately white with around 80% for the next twenty years while the black population increases from 11% to almost 15% over the next twenty years and the Hispanic population has the greatest amount of growth going from 2% to 4%. The influx of Mexican laborers, who used to be migrant workers on area farms, are now becoming residents of these rural communities. This trend is sure to continue for the next twenty years. Community facilities such as clinics, health departments, law

enforcement and anyone else who deals with the public on a daily basis should take this increase into account when hiring new employees or when considering continuing education for their employees. There should be at least one person in each department who can speak Spanish to interpret for those new residents who do not speak English. A basic understanding of emergency Spanish should be required for all health and emergency personnel.

EDUCATION

Over the past twenty years the percentage of those who have less than a 9th grade education has decreased in both Berrien County and Georgia. More so in Berrien County than the State with an 8.6% drop to the state's 4.42%. However, when it comes to 9th to 12th grade (No Diploma) and High School Graduate (Includes Equivalency) statistics the State out performs the County. In respects to secondary and post secondary education both the county and the State have seen respectable increases. See Tables 1-27 thru 1-34.

The increase in technical jobs and the use of computers in everyday jobs combined with the decline of independent farms and the increase of corporate farming which rely on more scientific means for production increases has put an emphasis on education whereas twenty to thirty years ago there did not seem a need for education if you were just going to work on a farm or in a factory.

The surrounding counties of Lowndes and Tift contain jobs that require a much higher level of education than those typically found in a small rural county like Berrien. However, the industries that are in and are being courted by Berrien are becoming increasingly technical. This must be a factor when making decisions in the secondary education fields. A technical school like that of Ware County's Okefenokee Technical College would be an asset not only to the county, but also to the local industries. Local industries would be able to have a pool of local workers who are knowledgeable in specific fields and those who attend the technical school would be able to remain in the county to work and not leave the area to find a job in their field.

At this point and time the county is mostly industrial with agriculture as its primary industry and manufacturing coming in second with the current industrial park almost to capacity. In order to diversify the economy the county would be wise to attract new and various types of industry. If the county continues to court promising industrial choices, as they have in the past, job growth in the county should continue to grow without any problems.

INCOME

In general, local incomes are still lower than that of the state. The fact is that rural salaries rarely, if ever, match those of urbanized areas. The cost of living is lower, therefore salaries are lower. However, the county has seen an increase comparable with that of the state since 1990 (1980 data was unavailable). There has been a steady increase of both mean household income and per capita income. See Tables 1-35 thru 1-44. The fact that the county has courted industries that pay well and has promoted the education of its citizens has helped to keep most of its citizens over the poverty level.

The Per Capita Income for 1999 was \$16,375 and the 2000 Census showed that over all only 17.7% of the county fell into this category while which was slightly higher than that of the state's

13%. See Table 1-45. The municipalities have a much sadder note. Their poverty levels range from 21.3% to 30% with the young and the elderly being the most evident victims. The cities of Alapaha, Enigma, Ray City and Nashville need to make sure that there is adequate housing and community programs for these people as their numbers are projected to increase over the next twenty years and it is these two groups who do not have the option of finding better employment. See Table 1-46.