2010 ADDENDUM TO COMMUNITY ASSESSMENT CITY OF FLOWERY BRANCH, GA, COMPREHENSIVE PLAN

Prepared December, 2010 Adopted June, 2011

CONTENTS

2010 ESTIMATES OF POPULATION AND HOUSING	5
POPULATION AND HOUSING UNIT PROJECTIONS	7
COUNTY AND AREA EMPLOYMENT TRENDS	10
EXISTING EMPLOYMENT IN THE CITY OF FLOWERY BRANCH	12
VACANT NON-RESIDENTIAL LANDS INVENTORY	15
JOBS-HOUSING BALANCE	17
DESCRIPTION OF PLANNING SUBAREAS	19
EXISTING LAND USE BY PLANNING SUBAREA	20
LAND USE ISSUES AND OPPORTUNITIES	24
CHARACTER AREAS BY PLANNING SUBAREA	27
FACILITY NEEDS ANALYSIS	29
HISTORIC PRESERVATION	32

LIST OF TABLES

1	Census Population Estimates, July 1, 2000 to July 1, 2009, City of Flowery Branch	5
2	Housing Unit Permits Issued, 2002 to 2009, City of Flowery Branch	5
3	Types of Housing Units, 2000 and 2010, City of Flowery Branch	6
4	Population Estimate, 2010, City of Flowery Branch	7
5	Inventory of Vacant Lands Planned for Residential Use by Planning Subarea City of Flowery Branch, 2010	8
6	Housing Unit Projections by Housing Unit Type, 2030 City of Flowery Branch	g
7	Population, Household and Housing Unit Projections, 2010-2030 City of Flowery Branch	g
8	Total Employment, Flowery Branch Zip Code (30542) and Hall County, 2003 to 2008	10
9	Employment by Industry, Hall County, 2003-2008	11
10	Average Employees per Establishment by Industry Gwinnett, Hall and Jackson Counties, Georgia, 1998, 2003, and 2008	12
11	Estimated Employment by Selected NAICS Industry Code, 2010 City of Flowery Branch	13
12	Characteristics of Flowery Branch Employment Density	14
13	Inventory of Vacant Lands and Projected Employment at Buildout Areas Planned for Nonresidential Use by Planning Subarea City of Flowery Branch, 2010	15
14	Forecasted New Employment by Land Use Type, 2010-2030 City of Flowery Branch	17
15	Employment Projections, 2010-2030, City of Flowery Branch	17
16	Projected Jobs-Housing Unit Ratios, 2010 to 2030 City of Flowery Branch	18
17	Flowery Branch's Planning Subareas	19
18	Existing Land Use Summary by Planning Subarea	23
10	Residential Development Issue and Opportunities Summary	2/

2010 Addendum to Community Assessment, Flowery Branch Comprehensive Plan

20	Non-Residential Development Issues and Opportunities Summary	26
21	Summary of Predominantly Residential Character Areas Applied to Planning Subareas	27
22	Summary of Predominantly Non-Residential Character Areas Applied to Planning Subareas	28
23	Functional Population Projections, 2010-2030 City of Flowery Branch	29
24	Administrative Space Needs, 2010-2030, City of Flowery Branch	29
25	Police Facility Space Needs, 2010-2030, City of Flowery Branch	30
26	Potable Water Needs, 2010-2030, City of Flowery Branch	30
27	Sanitary Sewer Capacity Needs, 2010-2030, City of Flowery Branch	31

2010 ESTIMATES OF POPULATION AND HOUSING

Revised housing unit, household, and population estimates are essential to project housing and population into the future. We started with the U.S. Census Bureau's estimates of population which are shown in Table 1. Table 2 provides new housing unit permits issued between 2001 and 2009.

Table 1
Census Population Estimates, July 1, 2000 to July 1, 2009
City of Flowery Branch

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Population	2,093	2,148	2,199	2,223	2,228	2,300	3,344	3,896	3,975	4,115

Source: U.S. Census Bureau, Population Division. September 2010. Annual Estimates of the Resident Population for Incorporated Places in Georgia: April 1, 2000 to July 1, 2009.

Table 2
Housing Unit Permits Issued, 2002 to 2009, City of Flowery Branch

Year	Single-Family	Two Family	3-4 Units	4 or more
2009	40			
2008	52			
2007	104	24		
2006	231			
2005	328	8	24	561
2004	215		12	
2003	56		36	
2002	41		55	29
2001	n/a	n/a	n/a	n/a
Total	1,067	32	127	590

n/a = not available

Source: City of Flowery Branch, November 2010. Compiled by Jerry Weitz & Associates, Inc.

From January 2002 through the end of 2009, Flowery Branch's records indicate it issued a total of 1,816 permits for new housing unit starts. After reviewing the housing permit data, it was clear that the Census had underestimated the city's population during the 2000s.

The data on housing starts in Table 2 provide the basis for estimating the city's current population, which in turn is the starting point for projecting future population, households, and housing units. Estimating population on the basis of housing unit type is more accurate, since average household size (i.e., persons per unit) varies by housing type, with household size being lower in multi-family dwelling units.

Table 3 provides an estimate of the number of housing units by housing type as of January 1, 2010. The estimates are derived by adding the housing starts in Table 2 to the Census counts of housing unit types in 2000 (shown in Table 3).

Table 3
Types of Housing Units, 2000 and 2010
City of Flowery Branch

Type of Unit	Total Housing Units 2000	%	Additional Housing Units Permitted 2001-2009	Total Housing Units 2010 (Jan. 1)	%
One family, detached	328	41.6%	1,088	1,416	54.0%
One family attached, two-family, and apartment	257	32.6%	749	1,006	38.3%
Mobile Home, Trailer, Other	203	25.8%	0	203	7.7%
Total	788	100%	1,837	2,625	100%

Note: In lieu of permit data for 2001 which were not available, it was estimated on the basis of the Census Population Estimates (Table 1) that an additional 55 persons would yield approximately 21 additional housing units, all single-family. Those additional units were added to the total housing starts.

Sources: Year 2000 data from U.S. Department of Commerce, Economics and Statistics Administration, Bureau of the Census, Census of Population and Housing, 2000 (SF3, Table H30). Housing starts from Table 2 (City of Flowery Branch), as modified by note above.

Housing units provides one of the most reliable bases on which to estimate population. One has to consider first that not all housing units will be occupied. Therefore, some occupancy rate must be assumed. Also one has to consider that the housing unit method for estimating population will yield an estimate of only the household population, excluding group quarters. If a given jurisdiction has college dormitories, correctional institutions, nursing homes, or other group quarters facilities, people residing in group quarters must be added to the population estimate. In the case of Flowery Branch, there are no group quarters.

We look to the year 2000 census for insight in determining what assumptions to make about occupancy rates and household sizes. From the 2005 community assessment, we extract the following relevant data which are used in the population projection. Year 2000 trends may hold true for 2010, unless there is reason to believe the decade has brought about significant changes.

- Household Sizes. The average household size in 2000 in Flowery Branch was 2.67 persons for owner-occupied housing units and 2.52 for renter-occupied housing units (Table 2.5, community assessment). Single-family units are predominantly but not exclusively homeowner occupied. Multi-family units are predominantly but not exclusively renter occupied. As noted in Chapter 2 of the community assessment (2005), there has been a historic decline in average household size in the United States over several decades. However, the community assessment (Chapter 2) also notes that in Georgia as a whole, household sizes remained generally steady from 1990 to 2000. Furthermore, in Flowery Branch, average household size increased significantly during the decade. For purposes of estimating and projecting population, we use the year 2000 household sizes for homeowner and renter-occupied housing units, assuming they have held constant in 2010 and will hold relatively constant through 2030.
- Vacancy Rates. Vacancy rates for housing in 2000 in Flowery Branch were 12.1
 percent for the total housing stock and 13.1 percent for both single-family and multifamily housing units. Conventional wisdom would suggest that rental unit vacancy rates
 are typically much higher than owner-occupied homes. At first glance, it is likely that

Flowery Branch's older housing stock as of 2000 consisted of a higher percentage of smaller, obsolete, and substandard houses than would the 2010 housing stock, suggesting that the vacancy rate would not be as high in 2010 as it was in 2000. On the other hand, the great recession resulted in many foreclosures which would increase the vacancy rate. It is not uncommon for renter-occupied units such as apartments to reach vacancy rates of 18 percent or more; however, the foreclosure crisis nationally would suggest that apartment unit vacancy rates would drop when homeowners have to move out of their homes. For Flowery Branch, we assume vacancy rates of 7 percent for single-family homes and 10 percent for multi-family units and manufactured homes.

Table 4 shows the estimated household population in Flowery Branch as of January 1, 2010, based on the housing unit method. There are no group quarters populations, so these household population projections are the same as total population projections.

Table 4
Population Estimate, 2010, City of Flowery Branch

Housing Unit Type	Estimated No. of Units, 2010 (Jan. 1)	Estimated Vacancy Rate	Estimated Occupied Units	Estimated Household Size (persons per unit)	Estimated Population 2010 (Jan. 1)
Single-family detached	1,416	7%	1,317	2.67	3,516
Multi-family	1,006	10%	905	2.52	2,280
Manufactured home	203	10%	183	2.52	461
Total Housing Units	2,625		2,405		6,257

Source: Jerry Weitz & Associates, Inc., November 2010.

POPULATION AND HOUSING UNIT PROJECTIONS

The city's population can change by variations in three major components. First, the city can annex lands with houses already built and occupied, thus increasing population. Second, population of the city can increase by virtue of increases to the housing stock or the addition of group quarters, or in other words, migration into the city. Third, there is natural increase, or the number of births minus the number of deaths.

No assumptions are made here about annexation, although any future annexations of residential lands, built and occupied or vacant, could change these projections considerably. The projection method applied here estimates population gain according to the number of housing units likely to be constructed in the future 20-year planning horizon. The prior plan assumed some additional population would occur due to the construction of group quarters such as nursing and personal care homes, but here we do not project any group quarters population in the future. If there are group quarters facilities constructed in Flowery Branch in the future, the impact on the total population projections is likely to be negligible. Natural increase is estimated based on data for births and death (birth and death rates) for Hall County in recent years, assuming they are applicable in Flowery Branch. However, natural increase is not specifically attributed in the projection method, since it is already accounted for in assumptions about average household size, as discussed further below.

The number of future housing units can be estimated by analyzing vacant residential lands in the city and projecting their development at densities recommended in the future land use plan. It is useful to project housing units on the basis of smaller city subareas. For that purpose the city was divided into twelve planning areas, discussed later in this report.

From the city's existing land use map, updated in 2010, and property tax assessment data available via the internet, the future capacity for additional population and housing units can be estimated. Table 5 provides a tabulation of vacant land and housing units likely to be developed. Vacant land was estimated to yield approximately 75 percent developable land, after considering environmentally sensitive land and land devoted to streets and other uses. Table 5 shows the inventory of developable residential land, along with estimated residential units at buildout (based on previous site plans submitted, and/or the future land use plan designation and corresponding maximum residential density permitted by the city's zoning ordinance). Again, these estimates are presented on the basis of "planning subareas" which are explained later in this report. Table 5 shows only those planning areas that have residential lands in the future.

Table 5
Inventory of Vacant Lands Planned for Residential Use by Planning Subarea
City of Flowery Branch, 2010

Planning Subarea	Parcel Acreage Tax/GIS)	Estimated Developable Acreage	Units Per Acre (Zoning) ²	Housing Units At Buildout
Northwest Residential	53.4	29.4	4.55	134
North McEver	49.16	36.9	2.18	80
West Greenfield	108	71.3	3.8	270
West Flowery Branch	18.7	14.0	11.2	157
Old Town	n/c	n/c	n/c	75
Phil Neikro/ Tanner South	8.21	6.2	3.0	19
	15.5	11.6	3.0	35
	37.9	28.4	3.0	85
	8.23	6.2	3.0	19
East Central	2.05	1.5	3.0	5
Falcon Pkwy./ Martin Road	32.49	24.4	3.0	73
South Hog Mountain	272.5	204.3	1.94	396
Sterling on the Lake	n/c	n/c	n/c	1,324
	57.4	43.1	2.18	94
Total New Units, City	n/c	n/c	n/c	2,766

n/c = not calculated

Source: Jerry Weitz & Associates, Inc. and Flowery Branch Planning Department, October 2010.

As shown in Table 5, there is a projected capacity of 2,766 additional housing units in Flowery Branch at buildout. The housing unit buildout projections do not indicate future housing types. However, reasonable projections of housing type can also be provided based on knowledge of development approvals and zoning categories (see Table 6). Housing unit increases in Flowery

¹ Except for land in the Northwest Residential, West Greenfield and South Hog Mountain planning areas, where previously proposed subdivision plans were available and provided a more accurate basis for estimation.

² For areas designated mixed use, a residential density of 3.0 units per acre is assumed, in addition to any applicable nonresidential development permissions.

Branch in the future will be influenced most predominantly by a single development, Sterling on the Lake, which is approved for 1,964 dwelling units.³ It is estimated that 640 homes have been built in that development as of October 2010, leaving approximately 1,324 new units to be constructed under that prior development approval. Data in Table 6 assume that all new mixed-use residential components will be classified as multi-family housing, and that approximately 200 units within Sterling on the Lake will be classified as multi-family housing. The only other land with multi-family zoning is in West Flowery Branch (see Table 5).

Table 6
Housing Unit Projections by Housing Unit Type, 2030
City of Flowery Branch

Housing Unit Type	Estimated No. of Units, 2010 (Jan. 1)	Estimated New Housing Units at Buildout, 2010- 2030	Total Housing Units, 2030 (buildout)
Single-family detached	1,416	2,098	3,514
Multi-family	1,006	668	1,674
Manufactured home	203	0	203
Total Housing Units	2,625	2,766	5,391

Source: Jerry Weitz & Associates, Inc., November 2010.

If dwelling units were built out in an even fashion over the twenty year time period, each five year time period would capture 25 percent of the total buildout potential. That is unlikely to be the case, because the economy has not improved remarkably. Furthermore, predictions are that economic conditions will not improve substantially until 2017 or later. Therefore, the projections below do not assume a sequentially and proportional residential buildout of the city over time. Rather, residential development over the next five years will be slower than in remaining five-year time periods (see buildout share in table below).

The housing unit, household, and population projections for the years 2015 through 2030 are shown in Table 7 below.

Table 7
Population, Household and Housing Unit Projections, 2010-2030
City of Flowery Branch

	2010	2015	5-yr.	2020	5-yr.	2025	5-yr.	2030	5-yr.
			change		change		change		change
Buildout Share, Period (%)		10%		35%		30%		25%	
Total Housing Units	2,625	2,902	+277	3,870	+968	4,700	+830	5,391	+691
Single-family	1,619	1,830	+211	2,561	+731	3,192	+631	3,717	+525
Multi-family	1,006	1,072	+66	1,309	+237	1,508	+199	1,674	+166
Total Households	2,405	2,667	+262	3,560	+893	4,326	+766	4,964	+638
In Single-family (93%)	1,505	1,702	+197	2,382	+680	2,969	+587	3,457	+488
In Multi-family (90%)	900	965	+65	1,178	+213	1,357	+179	1,507	+150
Total Population	6,286	6,976	+690	9,329	+2,353	11,347	+2,018	13,028	+1,681
In Single-family (2.67)	4,018	4,544	+526	6,360	+1,816	7,927	+1,567	9,230	+1,303
In Multi-family (2.52)	2,268	2,432	+164	2,969	+537	3,420	+451	3,798	+378

Note: These projections assume that, of the total new units constructed in a given five-year time period, 76% will be single-family detached and 24% will be multi-family units. Manufactured homes are counted as single-family.

Source: Jerry Weitz & Associates, Inc., November 2010.

^

³ Newland Communities. October 20, 2008. Sterling on the Lake Master Plan.

These projections take into account the additional housing units but do not factor in population increases that can be attributed to nature increase (i.e., births minus deaths). Hall County's rate of natural increase is estimated to be approximately 12 persons per 1,000 total population annually, based on estimates of births and deaths from 2000 to 2006. That figure is higher than the 9.5 per 1,000 population annual rate of natural increase observed during the 1990s in Hall County. The rate of natural increase, if it holds true in the future, means that for every 1,000 persons in the city, 12 new net residents will be gained, considering births minus deaths. However, it was determined that this amount of natural increase is already reflected in the assumption that average household size will remain the same as in past years. Therefore, to add a separate calculation of natural increase would be likely to over-count the population and would be inconsistent with the overall household size assumptions made in the projection method.

COUNTY AND AREA EMPLOYMENT TRENDS

Employment data are generally not published for small cities like Flowery Branch. Therefore, in order to get a good sense of the existing employment base, one can analyze total employment within the area zip code and also investigate employment trends in the county as a whole, by industry. Recent employment trends in Hall County and the Flowery Branch zip code are shown in Table 8. Employment by industry is shown for recent years for Hall County in Table 9. These data do not include government employment. The Flowery Branch zip code comprises 10.2 percent of total employment in Hall County as of 2008 (6,645 of 65,212 jobs) (see Table 8).

Table 8
Total Employment, Flowery Branch Zip Code (30542) and Hall County, 2003 to 2008

	2003	2004	2005	2006	2007	2008
Employment, 30542 Zip Code	4,382	4,636	5,178	5,938	6,169	6,645
Employment, Hall County Total	56,170	59,890	59,430	61,248	64,521	65,212

Source: U.S. Census Bureau, Zip Code Business Patterns and County Business Patterns, 2003-2008.

Total non-government employment in Hall County increased between 2003 and 2008 by 9,042 jobs. That represents an average annual increase in county non-government employment of more than 1,800 jobs in recent years. Many of the industry sectors shown in Table 9 have increased their employment significantly in Hall County between 2003 and 2008. The first major exception, however, is manufacturing. Although manufacturing maintained the highest share of total employment in terms of any individual NAICS category in Hall County in 2008, manufacturing has actually decreased by 564 jobs in the county during the last five years. Three other industry sectors experiencing employment decreases during the time period in Hall County were: (1) finance and insurance, which lost 189 jobs from 2003 and 2008; (2) real estate and rental and leasing, which lost 73 jobs in the recent five-year period; and (3) information, which declined by 171 jobs during the time period.

_

⁴ Birth and death rates were approximated from data in the U.S. Census Bureau's County and City Data Book: 2007, Table B-2, Counties – Components of Population Change (p. 72) which provides total births and deaths for each county in the U.S. from 2000 to 2006. In Hall County, there were 18,552 births and 6,592 deaths between 2000 and 2006.

The largest employment increase has occurred in the health care and social assistance category, with 2,159 jobs added in the county between 2003 and 2008. That finding is consistent with the observation generally that the health care field is one of the fastest growing industries in the nation. Health care and social assistance employment (9,482 jobs) was second only to manufacturing (16,614 jobs) in Hall County in 2008 in terms of total employment in all NAICS two-digit categories.

Table 9
Employment by Industry, Hall County, 2003-2008

Industry, Hall County, GA	2003	2004	2005	2006	2007	2008
Forestry, Fishing, hunting, and Agriculture Support	17	В	20	21	19	19
Mining, Quarrying, and Oil and Gas Extraction	70	61	64	64	В	В
Utilities	156	165	208	165	170	171
Construction	2,654	3,000	3,165	3,491	4,148	4,443
Manufacturing	17,178	17,354	15,856	16,637	16,900	16,614
Wholesale Trade	3,223	3,538	3,567	3,721	4,211	4,416
Retail Trade	6,645	6,991	7,113	7,379	7,906	8,296
Transportation and Warehousing	1,465	2,004	1,968	2,084	1,892	2,129
Information	782	805	656	639	605	611
Finance and Insurance	2,612	2,802	2,651	2,541	2,373	2,423
Real Estate and Rental and Leasing	604	671	612	657	532	531
Professional, Scientific, and Technical Services	1,751	2,022	1,727	1,907	2,117	1,789
Management of Companies and Enterprises	303	389	469	434	460	376
Administrative and Support and Waste Management	2,613	3,242	3,647	4,137	4,318	3,970
and Remediation						
Educational Services	1,159	1,200	1,233	1,302	1,397	1,373
Health Care and Social Assistance	7,323	7,657	7,981	7,725	8,674	9,482
Arts, Entertainment, and Recreation	623	612	658	723	808	837
Accommodation and Food Services	4,623	4,848	5,253	4,974	4,914	4,854
Other Services (Except Public Administration)	2,344	2,478	2,557	2,622	2,995	2,807
Industries Not Classified	25	Α	25	25	11	Α
Total	56,170	59,890	59,430	61,248	64,521	65,212

Source: U.S. Census Bureau, County Business Patterns, 2003-2008.

Construction employment witnessed the second largest increase in Hall County (almost 1,800 jobs; a 67 percent increase), from 2,654 in 2003 to 4,443 in 2008. Given the crash of the homebuilding industry, those figures probably do not reflect significant decreases in construction employment in Hall County in more recent years.

Retail trade employment in Hall County increased by 1,651 jobs from 2003 to 2008, an increase of approximately 25 percent in just five years. As noted below in the discussion of employment in Flowery Branch, a significant share of those new retail trade jobs have located within the City of Flowery Branch. The fourth largest increase occurred in the "administrative and support and waste management and remediation" NAICS category, which grew by 1,357 jobs in Hall County between 2003 and 2008. Wholesale trade employment was fifth, with an increase of 1,193 jobs in Hall County between 2003 and 2008 (a five-year growth rate of 37 percent). Employment increase in the wholesale trade NAICS category is not surprising given Hall County's location and highway access via Interstate 985/SR 365 and proximity to the metropolitan Atlanta area. Similarly, those same location advantages have fueled an increase of 664 jobs in the county between 2003 and 2008 in the transportation and warehousing NAICS category (an increase of 45 percent during the five year period).

Industry categories which remained relatively stable in employment in Hall County from 2003 to 2008 were: utilities; management of companies and enterprises; professional, technical, and scientific services; and (surprisingly) accommodation and food services.

Table 10 provides calculations of the number of employees per type of establishment using NAICS categories. Data for Hall County as well as two abutting counties (Gwinnett and Jackson) are shown. The data in Table 10 can be useful in analyzing and projecting employment impacts.

Table 10
Average Employees per Establishment by Industry
Gwinnett, Hall and Jackson Counties, Georgia, 1998, 2003, and 2008

Industry		Gwinnet	t		Jacksor	1		Hall	
	1998	2003	2008	1998	2003	2008	1998	2003	2008
Mining	23.8	28.8				12.7	15.6	17.5	
Utilities	39.4	27.0	26.9				31.2	39.0	34.2
Construction	9.2	9.0	10.6	5.3	5.3	8.5	5.9	5.7	8.4
Manufacturing	37.9	29.7	29.3	77.7	59.1	67.9	72.0	75.0	69.5
Wholesale Trade	18.0	18.8	17.6	16.8	15.9	14.1	14.3	12.7	13.9
Retail Trade	17.1	17.1	16.2	8.6	12.7	9.8	12.3	12.3	13.0
Transportation and Warehousing	16.4	16.0	18.8	8.8	8.0	24.8	9.5	11.1	16.0
Information	24.9	29.4	29.9	17.8	13.7	8.2	21.2	16.6	14.5
Finance and Insurance	16.0	14.3	12.3	7.2	6.1	5.4	9.8	11.6	8.1
Real Estate and Rental and Leasing	5.1	5.8	5.3	2.7	6.1	2.6	3.8	3.4	2.7
Professional, Scientific, and Technical Services	6.9	7.3	7.5	3.5	4.1	5.2	4.8	5.8	4.5
Management of Companies and Enterprises	69.0	63.8	62.0				14.3	20.2	14.5
Administrative and Support and Waste	22.2	23.9	22.1	16.0	7.8	11.7	16.3	13.5	17.2
Management and Remediation									
Educational Services	11.7	12.8	12.7	4.7	8.8	6.0	36.4	33.1	29.2
Health Care and Social Assistance	12.9	15.9	13.9	14.6	16.5	12.6	21.1	22.9	22.4
Arts, Entertainment, and Recreation	12.4	14.9	15.8	5.5	9.8	14.4	14.9	13.8	15.2
Accommodation and Food Services	20.4	19.3	16.8	25.3	19.2	20.1	20.8	19.4	17.8
Total	15.3	15.0	14.4	15.2	13.8	13.6	16.0	15.6	15.4

Source: U.S. Census Bureau, County Business Patterns, 1998, 2003, and 2008.

There is consistency among the observations about average employment per establishment; on average there are approximately 15 workers per establishment. Construction firms typically range from 5 to 10 employees per establishment; average employment has increased in construction firms over the decade, perhaps this is to a loss of smaller construction firms in down economy by 2008. Wholesale trade generally ranges from 14 to 18 employees per establishment. Retail trade employment per establishment ranges from 12 to 17 in the three counties included in Table 10. Professional and scientific service companies are typically small, with 4 to 7 employees per establishment. Similarly in the real estate NAICS category, the firms are typically small, with 3 to 5 employees per establishment. Accommodation and food services establishments range from 17 to 25 employees per establishment, with 18-20 being typical.

EXISTING EMPLOYMENT IN THE CITY OF FLOWERY BRANCH

Table 11 provides an estimate of employment within the city by industry in 2010 based on the city's data base of business licenses. An estimated 1,421 jobs existed within the city limits of Flowery Branch in 2010. Employment within the city limits of Flowery Branch constitutes approximately one fifth of total employment in the Flowery Branch zip code.

The employment data are self-reported and are not independently verified. The city's consultant classified the business license employment data according to categories of the North American Industry Classification System (NAICS) used by the U.S. Department of Commerce. Certain industry categories were excluded because there were no (or a small number of) businesses that could be attributed to that NAICS category. Single-employee establishments were not classified, either. Also, Table 11 provides percentages within each NAICS category of total employment in Hall County as of 2008 (the most recent year of published data). Such percentages provide useful perspective in terms of how the city's employment base matches or deviates from the county's employment base as a whole. However, because the source of the county data is County Business Patterns which does not include government employment, a percentage of total employment is not provided and a complete comparison between city and county employment mixes is therefore not possible.

Table 11
Estimated Employment by Selected NAICS Industry Code, 2010
City of Flowery Branch

NAICS Code	NAICS Description	Establish- ments	Employ- ment	% Total City Employ- ment	% Total Hall County Employ- ment 2008
21	Mining, quarrying, and oil and gas extraction	1	22	1.5%	1.0%
23	Construction	2	6	0.4%	6.8%
31	Manufacturing	6	90	6.3%	25.5%
42	Wholesale trade	9	37	2.6%	6.8%
44	Retail trade	22	372	26.2%	12.7%
48	Transportation and warehousing	6	34	2.4%	3.3%
51	Information	4	15	1.1%	0.9%
52	Finance and insurance	7	37	2.6%	3.7%
53	Real estate and rental and leasing	2	15	1.1%	0.8%
54	Professional, scientific, and technical services	15	54	3.8%	2.7%
61	Educational services	2	9	0.6%	2.1%
62	Health care and social assistance	7	46	3.2%	14.5%
71	Arts, entertainment, and recreation	3	107	7.5%	1.3%
72	Accommodation and food services	24	327	23.0%	7.4%
99	Industries not classified	145	170	12.1%	n/c
	Government	n/c	80	5.6%	n/c
	Total All Industries and Government	255	1,421	100%	n/c

Notes: NAICS = North American Industry Classification System; n/c = not compiled and/or not comparable. Sources: Compiled by Jerry Weitz & Associates, Inc. based on City of Flowery Branch data base of business licenses, 2010. Year 2008 Hall County data derived from County Business Patterns 2008.

According to the business license data base, Flowery Branch had 132 single-employee establishments. Those are not classified in the table above. Hence, the data in Table 11 show a higher percentage of "industries not classified" than would be the case if non-government employment data from County Business Patterns were used exclusively. A large number of those unclassified establishments in the city appear from the business license data base to be independent construction contractors of various sorts, which would fall within the "construction" category; hence total construction employment in Flowery Branch is significantly underemphasized in Table 11.

Manufacturing comprises a relatively small percentage of total employment in Flowery Branch (6.3%). However, that number is somewhat deceptive in terms of total manufacturing

employment in the immediate city area, since a number of manufacturing establishments exist just north of but outside the city limits.

The largest industry share of total employment in Flowery Branch as of 2010 is retail trade, constituting an estimated 372 jobs and more than one-quarter (26.2%) of total employment in the city. Flowery Branch has witnessed substantial growth in retail trade employment in recent years with the development of Stonebridge Village and other shopping centers east of Interstate 985. The three largest retail trade employers in Flowery Branch are (with number of employees shown): Publix (89), Target (84), and The Home Depot (80). Following a close second in terms of total employment in Flowery Branch is accommodations and food services, with 327 jobs or 23% of total employment in the city. Nearly all of these jobs include restaurants (i.e., food services), as there is presently only one lodging establishment located in the city.

The largest employer in Flowery Branch is the Atlanta Falcons football club, which comprises nearly all (102 of 107) jobs classified as arts, entertainment, and recreation. The existence of the Atlanta Falcons headquarters in Flowery Branch also explains why the city has a much higher percentage of employment in that NAICS category than Hall County as of 2008.

Another significant industry classification providing employment in Flowery Branch is professional, scientific, and technical services, with an estimated 54 jobs. That figure may be somewhat deceptive, however, in that a substantial share of the jobs in that category are personal service establishments typically found in shopping centers such as haircutters and nail salons. The city has significant employment in health care (46 jobs), which includes medical professionals and dentists but also includes animal care specialists.

Government employment in Flowery Branch consists of the city's employees plus employees working at two Hall County public schools. That figure is a rough estimate.

Table 12 presents a compilation of employment density figures for the city. These were compiled in order to help with the estimation of employment in the city and to assist with projecting employment.

Table 12
Characteristics of Flowery Branch Employment Density

Jurisdiction	Land Use	Acres	Building Sq. Ft	FAR	Emp- loyees	Employ- ment per acre	Emp. Per Bldg, Sq. Ft
Flowery Branch	Convenience Store; Retail strip	1.25	7,544	0.14		por doro	
Flowery Branch	Conv. Store/warehouse	1.16	5,440				
Flowery Branch	Neighborhood Shopping	2.09	8,000	0.09			
Flowery Branch	Neighborhood Shopping	1.36	10,602	0.18			
Flowery Branch	Regional Shopping	9.13	93,409	0.24			
Flowery Branch	Kohl's	6.53	89,134	0.31	62	9.49	1 per 1438
Flowery Branch	Target	9.63	126,842	0.30	84	8.7	1 per 1510
Flowery Branch	Home Depot	10.65	106,278	0.23	80	7.5	1 per 1328
Flowery Branch	Office Max		18,000		11		1 per 1636
Flowery Branch	PetSmart		20,087		25		1 per 803
Flowery Branch	TJ Maxx		26,090		20		1 per 1305
Flowery Branch	Ross		25,000		13		1 per 1923
Flowery Branch	Light Industrial	13.63	35,000	0.06			
Flowery Branch	Light Industrial (Reconserve)	12.38	85,574	0.16	33	2.7	1 per 2,593
Flowery Branch	Manufacturing (Avery)	39.78	220,849	0.13			
Flowery Branch	Light Industrial	8.99	25,520	0.07			
Hall County	Wrigley manufacturing	100.33	473,694	0.11	700	7.0	1 per 677

Source: Compiled by Jerry Weitz & Associates, Inc., October 2010 from available city business license and county tax records.

VACANT NON-RESIDENTIAL LANDS INVENTORY

Table 13 provides an inventory of vacant land acreage in the city that is designated for non-residential development. As with the inventory of residential lands, vacant tracts are classified according to planning subareas, which are described in more detail later in this report. Future land use is assigned based on the future land use plan. The development intensity is a professional judgment based on an analysis of existing employment density and floor-area ratios. Generally, land development in Flowery Branch is developed significantly (if not substantially) lower than what is permitted by the city's zoning ordinance. That is not surprising, given that Flowery Branch is located in a suburbanizing environment.

The data in Table 13 show that under prevailing development intensities (i.e., "floor to area ratios"), Flowery Branch has enough land to develop some 6.7 million square feet of nonresidential space. That figure assumes FARs that are not at the maximum, but they represent substantial suburban-scale development. Also Table 13 incorporates an "efficiency ratio" which only counts a large proportion of the forecasted total non-residential development. The efficiency ratio is incorporated so as to not overestimate employment potential. It generally reflects recognition that there is a trend toward more space utilized per employee and also the possibility that all building square footage may not be used, may not be used for employment, or is vacant altogether. Also, the employment per square foot multipliers used in this projection are considerably lower than what the literature suggests is typical, but these lower employment per square foot multipliers appear justifiable given data in Table 12 and also so as not to overestimate employment.

Table 13
Inventory of Vacant Lands and Projected Employment at Buildout
Areas Planned for Nonresidential Use by Planning Subarea
City of Flowery Branch, 2010

Planning Subarea	Parcel Acreage Tax/GIS	Forecasted Future Land Use (FAR)	Rounded Building Sq. Ft.	Efficiency Ratio (%)	Utilized Building Sq. Ft.	Employment (1 per 1,000 sq. ft. commercial, 1 per 2,000 industrial); 1 per 800 mixed use
North McEver	16.85	Commercial (0.15)	110,100	75%	82,575	82
	15.39	Commercial (0.15)	100,550	75%	75,410	75
	21.33	Commercial (0.15)	139,250	75%	104,440	104
	10.08	Commercial (0.15)	65,850	75%	49,390	49
	12.15	Commercial (0.15)	79,500	75%	59,625	59
South McEver	24.07	Commercial (0.15)	157,250	75%	117,940	118
	6.43	Commercial (0.15)	42,000	75%	31,500	31
	1.98	Commercial (0.15)	12,950	75%	9,710	8
	20.07	Light Industrial (0.22)	192,250	95%	182,640	91
	31.33	Light Industrial (0.22)	300,250	95%	285,240	142
	14.92	Light Industrial (0.22)	143,000	95%	135,850	68
Old Town		Commercial (n/c)	125,000	75%	93,750	93
Phil Neikro/ Tanner South	56.90	Commercial (0.20)	495,700	75%	371,775	372
	28.97	Commercial (0.20)	252,400	75%	189,300	189
	32.21	Commercial (0.20)	280,600	75%	210,450	210
	36.58	Commercial (0.20)	318,700	75%	239,025	239

Planning Subarea	Parcel Acreage Tax/GIS	Forecasted Future Land Use (FAR)	Rounded Building Sq. Ft.	Efficiency Ratio (%)	Utilized Building Sq. Ft.	Employment (1 per 1,000 sq. ft. commercial, 1 per 2,000 industrial); 1 per 800 mixed use
	8.18	Commercial (0.20)	71,250	75%	53,440	53
	14.82	Commercial (0.20)	129,100	75%	96,825	97
	2.69	Commercial (0.20)	23,425	75%	17,570	17
	8.77	Mixed Use (0.12)	45,850	80%	36,680	45
	17.38	Mixed Use (0.12)	90,850	80%	72,680	91
	11.27	Mixed Use (0.12)	58,900	80%	47,120	59
	3.52	Mixed Use (0.12)	18,400	80%	14,720	18
	4.71	Mixed Use (0.12)	24,600	80%	19,680	24
Tanner North	7.12	Light Industrial (0.22)	68,250	95%	64,840	32
	1.75	Light Industrial (0.22)	16,770	95%	15,930	8
	2.21	Light Industrial (0.22)	21,180	95%	20,120	10
	2.59	Light Industrial (0.22)	24,825	95%	23,585	12
	6.72	Light Industrial (0.22)	64,400	95%	61,180	30
	18.34	Light Industrial (0.22)	175,750	95%	166,960	83
	8.72	Light Industrial (0.22)	83,560	95%	79,380	39
	4.03	Light Industrial (0.22)	38,620	95%	36,690	18
Falcon Pkwy./ Martin Road	24.09	Commercial (0.20)	209,875	75%	157,400	157
	11.01	Commercial (0.20)	95,925	75%	71,945	72
	23.90	Commercial (0.20)	208,225	75%	156,170	156
	6.65	Commercial (0.20)	57,950	75%	43,460	43
	26.18	Commercial (0.20)	228,100	75%	171,075	171
	91.18	Commercial (0.20)	794,360	75%	595,770	595
	13.58	Commercial (0.20)	118,310	75%	88,735	89
	24.71	Commercial (0.20)	215,275	75%	161,450	161
	9.71	Commercial (0.20)	84,600	75%	63,450	83
	32.49	Mixed Use (0.12)	169,825	80%	135,860	170
I-985/Spout Springs	10.00	Commercial (0.20)	87,100	75%	65,325	65
-	1.77	Commercial (0.20)	15,425	75%	11,570	11
	0.94	Commercial (0.20)	8,200	75%	6,150	6
	5.64	Commercial (0.20)	49,125	75%	36,845	37
	2.05	Commercial (0.20)	17,860	75%	13,395	13
	2.87	Commercial (0.20)	25,000	75%	18,750	19
	9.59	Commercial (0.20)	83,550	75%	62,665	62
	6.40	Commercial (0.20)	55,750	75%	41,810	42
	9.22	Commercial (0.20)	80,325	75%	60,245	60
South Hog Mountain	2.0	Commercial (0.15)	13,075	75%	9,800	10
Sterling on the Lake	28.0	Commercial (0.15)	182,950	75%	137,215	137
LaFarge Quarry	25.35	Commercial (0.15)	165,650	75%	124,240	124
Total New City	819.41		6,737,535		5,299,345	4,849

n/c = not calculated

Source: Jerry Weitz & Associates, Inc. November 2010.

Table 14 projects the capacity of new employment over the 20-year planning horizon by general type of land use. It is estimated that Flowery Branch has buildout potential for 5.2 million square feet of commercial space, of which approximately 3.9 million square feet will be occupied by 2030. The various mixed-use designations in Flowery Branch constitute a projected 0.4 million square feet of building space, of which 0.3 million square feet will be constructed and occupied by the end of the planning horizon. Capacity for light industrial building space is approximately 1.1 million square feet, of which about 1.0 million square feet will be constructed and occupied by the year 2030. The division of employment by major land use type should be used with some

caution, as Flowery Branch's zoning ordinance would allow for significant flexibility in terms of whether a given property is developed for commercial versus light industrial uses.

Table 14
Forecasted New Employment by Land Use Type, 2010-2030
City of Flowery Branch

Use of Land (Employment)	Acreage, 2010-2030	Gross Sq. Ft. Building	Net Sq. Ft. Building Constructed and Occupied	Gross Square Feet per Employee	Employment Per Net Occupied
Commercial	623.47	5,200,255	3,900,190	1,000	3,909
Mixed Use (commercial and office)	78.14	408,425	326,740	800	407
Light industrial	117.8	1,128,855	1,072,415	2,000	533
Total new employment, 2010-2030	819.41	6,737,535	5,299,345		4,849

Source: Jerry Weitz & Associates, Inc. November 2010.

Table 15 provides projections of employment by five year increment in the year 2030. As with the projections of housing units, households, and population, it is anticipated that employment increases will not occur uniformly during the next 20 years. In particular, the non-residential economy may be sluggish during the next five years, but is expected to resume substantially during and after the year 2017. These figures do not assume any increase in government employment.

Table 15
Employment Projections, 2010-2030
City of Flowery Branch

	2010	2015	5-yr. change	2020	5-yr. change	2025	5-yr. change	2030	5-yr. change
Share, Period (%)		10%		35%		30%		25%	
Employment	1,421	1,906	485	3,603	1,697	5,058	1,455	6,270	1,212

Source: Jerry Weitz & Associates, Inc., November 2010.

JOBS-HOUSING BALANCE

One consideration in planning is whether the city will have a balance in terms of jobs and housing. It is customary based on the literature to strive for an overall ratio of 1.5 jobs to every 1 housing unit, with a range of 1.3 to 1.7 considered a good balance. That rule of thumb is based on the observation that there are typically 1.5 workers for every household. The rationale is that if 1.5 jobs exists for every 1 housing unit, there will be a job available in the community for every working resident of the community. However, one has to view that rule of thumb with caution, as jobs may be available very close to the city but not in the city limits and therefore not included in the calculation. Furthermore, a quantitative balance does not necessarily suggest that the jobs available in the community are those that the skilled labor force in the city is best matched to fill.

Table 16 shows the projected job-housing ration in Flowery Branch in future five-year increments.

Table 16
Projected Jobs-Housing Unit Ratios, 2010 to 2030
City of Flowery Branch

	2010	2015	2020	2025	2030
Jobs	1,421	1,906	3,603	5,058	6,270
Housing Units	2,625	2,902	3,870	4,700	5,391
Jobs-Housing Unit Ratio	0.54 : 1	0.65 : 1	0.93 : 1	1.08 : 1	1.16 : 1

Source: Jerry Weitz & Associates, Inc. November 2010

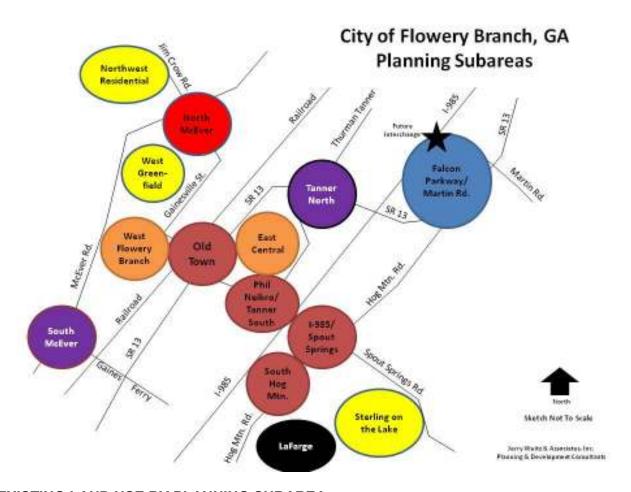
As indicated in Table 16, Flowery Branch is presently best categorized as more of a bedroom community, but its ratio of jobs to housing units will steadily increase over time, approaching the lower part of what is considered the minimum desirable ratio signifying a range of balance. One should keep in mind that the employment estimates were deliberately kept conservative, and that with more intense development than anticipated and lower vacancy rates, Flowery Branch could very well achieve a jobs-housing unit ratio that is within the desired range of 1.3 to 1.7 jobs to housing units. Also, given potential for annexation, it is likely that this ratio will improve further over time.

DESCRIPTION OF PLANNING SUBAREAS

Flowery Branch can be subdivided into planning subareas of development and development opportunities, as described in the following subsections. These subareas are distinguishable to some extent by unique characteristics, but they are primarily conceived to provide easy-to-understand geographic places within the city that lend themselves to development analysis and planning. These subareas also present an opportunity to further define character. These subareas are shaped to a large extent by the railroad running through the original settlement portion of Flowery Branch, and Interstate 985.

Table 17
Flowery Branch's Planning Subareas
(see sketch illustration on the following page)

Northwest Residential	East Central			
North McEver	Tanner North			
West Greenfield	Falcon Parkway/Martin Road			
West Flowery Branch	I-985/Spout Springs			
South McEver	South Hog Mountain			
Old Town	Sterling on the Lake			
Phil Neikro Blvd./ Tanner South	LaFarge Quarry			



EXISTING LAND USE BY PLANNING SUBAREA

Northwest Residential

Lake Lanier lies to the west of the city. Flowery Branch previously annexed three subdivisions along Jim Crow Road north of McEver Road. This area is a combination of the three single-family residential subdivisions in the city as well as developed and undeveloped properties in unincorporated Hall County. Hall County's Alberta Banks Park is also located in this subarea.

North McEver

This subarea is centered on and lying south of the intersection of McEver Road and Gainesville Street (which extends north as Jim Crow Road into the Northwest Residential Lakefront area. Almost all of this area is presently undeveloped, except for neighborhood commercial businesses at the intersection of McEver Road and Gainesville Street/ Jim Crow Road.

West Greenfield

This subarea consists of a single, large (95-acre), undeveloped parcel of land lying northwest of Old Town Flowery Branch, south of McEver Road, and east of Lights Ferry Road.

West Flowery Branch

This subarea encompasses properties west and east of Lights Ferry Road, west of the railroad, and close to Lake Lanier. It is due west of Old Town Flowery Branch and south of the West Greenfield subarea. Most of the property in this subarea is not lakefront, but is influenced to some degree by lake frontage and access. There is a diverse combination of detached single-family lots, including conventional suburban, traditional neighborhood, townhouses, a manufactured home park, and limited agricultural and vacant lands.

South McEver

This subarea is centered on the intersection of McEver Road and Gaines Ferry Road but also extends north between McEver Road and the railroad. All of this subarea except for one vacant parcel was annexed into the city in 2010, and was therefore not addressed in the 2025 adopted comprehensive plan. Virtually all If not all of the land in this subarea is undeveloped.

Old Town

Old Town corresponds with the original central settlement of Flowery Branch. It lies mostly west of Atlanta Highway (SR 13) and the railroad track, but it also extends east of the highway and railroad track. This planning subarea is larger in geography than the Old Town character area as shown in the Community Agenda.

Phil Neikro/ Tanner South

This subarea lies along the north and south sides of Phil Neikro Boulevard and the southern portion of Thurman Tanner Boulevard, all west of Interstate 985. Almost all of this subarea along Phil Neikro Boulevard and Thurman Tanner Parkway is undeveloped, except for a few scattered residences and a single commercial development. However, this subarea also includes Mulberry Street which has a single-family residential subdivision and some older homes alongside it.

East Central Flowery Branch

This subarea lies due east of Old Town, north of East Main Street, and west of Thurman Tanner Parkway. It has a unique combination of existing, mostly residential uses. It contains some subdivisions developed in conventional suburban design, along with newer townhouses and the 456-unit apartment complex called "Tree Park."

Tanner North

This area is exclusively nonresidential. This subarea lies along both sides of Thurman Tanner Parkway, northwest of Cantrell Road. It includes properties in Flowery Branch but substantial areas of unincorporated lands. The Flowery Branch portion of this subarea lies east and south of Atlanta Highway (SR 13), but a significant portion of this part of the subarea is also unincorporated. In the Flowery Branch portion, there are some properties developed as light industrial and business park uses, but much of the city's part of the subarea remains undeveloped. Almost all of the land north of Atlanta Highway (SR 13) along both sides of Thurman Tanner Parkway between the railroad and Interstate 985, except for Avery Products is in unincorporated Hall County rather than Flowery Branch. This part of the Thurman Tanner North subarea includes big industrial sites like Wrigley Manufacturing.

Falcon Parkway/Martin Road

This area lies almost entirely east of Interstate 985 and extends south of Atlanta Highway (SR 13) (west of Hog Mountain Road) as well as both sides of Falcon Parkway up to Martin Road. This area is characterized by existing developed county schools, the Atlanta Falcons headquarters and practice facility, a few commercial uses, and significant undeveloped lands. It is almost exclusively nonresidential in nature and has mostly an institutional character. The proposed interchange of Interstate 985 and Martin Road will be constructed in the northern part of this subarea. Some of the property in this subarea, particularly where the interchange will be constructed, is presently unincorporated.

I-985/Spout Springs

This subarea contains properties north and south of Spout Springs Road east of Interstate 985. The bulk of existing development lies in between Hog Mountain Road and Interstate 985, but the activity center is extended east of Hog Mountain Road commercial uses. This is the area that contains much of Flowery Branch's newer suburban commercial development, including big box retail stores, restaurants, and grocery-anchored shopping centers. Also, this area contains an older single-family residential subdivision along Holland Dam Road and Oak Street (presently unincorporated).

South Hog Mountain

This subarea, lying south of the I-985/Spout Springs interchange area, has a narrow strip of land between I-985 and Hog Mountain Road with some limited commercial uses on small lots, and a huge (273-acre) undeveloped tract that abuts the western portion of Sterling on the Lake. This area is currently non-residential in nature.

Sterling on the Lake

This planned unit development area extends along the south side of Spout Springs Road to Blackjack Road on the south and is bisected by Capitola Farm Road. Property to the north of Spout Springs Road, which was developed as a church in 2006, is also included in this subarea. Almost all of this subarea is under the development of Newland Communities and the Sterling on the Lake master planned unit development.

LaFarge Quarry

This subarea is bounded by Blackjack Road on the north, Swansey Road on the southeast, and Friendship Road (SR 347) on the south. It lies east of but does not abut Hog Mountain Road. This area contains properties controlled by LaFarge, a mineral aggregate company. The vast majority of the land in this subarea is devoted to quarry operations and buffer lands surrounding quarry operations. However, this subarea also includes undeveloped, commercially zoned land on the south side of Friendship Road (SR 347).

Summary

Existing land use in the 14 planning subareas is summarized in Table 18.

Table 18
Existing Land Use Summary by Planning Subarea

	Single- family Residential	Residential Mixed Unit Types	Insti- tutional	Neigh- borhood Retail	Regional Retail	Mixed Uses	Light Industrial	Heavy Industrial Quarry
Northwest Residential		71						
North McEver								
West Greenfield								
West Flowery Branch								
South McEver								
Old Town								
Phil Neikro/ Tanner South								
East Central								
Tanner North								
Falcon Pkwy./ Martin Road								
I-985/Spout Springs								
South Hog Mountain								
Sterling on the Lake								
LaFarge Quarry								

Development-related issues and opportunities are most easily summarized by dividing them into residential and nonresidential. Residential issues are summarized in Table 19.

Table 19
Residential Development Issue and Opportunities Summary

	Existing Subdivision Protection	Substandard Neighborhood Conditions	Potential Neighborhood Conversion	Mixed Housing Unit Types	Residential Infill Potential	New Greenfield or PUD
Northwest Residential						
North McEver						
West Greenfield						
West Flowery Branch						
South McEver						
Old Town						
Phil Neikro/ Tanner South						
East Central						
Tanner North						
Falcon Pkwy./ Martin Road						
I-985/Spout Springs						
South Hog Mountain						
Sterling on the Lake						
LaFarge Quarry						

Table 19 emphasizes residential land use issues. Existing single-family subdivisions are concentrated mostly within just four planning subareas. Though there is not a concentration of substandard housing conditions in any of the subareas, there is potential for concern with regard to three planning subareas — the city's older neighborhoods adjacent to Old Town. Conversions of small neighborhoods or isolated residential lots is possible in the I-985/Spout Springs subarea, where relatively older, smaller, and lower value homes appear to be in the path of expanding commercial development. There may also be some threat of residential land use conversion along parts of Mulberry Street as commercial and mixed-use development takes place in the future.

A mixture of different types of dwelling units occurs in four planning subareas. Three of these are, again, the older settled neighborhoods in Flowery Branch, including Old Town. A fourth subarea, Sterling on the Lake, incorporates a variety of housing types by design as part of the planned unit development master plan. Mixed housing unit types is primarily an "opportunity" to meet diverse housing needs, and is positive. However, there also may be some concern about incompatibility, for instance, if higher densities or different dwelling types in the city's older neighborhoods are not managed with regard to design and other characteristics of the dwellings

and neighborhoods. For instance, introducing a curvilinear street and other conventional suburban development patterns in the city's older, traditional neighborhoods would undermine their character.

Residential infill development is similar in scale and importance with the mixed housing unit types issue, and it applies to the same four residential planning subareas. Residential infill is an opportunity to both provide efficient use of land and to house families and households where facilities and services already exist. As already noted, compatibility issues such as the size of home and density also need to be managed as infill development occurs in these areas.

There is extensive vacant land appropriate and designated for future residential development in Flowery Branch. These "Greenfield" opportunities exist predominantly within four planning subareas. Greenfield development presents major opportunities to attract and encourage the most appropriate development in terms of open space, development design, accessibility, and sustainability. The opportunities with regard to design can include attractive, conventional suburban development, designs that follow traditional neighborhood development principles, innovative layouts that follow conservation principles, and even more innovative designs involving low impact development. Such Greenfield residential development sites need to be managed in terms of clear vision for their appearance and their impact on the environment. In the case of Sterling on the Lake, through covenants and unified site control an overall quality of development is relatively assured. In others, the city will be confronted with unique issues such as viewshed planning and multi-use greenway connection opportunities in the case of the planning subarea called "Greenfield," and steep slopes for a large residential development tract in the South Hog Mountain planning area.

Nonresidential land use issues and opportunities apply more broadly than the aforementioned residential issues (see Table 20). There are 11 of the 14 identified planning subareas that have institutional, commercial, and/or industrial development and further development potential. In the Falcon Parkway/Martin Road planning subarea, there is a clear precedent set by existing public schools and the Falcons Training and Headquarters Facility for following principles of institutional campus planning.

For each nonresidential planning subarea, the question of scale must be addressed. Along McEver Road, there are two distinct planning subareas, one developed and one undeveloped. Because these areas abut significant single-family residential developments, they are considered neighborhood in scale and should not outgrow the needs of the surrounding neighborhoods. In the case of Sterling on the Lake, neighborhood-scale shopping centers are proposed as a part of that master planned unit development along Spout Springs Road, and the scale and design of those commercial centers should be compatible with the quality and scale of the entire development. The potential exists, but has not nearly been realized yet, for commercial development serving the region in two planning areas along Interstate 985 – the I-985/ Spout Springs regional activity center, which has already partially developed, and the Falcon Parkway/ Martin Road planning area (especially upon construction of a new I-985 interchange).

Table 20
Non-Residential Development Issues and Opportunities Summary

	Institutional Campus	Neighborhood Scale	Regional Scale	Industrial/ Employment	Pedestrian Oriented	Vehicle Dominated
Northwest Residential						
North McEver						
West Greenfield						
West Flowery Branch						
South McEver						
Old Town						
Phil Neikro/ Tanner South						
East Central						
Tanner North						
Falcon Pkwy./ Martin Road						
I-985/Spout Springs						
South Hog Mountain						
Sterling on the Lake						
LaFarge Quarry						

Future industrial land uses are concentrated primarily within just two planning subareas, Tanner North and South McEver Road. Tanner North already has some business park and industrial development. The South McEver subarea is currently undeveloped but is planned for light industrial and business park uses. The Lafarge Friendship Quarry planning area consists almost entirely of the LaFarge quarry operation but also includes a vacant commercially zoned tract on the south side of Friendship Road (SR 347); given its relative distance away from I-985 and the designation of other, more appropriate planning areas for regional-scale commercial development, the commercial uses in the LaFarge Quarry planning area should be guided by neighborhood-scale commercial development principles.

Finally, the design of future commercial and other non-residential planning areas needs to address pedestrian access even if the automobile and truck traffic will dominate transportation access. In two planning areas, Old Town and Sterling on the Lake, it is imperative that pedestrian access receive priority in terms of planning instead of auto access. In the other planning subareas, vehicle (including truck) access is expected to dominate, yet it is imperative that pedestrian access be assured, as well.

CHARACTER AREAS BY PLANNING SUBAREA

Eight of the 14 planning subareas are more residential than non-residential in character, as the following chart indicates. Table 21 describes how the character area map applies within the predominantly residential subareas.

Table 21
Summary of Predominantly Residential Character Areas
Applied to Planning Subareas

	Suburban Residential	Traditional Neighborhood	Urban Density Community	Conservation Subdivision	Conservation	Old Town
Northwest Residential						
West Greenfield						
West Flowery Branch						
Old Town						
Phil Neikro/ Tanner South						
East Central						
South Hog Mountain						
Sterling on the Lake						

As shown in Table 21, there is significant balance and diversity in terms of existing and future residential development character in Flowery Branch. Suburban residential character applies to five of the eight planning subareas with residential development opportunities. The Old Town planning subarea is larger than the Old Town character area, including traditional neighborhoods surrounding the downtown core and also taking in some urban density communities (i.e., apartments). East Central Flowery Branch is also diverse, incorporating characteristics of conventional suburb, traditional neighborhood, and urban density community. Sterling on the Lake is the most comprehensive in terms of applying several different types of residential character areas. The Northwest Residential planning area is exclusively suburban residential, and the large residential tract in the South Hog Mountain planning area is anticipated to be lower density suburban residential with curvilinear roads appropriate for its steep topography; though not designated as a conservation subdivision per se, the large residential development tract in the South Hog Mountain planning area is an opportunity to apply conservation subdivision design principles as well, consistent with that character area description.

Nine of the fourteen planning subareas incorporate non-residential development to some significant degree, and many of them are almost exclusively non-residential in character (see Table 22). A majority of the non-residential planning areas are dominated by a single non-residential character, while the four others incorporate more than one character area type.

Table 22
Summary of Predominantly Non-Residential Character Areas
Applied to Planning Subareas

	Institutional Campus	Neighborhood Commercial	Activity Center	Mixed Use	Mixed Use Downtown	Industrial/ Employment
South						
McEver						
Old Town						
Phil Neikro/						
Tanner South						
Tanner						
North						
Falcon Pkwy./						
Martin Road						
I-985/Spout						
Springs						
South Hog						
Mountain						
Sterling on			· · · · · · · · · · · · · · · · · · ·			
the Lake						
LaFarge						
Quarry						

Institutional campus is a major characteristic presently of the Falcon Parkway/Martin Road planning subarea, but as future development occurs around the proposed Martin Road interchange with I-985, it will evolve into a regional scale activity center on its own right somewhat comparable to the I-985/Spout Springs interchange activity center. Considerable expansion of activity center development will occur in the Phil Neikro/Tanner South planning area.

Mixed use, at a scale somewhat different than that planned for in Old Town, is planned for mostly within the Phil Neikro/Tanner South planning subrarea, but there is also potential for mixed use at the eastern edge of the Falcon Parkway/Martin Road planning subarea (currently unincorporated). Tanner North and McEver South are two areas that are planned to develop as light industry and business parks, though the latter will also have some neighborhood commercial development. Commercial development in the other predominantly non-residential planning subareas is expected to be consistent with the neighborhood commercial character area.

FACILITY NEEDS ANALYSIS

The need for facilities in the future can be determined by analyzing the existing level of service and applying level of service standards based on future demands on those facilities. In the case of some facilities, like administration and police, both residents and various non-residential establishments place demands on city services. Others, like libraries and parks, are demanded mostly if not exclusively by residents of the city. It is useful to describe a "functional" population, combining the demand effects of both residential and non-residential development on public safety, utility, and general administrative facilities and services of the city.

Functional Population

Estimates and projections of the functional population in Flowery Branch are provided in Table 23. These numbers are used to calculate existing levels of service and future level of service standards.

Table 23
Functional Population Projections, 2010-2030
City of Flowery Branch

	2010	2015	2020	2025	2030
Population	6,286	6,976	9,329	11,347	13,028
Employment	1,421	1,906	3,603	5,058	6,270
Functional Population	7,707	8,882	12,932	16,405	19,298

Source: Jerry Weitz & Associates, Inc. November 2010.

Administrative Space Needs

The city's administrative offices are located in City Hall, which consists of 2,397 square feet. In addition, the city since 2005 has expanded its office space for general administrative facilities by renting office space in the downtown across the street from City Hall. The service area is the entire city limits. A level of service (LOS) standard of 0.7 square feet of building space per functional population is recommended.

At the recommended LOS standard, the city is projected to need administrative space as shown in Table 24.

Table 24
Administrative Space Needs, 2010-2030
City of Flowery Branch

	2010	2015	2020	2025	2030
Functional Population	7,707	8,882	12,932	16,405	19,298
LOS Standard	0.7 square feet per functional population				
Total Building Space Needed (sq. ft.)	5,395	6,217	9,052	11,484	13,509

Source: Jerry Weitz & Associates, Inc. November 2010.

Police Facility Space Needs

The City's Police Department building is located on Main Street near City Hall and consists of 1,608 square feet. The service area is the entire city limits. The existing (2005) level of service for police facility space per functional population was 0.389 square feet per functional population. As of 2010, the existing level of service has been reduced to approximately 0.21 square feet of building space per functional population. A level of service standard of 0.5 square feet of police facility space per functional population is recommended. Table 25 shows facility space needs from 20010 to 2030.

Table 25
Police Facility Space Needs, 2010-2030
City of Flowery Branch

	2010	2015	2020	2025	2030
Functional Population	7,707	8,882	12,932	16,405	19,298
LOS Standard		0.5 square feet per functional population			
Total Building Space Needed (sq. ft.)	3,854	4,441	6,466	8,202	9,649

Source: Jerry Weitz & Associates, Inc. November 2010.

Future Water Needs

For planning purposes in the absence of a water master plan, a level of service of 300 gallons per day per functional population is recommended. However, with water conservation efforts and the city's reuse system, the Level of Service Standard may be reduced in the future to 200 gallons per day per functional population if warranted. Future water needs are projected in Table 26.

Table 26
Potable Water Needs, 2010-2030
City of Flowery Branch

	2010	2015	2020	2025	2030
Functional	7,707	8,882	12,932	16,405	19,298
Population					
LOS Standard	300 gallons per day per functional resident				
Total Water	2,312,100	2,664,600	3,879,600	4,921,500	5,789,400
Consumption					
(gallons per day)					

Source: Jerry Weitz & Associates, Inc. November 2010.

At first glance, these projections of need appear to outstrip current plans of the city. However, one should note that the Flowery Branch service area is small and does not encompass the entire City Limits. It also does not include much of the highest growth areas projected in the city limits. Much of the substantial future water supply needed will be purchased from the City of Gainesville.

Future Sanitary Sewer Needs

As a general rule of thumb, approximately 70 to 80 percent of the potable water supplied by any given community's water system is returned to the sanitary sewer collection system. Sanitary sewer systems are usually sized to accommodate average wastewater flows of approximately one hundred gallons per capita per day (Somers et al 1986). Other sources note that in general "about 60 to 80 percent of the per capita consumption of water will become sewage (Colley 1986), and that an estimated 65 percent of the water used for residential use returns to the sewage system (Brewer and Alter 1988). Based on these professional observations, a level of service equating to 65 percent of water demand is recommended, or in other words, 195 gallons per day per functional resident. Based on that recommendation, future sanitary sewer needs are indicated in Table 27.

Table 27
Sanitary Sewer Capacity Needs, 2010-2030
City of Flowery Branch

	2010	2015	2020	2025	2030
Functional	7,707	8,882	12,932	16,405	19,298
Population					
LOS Standard	195 gallons per day per functional resident				
Total Sewer	1,502,865	1,731,990	1,521,740	3,198,975	3,763,110
Demand					
Generated					
(gallons per day)					

Source: Jerry Weitz & Associates, Inc. November 2010.

HISTORIC PRESERVATION

Preservation Program History

The City of Flowery Branch has developed an impressive historic preservation program since 1985, as follows:

1985: The City applied for and received listing of the Flowery Branch Commercial District in the National Register of Historic Places.

1999: The City established a Better Home Town Program that has given the city access to funding and economic redevelopment opportunities available from the state.

2000: The City adopted a local historic preservation ordinance provided a framework for forming a local Historic Preservation Commission and local historic districts. Subsequently, Flowery Branch formed its Historic Preservation Commission.

2001: The City designated two local historic districts (Cotton and Railroad) in the general downtown area.

2002: The city obtained designation as a Certified Local Government (CLG) that allowed Flowery Branch to obtain professional technical expertise for downtown preservation projects, as well as matching historic preservation grant funds from the Georgia State Historic Preservation Office (GSHPO).

2003: The city applied for and received funding from the GHSPO to complete a historic resources survey of two and one half square miles of Flowery Branch. The results of a historic resource survey indicated the numbers and groupings of buildings, structures and objects dating over 50 years old that were deemed to be significant for their historical associations, architecture, or craftsmanship. Some historic resources were significant because they represent the only existing example of a particular architectural style or building type in an area; other resources are significant as a group, such as a group of buildings that together form a historic district. There were 160 historic resources identified, many of which appear to meet National Register criteria.

2005-2006: The Jaeger Company as part of a team led by Weitz and Associates completed a comprehensive plan for the city. TJC's role among others was to complete the preservation element (an earlier version of this chapter, which was initially adopted in 2006).

2008: The Jaeger Company updated the historic resources inventory for Flowery Branch. Field work was performed in November and December 2007. The field work followed the methodology set forth in the Georgia Department of Natural Resources, Historic Preservation Division's *Historic Resources Survey Manual*. This updated survey was focused on the areas of the city which contained the local districts, in an effort to implement a recommendation from the previous preservation element which suggested that the boundaries for these districts be revisited. Information gathered on each property includes: property ownership; building type and style; original floor plan shape, width, and depth; number of stories; roof type; construction method and materials, configuration of porches and windows. Photographs were taken of each

resource. The results of this survey are documented in the "Flowery Branch Historic Resource Inventory" which is a separate document from the historic preservation element.

2008: Flowery Branch with consultant assistance adopted a new historic preservation ordinance (repealing the 2000 ordinance) and a new ordinance designating a local historic district (thus repealing the two separate historic districts established in 2001).

Historic Resource Inventory Narrative

The 2008 Flowery Branch Historic Resource Inventory provides the recommended mapping and historic information on 134 resources. The survey update assigns each historic resource a number that corresponds to the accompanying maps. The Historic Resource Inventory includes information from the field survey which is provided on a Property Information Form. This is followed with the Hall County parcel information form and with photographs of each resource. The Georgia Historic Resource survey form from 2003 is reproduced for each property if applicable. A final copy of this survey has been compiled into a notebook and is available from the City of Flowery Branch. Each form has also been provided in a digital pdf format.

The survey identifies the resources that have historic significance for Flowery Branch. While "historic resources" are generally considered to be 50 years of age or older, resources constructed from 1960-1970 are also identified for future planning purposes. Resources identified in the survey are placed within four categories based on their probable date of construction: (1) 1860-1900; (2) 1901-1940; (3) 1941-1960; and (4) 1961- 1970. The date of construction for each structure is based on information available on the Gainesville-Hall County GIS website: http://gispublic.hallcounty.org as well as an estimate from a visual inspection of the property. The survey document also provides boundaries for the current city limits within the focus area as well as the city's boundaries as used on historic Sanborn Maps from 1912 and 1924.

The criteria for selecting properties were purposefully broad and inclusive. The survey collected information on each property determined to be potentially contributing to a local historic district. While National Register criteria are used to evaluate the resources, the survey included structures regardless if they appeared to meet National Register nomination standards. The survey includes buildings of varying physical condition-- buildings that retain significant architectural integrity and buildings that have undergone extensive alteration.

The physical condition of a property does not determine if a resource contributes to a historic district; rather, architectural integrity is used to determine whether a resource retains sufficient physical features—material, details, and architectural character—to accurately convey a sense of the past. According to the *National Register Bulletin: How to Apply for the National Register* there are seven aspects of integrity: location, design, setting, materials, workmanship, feeling, and association. For a property to retain architectural integrity, it should possess most of these aspects.

Integrity of a historic resource is also related to the historic significance. The National Register Criteria establish different categories with which to evaluate historic significance. A resource may have associative values (Criterion A and Criterion B), design or construction value (Criterion C), or information value (Criterion D). To meet Criterion A, a resource must be associated with events that have contributed to "the broad patterns of our history." Criterion B states that properties are eligible "if they are associated with the lives of persons significant in our past." Criterion C requires that a resource embody "distinctive characteristics of type, period,

or method of construction." Under Criteria C, a resource may be individually evaluated or together with other resources as a district "whose components may lack individual distinction." Criterion D applies to properties that "have yielded, or may be likely to yield, information important in prehistory or history."

The majority of historic properties in Flowery Branch were evaluated under Criterion A and Criterion C. Under Criterion A, numerous resources are associated with town planning, land use patterns, and architectural history in Georgia. Under Criterion C, numerous resources represent building types identified in *Georgia's Living Places: Historic Houses in Their Landscaped Settings* as significant in Georgia's architectural history. Most of the historic resources in Flowery Branch achieve historic significance as a result of their interrelationship. Using the categories established in the Georgia Department of Community Affair's *Minimum Standards and Procedures for Local Comprehensive Planning*, the historically significant properties in Flowery Branch represent several, codependent, land use categories, including residential, commercial, industrial, public, agriculture, and undeveloped/vacant land. As a whole, these resources achieve significance by elucidating the historic environment and the historic evolution of Flowery Branch. The Flowery Branch Cemetery also appears to satisfy Criterion B because of its association with figures important in the history of Flowery Branch.

A total of 134 properties are included in this survey, 132 of which meet the age requirement to be considered historic. The historic property classifications include 109 residential properties, 6 manufacturing-related resources, 12 commercial properties (3 single retail and 9 multiple resource types), 2 former service stations, 1 cemetery, 1 former school, and 1 railroad depot. The physical conditions of these resources range from excellent to fair.

There is a diversity of residential building types in Flowery Branch. The survey identified 19 different historic building types (see table below), which are distributed throughout the city. Below is a list of building types and number of the particular type in Flowery Branch.

Number	Building Type
22	American Small House
20	Front Gabled Bungalow
13	Ranch
12	Central Hallway
9	Gabled El Cottage
6	Georgian Cottage
6	Saddlebag
4	Side Gabled Cottage
3	I House
2	Hall Parlor
2	New South Cottage
2	Hip Roof Bungalow
1	Side Gabled Bungalow
1	Extended Hall Parlor
1	Gable Ell Bungalow
1	Double Shotgun
1	Pyramid Cottage
1	Double Pen
1	Plantation Plain
3	Unrecognizable

There are also a wide range of construction dates for the historic resources. Below is a list of "Periods of Development" with the number of resources built in each period.

Number	Period of Development
34	1860-1900
45	1901-1940
49	1941-1960
4	1961-1970

Flowery Branch's historic resources encompass a geographically definable area containing residential and commercial structures that contribute to the historic character of the community. Using the criteria developed for the National Register, the survey report identifies Flowery Branch's residential and commercial resources that are representative of the region's architectural history and the history of town planning in Georgia. The city's collection of vernacular architectural styles reflects regional, cultural, and economic trends in nineteenth and twentieth century Georgia. The historic resources in Flowery Branch convey the character of the historic environment and the history of the town's development through their construction methods, forms, and arrangement in the environment.

Flowery Branch is distinguishable from its surrounding geographic area because of character-defining elements of form, scale, density, age, and style of its historic resources. There is a discernible pattern of historic land use and cultural activities within Flowery Branch. Remnants of agricultural activities are extant on the periphery of the historic downtown. Historic commercial and industrial facilities developed along Railroad Avenue, Main Street, and Pine Street. A traditional neighborhood of mixed housing types developed over several decades among a historic grid of streets and residential blocks.

The cultural landscape helps identify the boundaries of the historic Flowery Branch area. This landscape is especially important along Gainesville Street, where pastoral fields and elements of an agrarian landscape form a gateway into the city. Some of the older houses on the outskirts of town were originally built as rural farmsteads, remnants of the agrarian landscape that historically surrounded Flowery Branch. Notable among these older, farmsteads are the Bagwell House (5220 Gainesville Street) and the Black-Butler House and Farm (5245 Gainesville Street).

The town plan of grid streets, which appears on the 1912 and the 1924 Sanborn maps, is another character-defining historic feature which conveys a sense of this historic environment and historic development of Flowery Branch. The town plan responds to the natural topography, terminating at the top of the ridge north of town. The town plan also relates to historic transportation infrastructure as roads are aligned to run parallel to the railroad tracks.

By 1912, the commercial core of downtown Flower Branch was developed along the first blocks of Main Street and Pine Street. There were also commercial and manufacturing structures located along West and East Railroad Avenues.

Most of the commercial buildings in Flowery Branch are one- and two-story attached brick structures typical of commercial buildings constructed in Georgia during the late nineteenth century and early twentieth century. Many of these commercial buildings have been recently rehabilitated.

There are additional commercial and industrial resources on the blocks surrounding Main Street. There are manufacturing facilities on Railroad Avenue adjacent to the railroad tracks. There is also the Mooney Manufacturing Complex, presently vacant, on the block north of downtown. There are also notable commercial buildings on Atlanta Highway, including two gas stations from the early twentieth century, which have been converted into retail stores. Historic institutional resources in Flowery Branch include a historic cemetery, located on the edge of downtown on Atlanta Highway, and the Flowery Branch School, which has been converted into apartments.

Flowery Branch's residential architecture is spread through the blocks surrounding downtown and is similarly characterized by a clearly definable geographic area that relates to the natural environment and historic transportation resources. The majority of residential houses from the first half of the twentieth century are on identifiable lots subdividing the city blocks extending roughly from Martin Street to Spring Street. The extant examples of these residential resources typically have minimal stylistic features but do represent house types identified in *Georgia's Living Places: Historic Houses in Their Landscaped Settings*. As a previous table indicates, there is a variety of house types in Flowery Branch; most of the houses from this period tend to be either Cottage or Bungalow House types. There are several outstanding examples of these house types built in Flowery Branch during this period, including a Gable Ell Cottage at 5708 Main Street (Resource 08), a Georgian Cottage at 5633 Church Street (Resource 050), and a Central Hallway House at 5214 Railroad Avenue (Resource 071).

As shown on the 1924 Sanborn Map, Flowery Branch's residential subdivisions were expanded to the west, extending just beyond Tanner Street. The streets in that area were extensions of existing streets. As can be seen in aerial photographs of Flowery Branch taken in 1944, residential construction expanded over these new blocks and also filled the spaces between older residences. The majority of the houses constructed during this period are compact, rectangular homes with a moderately pitched, gabled-roof, generally described as an American Small House building type. There are also several outstanding house types constructed during this period, including the American Small House at 5932 Mitchell Street (Resource 110).

Residential development in the 1960s and 1970s continued this pattern of infill, as seen in an aerial photograph taken in 1960. New houses from this era also reached farther from the city center, springing up along the roads that approached Flowery Branch from different directions. These later residential resources have minimal stylistic features but do represent good examples of red brick, hipped-roof ranch house building type, which is a historic house type identified in *Georgia's Living Places: Historic Houses in Their Landscaped Settings*. An especially good example of a ranch type house is 5416 Gainesville Street (Resource 011).

The factors which influence the potential reconfiguration of historic district boundaries include: historical factors, visual factors, physical factors, legal survey lines, and the city's municipal boundaries.