

Section 2.

Overview of Gwinnett County, Currently Protected Greenspace and Targets for Preservation

2A. Overview of Gwinnett County: Demographics, Economics and Natural Environment

Located northeast of the city of Atlanta, Gwinnett County is part of the 10-county core that makes up the Atlanta metropolitan region. It is a large county by Georgia standards, encompassing 437 square miles of rolling Piedmont land. Gwinnett County is well known for its rapid growth and vibrant economic development. In 1970, the County had a population of 72,349. In 2000, that number had grown to 588,448—an increase of 516,099 people in just 30 years.

Demographics

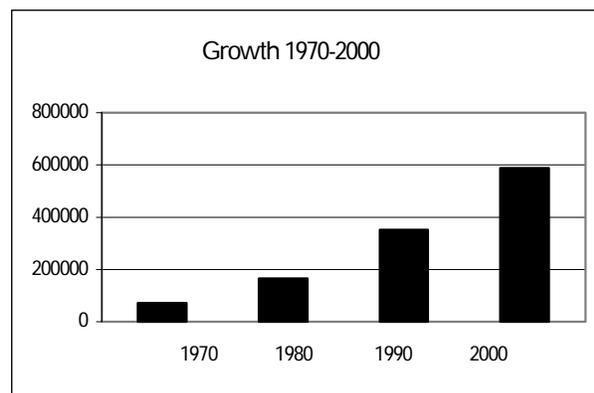
Between 1990 and 2000, Gwinnett County experienced a population increase of 66.7% compared to a 26.4% overall gain in Georgia and a 38.9% gain in the Atlanta region. This is actually lower than the growth rate in previous decades. Between 1970 and 1980, the County grew by 130.7%, while from 1980 to 1990 it experienced a 111.5% increase.

COUNTY	POPULATION		NET INCREASE	PERCENT CHANGE
	1990	2000		
Cherokee	90,204	141,903	51,699	57.3
Clayton	182,052	236,517	54,465	29.9
Cobb	447,745	607,751	160,006	35.7
DeKalb	545,837	665,865	120,028	21.9
Douglas	71,120	92,174	21,054	29.6
Fayette	62,415	91,263	28,848	46.2
Fulton	648,951	816,006	167,055	25.7
Gwinnett	352,910	588,448	235,538	66.7
Henry	58,741	119,341	60,600	103.2
Rockdale	54,091	70,111	16,020	29.6

Source: U.S. Census Bureau, 2000

The population density of 1,347 persons per square mile is moderate, especially when compared to neighboring DeKalb County's 2,484.6 persons per square mile. As shown on the enclosed map, *2000 Population Density by Census Tract*, much of the population is concentrated in the central and southwest portions of the County.

However, the northern and southeastern areas of the County have experienced much of the growth of the last decade, as illustrated in the map *Population Growth 1990-2000 by Census Tract*. The County expects to continue growing rapidly over the next 25 years, exceeding a million people by 2025 according to its own estimates.



According to the 2000 census, persons under 18 represent 28.2% of the population and persons 65 and older represent 5.4%. The largest age groups are:

- persons 25 to 34 – 104,688
- persons 35 to 44 – 115,719
- persons 45 to 54 – 81,237

The average household has 2.88 people and the median age is 32.5 years. The Atlanta Regional Commission's (ARC) *Long-Range Outlook for the Region* reports that baby boomers are expected to move from the area once they reach retirement age and the region will continue to be relatively younger than the nation with a predicted median age of 35.4 in 2020, as compared to the national forecast median age of 38.3. Young households with children have a large demand for recreation space and are heavy users of greenways.

Employment and Income

The median household income in Gwinnett County is \$56,082, well above the Georgia median of \$36,372. Gwinnett County has the second lowest poverty rate in the Atlanta region, at 5.2% (according to the *Poverty Rates by Jurisdiction, 1995*). Gwinnett is one of five counties considered to be the economic core of the Atlanta region by the ARC, the major regional planning organization. According to the ARC, employment is centered in these five counties and accounted for 92% of the region's jobs in 1998 and 86% of the region's net employment increase since 1990. This rate is slowing somewhat as growth moves to adjacent counties, but still advances at an above-average pace.

In 1980, Gwinnett County was largely an Atlanta bedroom community with a low ratio of jobs to residents. Since that time, Gwinnett County's job base has more than quadrupled from 48,500 to 254,600, according to ARC estimates, increasing even faster than the population. Economic growth has been distributed throughout existing industries, with the largest gains seen in services, retail trade, wholesale trade and manufacturing.

	<u>Gwinnett County</u>			<u>Atlanta Region (includes Gwinnett)</u>		
	<u>1980</u>	<u>1990</u>	<u>1999</u>	<u>1980</u>	<u>1990</u>	<u>1999</u>
	Miscellaneous	320	1,400	3,700	3,084	8,000
Construction	5,889	9,700	22,400	48,768	64,300	97,100
Manufacturing	11,056	26,300	34,300	135,923	153,900	173,600
Trans., Comm., Util.	1,828	4,300	11,450	82,654	126,500	176,000
Wholesale Trade	6,988	23,700	41,800	82,525	139,100	173,200
Retail Trade	7,439	31,400	58,200	145,654	261,500	343,500
Finance, Insur., Real Est.	2,369	10,100	14,100	71,737	113,800	134,400
Services	6,237	28,500	67,500	181,549	349,700	566,100
Government	6,388	16,600	23,000	149,263	209,200	238,900

Source: Atlanta Regional Commission

Retail employment centers include three major malls: Gwinnett Place, the Mall of Georgia (largest in the southeast), and the recently opened Discover Mills. Peachtree Corners in the Norcross superdistrict has become a center for high-tech firms while Central Gwinnett has seen large gains in business services and health services employment. (A superdistrict is a geographic area composed of multiple census tracts.) Manufacturing and retail trade are also strong in this area. The North Gwinnett, East Gwinnett and Snellville superdistricts still include large, undeveloped regions but are experiencing rapid growth in retail trade and services. The Lilburn superdistrict remains primarily residential with expansion predicted for local-serving jobs, especially in retail trade, construction and services. This trend mirrors that of the whole metropolitan region, in which the services industry is predicted to claim one of every four new jobs created in Gwinnett between 1990 and 2020, more than doubling in size over this period. Retail trade employment will nearly double, up 95%, to be the region's second fastest growing industry between 1990 and 2020 (Atlanta Regional Commission).

In 2001, Gwinnett County earned a triple-A rating for the fifth consecutive year from Moody's, Fitch and Standard & Poor's. As reported in the *2000 Gwinnett County Citizens' Report*, services are up and the property tax rate is down, having been cut 23% since 1996. This is thanks, in part, to the citizens' willingness to support Special Purpose Local Option Sales Taxes.

Housing

The high rate of home ownership in Gwinnett County is another factor to consider when planning community amenities. The Census Bureau reports 209,682 housing units in 2000 with a 72.4% rate of ownership. Slightly higher figures are reported in an Atlanta Regional Commission report dated December 20, 2000. According to that report there are 218,247 housing units in the County which break down as follows:

- 165,180 single family units for a 75.7% share
- 47,887 multifamily units for a 21.9% share
- 5,180 mobile home units for a 2.4% share

Transportation

The Atlanta metropolitan region contains over 361 miles of multi-lane highways and nearly 2,000 miles of arterial roadways with the majority of roads located on the north side of Atlanta. Cherokee, Cobb and Gwinnett have over 38% of the region's roadways. Major highways serving Gwinnett County are I-985, I-85 and Georgia State Highway 316. These roads link retail and business activity centers while providing access to Atlanta and adjacent counties. A major highway expansion project, known as the Northern Arc, is being planned by the state of Georgia. It will run through the County, providing improved traffic flows in the northern section of the County. Funding and the time frame for construction have not been confirmed at this time.

The region's public transit, Metropolitan Atlanta Rapid Transit Authority (MARTA), does not serve Gwinnett County and is unlikely to in the future. Gwinnett County has developed its own public transit system, which began providing express bus service to Atlanta in 2001. In addition to the express bus services, local bus service will begin in the County in the fall of 2002.

The ARC Board has approved an allocation of \$5 million over a five year period to fund the Livable Center Initiative (LCI) program. The purpose of these studies include promotion of mixed uses and increased connectivity, access to a range of travel modes and others during the first two years of the program. The cities of Duluth, Norcross and Suwanee were awarded study grants, as well as Gwinnett County, for the activity centered around Discover Mills and the Gwinnett Civic & Cultural Center. An additional \$350 million has also been allocated by the ARC Board for funding of projects recommended by the LCI studies.

Natural Environment: Terrestrial

Gwinnett County is located in the Piedmont physiographic province, characterized by rolling hills and clay soils underlain by crystalline rock. Originally mostly forested, the County was cleared for row-crop agriculture early in the nineteenth century. Poor farming practices led to loss of much of the fertile topsoil, reducing the economic viability of row cropping and leading many producers to convert to forestry or livestock. These land uses have declined greatly since the Atlanta development boom reached the County in the 1970s and 1980s.

The forested land in Gwinnett County has undergone several significant changes. The original forest was a climax forest, dominated by Oaks, Hickory and Chestnut trees. Since the time of settlement, the forest has undergone repeated harvesting and clearing to make way for agriculture. At the height of the County's cotton-growing period in the late nineteenth century, much of the forest had given way to major cotton growing operations. With the end of the cotton period, much of the County converted to dairy farming to support the growing demands of Atlanta. Both of these agriculture practices required the removal of forested areas.

On a large scale, these agricultural practices have ended and portions of the County have revegetated with second growth forest. The latest forest survey completed by the U. S. Department of Agricultural Forest Service, *Forest Statistics for Georgia, 1997*, reported that the County has 104,000 acres of forested land; the ARC reported in 1995 that Gwinnett had 89,567 acres of forested land. The discrepancy is likely due to differences in methods of estimation. Both estimates represent a decline from earlier estimates of 131,000 – 137,000 acres in the late 1980s (Forest Service and ARC estimates). As in the past, the forest land in the County continues to cycle with different land use patterns and development activities.

Small portions of the County contain rock outcrops, which support rare and sensitive plant communities. In Eastern Gwinnett County, some streams wind through steep valleys overlooked by bluffs, which also are home to uncommon plant assemblages. Some of these areas still retain healthy hardwood forests and impressive displays of native wildflowers, including some rare and endangered species. Such areas should be targets for preservation. Plant species listed as endangered, threatened or unusual are shown in the table below.

State Protected Plants Known from Gwinnett County

Little Amphianthus	<i>Amphianthus pusillus</i>
Moccasin Flower	<i>Cypripedium acaule</i>
Golden Slipper	<i>Cypripedium calceolus</i>
Harper Wild Ginger	<i>Hexasylis shuttleworthii</i> var. <i>harperi</i>
Goldenseal	<i>Hydrastis canadensis</i>
Black-spored Quillwort	<i>Isoetes melanospora</i>
Bay Star-vine	<i>Schisandra glabra</i>
Puck's Orpine	<i>Sedum pusillum</i>
Ozark Bunchflower	<i>Veratrum woodii</i>
Piedmont Barren Strawberry	<i>Waldsteinia lobata</i>

Natural Environment: Aquatic

Gwinnett County is situated at the headwaters of multiple watersheds: the Oconee, the Apalachee, the Alcovy and the Yellow, as well as tributaries of the Chattahoochee River. Unfortunately, a number of streams in the western and southern portions of the County have already been impacted by development and have been placed on the "303D" list of impaired waters. The tributaries in the eastern and northeastern portion of the County are, in contrast, still relatively healthy. It is in this region that open space preservation can have the greatest impact on water quality since land preservation is a good tool for protecting healthy watersheds but inefficient for improving degraded watersheds.

According to the 2020 Comprehensive Plan, Gwinnett County has five existing or future public water supply watersheds. These include Big Haynes Creek and the Chattahoochee, Alcovy, Apalachee and Mulberry Rivers. Approximately 23,000 acres (roughly 8%) of Gwinnett County lies within the 100-year floodplain.

Although the vast majority of Gwinnett County residents rely on surface water sources for drinking water, an estimated 2,300 households in Gwinnett County received drinking water from groundwater sources (1990 U.S. Bureau of Census estimate). Approximately 55,000 acres, or 20% of Gwinnett County, are located within the potential groundwater recharge areas of underground aquifers (refer to the *Protected Areas* map). Significant groundwater recharge areas are located near Snellville,

Lawrenceville, Norcross and Lilburn. Protection of undeveloped areas within these groundwater recharge areas is important to protecting these water supply sources.

Scenic Views and Sites

The 2020 Comprehensive Plan identified six scenic views and sites of natural features that should be considered for protection status. The sites are as follows:

- **Stone Mountain** viewed from Centerville Highway near and just south of its intersection with Johnson Drive
- **Lake Lanier** viewed from the east side of the dam (The lake and valley below make up this viewshed.)
- **Chattahoochee River** viewed from areas elevated above the river and along the river
- **Berkeley Lake** viewed from areas around the lake
- **Norris Lake** viewed from Hightower Road
- **Mountains and lakes** viewed from Mineral Springs Road near the intersection with Hog Mountain Road

Protection of these viewsheds is important to the overall aesthetic quality of the County.

Historic and Prehistoric Resources

The 2020 Comprehensive Plan has identified 13 sites and buildings listed on the National Register of Historic Places. A fourteenth site, the Swanns-Freemans Mill site, has been nominated. This is a property that has been purchased by the County for protection and interpretation as part of the open space program. The 13 sites are:

- The Bona Allen House
- The Thomas Hudson House, also known as the Hudson-Nash House
- The Robert Craig House
- The Thomas Wynn House
- The Clarence R. Ware House
- The William Terrell Home Place
- The John Quincy Allen House
- Norcross Historic District
- Lawrenceville Female Seminary
- The Gwinnett County Historic Courthouse
- The Mechanicsville School
- The Elisha Wynn House
- Parks – Strickland Complex

In addition to the historic structures, cultural resource sites are also common in the County. In the Hog Mountain-Dacula area there are reported prehistoric mounds. Other sites can be found along the Chattahoochee, Little Mulberry and Yellow Rivers and along Beaver Ruin, Stone Mountain and Big Haynes and Suwanee Creeks. There are also scattered sites near the Norcross area. The remains of a bridge on the settlement route of the Hightower Trail is located on the Yellow River. Rogers Bridge, a historic steel bridge, remains intact over the Chattahoochee River. Numerous old cemeteries can be found throughout the County.

2B. Existing Protected Open Space and Open Space Planning Programs

Summary of Open Space and Park Lands in Gwinnett County

The availability of parkland and open space in the County currently is much higher than it was a few years ago. Gwinnett County has seen its parkland grow from just over 1,800 acres to over 7,200 acres. Currently, there are over 3,056 acres held by other public agencies and land trusts. This brings the combined total of the open space and parkland in the County to over 10,200 acres. This represents 3.6% of the total area of the County, or 18% of the goal of 55,403 acres of protected open space and parkland.

The levels of permanent protection vary among the open space and park properties at this time. As previously stated, approximately 3,056 acres of the land is currently permanently protected. Other portions of the parkland included in the overall acreage total do not meet all the permanent protection requirements of the Georgia Greenspace Program, but the land is now protected from private development.

The process of protecting open space and parkland in the County has long been a priority of the Board of Commissioners. In past years the County has focused on meeting active recreation needs in their parkland acquisitions. This has changed as the County has been able to meet these recreation demands. In 1998, Gwinnett County acquired two (2) significant large land tracts. Working with the Trust for Public Land, the County purchased 485 acres in northeast Gwinnett County, now known as Little Mulberry Park. A larger tract, 565 acres in southern Gwinnett County known as the Yellow River Park property, was also purchased. Yellow River Park is currently a very popular park with trails for hiking, mountain biking and equestrian use. Both of these land acquisitions for passive recreation interests were funded through the County's General Fund.

The County also targeted properties in highly developed areas of the County. Again with General Fund tax dollars, Gwinnett County purchased significant park properties including McDaniel Farm Park (134 acres) and Graves Road park site (70 acres). A joint parkland purchase with the National Park Service and the Department of Natural Resources helped to preserve 340 acres along the Chattahoochee River (Gwinnett County purchased 217 acres of the total site).

In November 2000, the citizens of Gwinnett County approved a Special Purpose Local Option Sales Tax (SPLOST) which identified \$55 million for passive parkland acquisition. A 404-acre expansion to Little Mulberry Park was the first property purchased with 2001 SPLOST funds. Other properties acquired in 2001 include: Deshong Road park site (208 acres); Five Forks Park (25 acres); Kanhoda area park site (25 acres); and Palm Creek park site (295 acres). Also during 2001, the County received approximately \$2.7 million from the Georgia Greenspace Program. These funds were utilized to acquire a historic mill site on the Alcovy River and a 350-acre passive park site east of the Norris Lake community in southern Gwinnett County. Finally, Gwinnett

County's largest land purchase to date with SPLOST funds will occur in early 2002. This will be the acquisition of nearly 1,800 acres in the Harbins area along the Alcovy River.

Gwinnett County's Greenspace Program also received a boost with the approval of the County's first conservation subdivision ordinance in 2001. Several development plans have been submitted for this designation. The county-wide Open Space and Greenway Master Plan will assist Gwinnett County in continuing its Greenspace Program. In addition, this planning tool will compliment the County's participation in the state of Georgia's Greenspace Program. Gwinnett County is working with the cities located within the County in this annual application process. The current protected open space and recent acquisitions are summarized below.

Currently Protected Open Space

Owner	Acreage
Federal	2544.33
State of Georgia	0
Gwinnett County	155
Municipalities	29.37
Conservation Organizations	327.78
Total Acres Permanently Protected Greenspace	3056.48

Properties that have been acquired as open space or passive park lands include the following:

Property	Size	Acquisition Cost
Mulberry Property	404 acres	\$6,644,000
Alcovy River Grist Mill	11.8 acres	\$350,000
Deshong Property	208.3 acres	\$9,400,000
McDaniel Farm Property	133.6 acres	\$9,886,000
Graves Property	70.2 acres	\$3,857,000
Kanoheda Property	25.4 acres	\$949,000
Five Forks Park	24.6 acres	\$1,678,000
Norris Lake Property	350 acres	\$4,095,000
Settles Bridge	217 acres	\$10,500,000
Palm Creek	295 acres	\$4,803,000
Harbins Property	1,795 acres	\$20,133,000 *
Tribble Mill Expansion	49.7 acres	\$423,000
Harris Property	10.84 acres	\$847,287
Total	3,595.44 acres	\$73,565,287

*The purchase of 180.06 acres has been completed. The balance of this acquisition is pending and the total cost is subject to change.

Acquisition Cost Summary

Many of these properties acquired by the County correspond with recommendations made by the public (see *Suggested and Acquired Properties* map). These acquisitions illustrate the high cost of purchasing open space in Gwinnett County, with an average cost per acre of \$20,460. This average should be a good cost to use in estimating acquisitions on a system-wide basis. The average includes properties from all areas of the County and consists of both properties with high development potential and properties with lower development potential due to large sections of floodplains or steep hillsides. If the County were to acquire an additional 5,000 acres of developable property using an average cost of \$20,460 per acre, it would cost over \$100,000,000. It is clear that at this high cost, the County will have to seek other means of acquiring and protecting open space in addition to its fee simple purchase of lands for protection and preservation.

Ongoing Open Space and Greenway Planning Efforts in the County

Gwinnett County Department of Transportation

The Department of Transportation has developed alternative transportation plans as part of the recently completed Comprehensive Transportation Master Plan. The department has led the County's efforts to plan pedestrian and bicycle facilities and to work on grant applications funded through the Georgia Department of Transportation. The transportation planning staff should be included in interdepartmental planning efforts on all future greenway and bicycle projects, as many of the projects can be developed in association with roadway projects.

A partial listing of greenway and bicycle projects in the current Comprehensive Transportation Master Plan is provided below. These projects are taken from the Atlanta Regional Commission's approved FY2002-2004 Transportation Improvement Program (TIP). This TIP is in the process of being updated and the listed projects are subject to revision as a result of the update, currently scheduled for approval in fall, 2002.

Greenway and Bicycle projects (partial list)

<i>Number</i>	<i>Road</i>	<i>From</i>	<i>To</i>	<i>Miles</i>
GW-AR 177H	Peachtree Industrial Blvd. Western Gwinnett Sidewalk/Bikeway <i>FY 2002 – 2004</i>			0.00
GW-AR BP002	Sugarloaf Parkway <i>Not currently funded</i>	SR 20	Old Peachtree Road	12.00
GW-AR BP002A	Sugarloaf Parkway <i>Not currently funded</i>	Old Peach	Buford Hwy	1.00
GW-AR BP002B	Sugarloaf Parkway <i>Not currently funded</i>	Buford Highway	Peachtree Industrial Blvd	1.00

Greenway and Bicycle projects (partial list continued)

Number	Road	From	To	Miles
GW-AR BP011	WP Jones Memorial Trail; Pleasant Hill Road <i>FY 2002 – 2004</i>	Bridge at River	Buford Hwy (Regency Pk Dr)	2.20
GW-AR BP014	Suwanee Creek Greenway Trail Ext. <i>FY 2002 – 2004</i>	Martin Farm Park	McGinnis Ferry Road	0.80
GW-AR BP016	Peachtree Industrial Blvd. <i>FY 2002 – 2004</i>	Riverwood Pkwy	Rogers Bridge Road/Duluth	0.50
GW-AR BP081	Suwanee Creek Greenway IV <i>Not currently funded</i>	McGinnis Ferry Rd	US 23/Buford Hwy	1.50
GW-AR BP092	Suwanee Creek Trail Ext. & Landscaping Ext. TEA <i>FY 2002 – 2004</i>	McGinnis Ferry Rd	US 23/Buford Hwy	1.40
GW-AR BP093	Rogers Bridge Multi-use Trail TEA <i>FY 2002 – 2004</i>	Rogers Bridge Rd	Peachtree Ind. Blvd.	0.50
GW-AR BP077	Ivy Creek Tributary <i>Not currently funded</i>	Suwanee Creek	Camp Branch Road	3.50
GW-AR BP079	No Business Creek Greenway <i>Not currently funded</i>	Springdale Rd	Norris Creek	5.50
GW-AR BP080	Suwanee Creek Greenway <i>Not currently funded</i>	Bryant Rd	Suwanee Elem	8.80
AR-GW BP35B	State Bicycle Route #35 "March to the Sea" <i>Not currently funded</i>	Five Forks Trickum Rd to Dogwood Dr, to SR 124	To Lenora Church, to Centerville-Rosebud to Walton Co.	18.00
AR-GW BP55B	State Bicycle Route #55 "Appalachian Gateway" <i>Not currently funded</i>	Old Peachtree Road from Collins Hill to to Hamilton Mill	To Ridge Road, to Hall County Line	12.00
AR-GW BP60B	State Bicycle Route #60 "Athens Link" <i>Not currently funded</i>	Chandler Road at Grayson New Hope Road	To Ozora Road to Walton County Line	5.00
AR-GW BP70B	State Bicycle Route #70 "Northern Crescent" <i>Not currently funded</i>	McGinnis Ferry Road from Co. Line to Pib, to GA, 317, to Horizon, to Collins Hill	Jackson/New Hope Road, to Chandler to Grayson-New Hope, to Main St to Grayson Pkwy	25.00

Gwinnett County Department of Planning and Development

The Gwinnett County Department of Planning and Development has played an active role in the preservation of open space in the County. As early as 1995, the staff developed a draft greenway master plan that considered the potential for a variety of multi-use pathways and bike paths throughout the County. More recently, the planning staff cooperated closely with the Tree Advisory Committee in drafting the County's conservation subdivision ordinance, approved by the County Commission in 2001. The department is currently leading the program to develop an urban-center type development node as part of a Livable Centers Initiative. Focusing growth in such centers will facilitate protection of larger areas of greenspace elsewhere in the County. The Planning and Development Department will continue to play a major role in greenspace protection in the future by managing the patterns of growth and by working with developers who are building adjacent to open space properties and greenway routes.

Gwinnett County Department of Public Utilities

Gwinnett County Department of Public Utilities is involved in land acquisition for utility easements, in the permitting of the County's water and sewer supply, and in assisting in the implementation of the County's storm water ordinance. There are many opportunities for the Department of Public Utilities to purchase property that meets its needs, doesn't hinder the provision of water and sewer services and also provides opportunities for public open space or greenway connectors. Supplemental funding to provide for recreational use of this land will need to be provided. At this time, the Department is active in the open space discussions but has not established procedures that require joint projects.

Gwinnett County Municipalities

Currently, the municipalities' across the County are working to advance their own greenspace programs. Most of the municipalities are actively working with the County on the Georgia Greenspace Program as participating members of the grant. The funds received from the grant program, along with 10 million in SPLOST dollars, will provide the municipalities with funds to pursue open space acquisition and greenway projects.

The cities and county planning staffs meet on a regular basis to discuss planning, transportation and greenway activities that are not limited by municipal or unincorporated county boundaries. At these meetings, they also discuss grant programs they can pursue collectively or as individual jurisdictions. Two joint planning sessions were held as part of this master planning process.

Land Trusts and Conservation Organizations

While several land trusts hold lands or easements in the County, the two most active are the Trust for Public Land and the Gwinnett Open Land Trust. The Trust for Public Land is a national conservation organization that seeks to enable property across the country to be protected from development or degradation. The Trust for Public Land

prefers to hold the land in a temporary status and then transfer the land for permanent protection to governmental agencies or other non-profit conservation groups. In Gwinnett County, the Trust for Public Lands has been focusing on securing land to be transferred into the Chattahoochee River National Recreation Area. It currently holds over 300 acres of land in Gwinnett County.

The Gwinnett Open Land Trust is a local land trust that is concerned with the protection of open space in Gwinnett County. Members of the Gwinnett Open Land Trust were active participants in the Tree Advisory Committee that developed the County's conservation subdivision ordinance. The organization has expressed an interest in holding conservation easements on open space in these conservation subdivisions, as well as on other tracts of land. The Gwinnett Open Land Trust currently holds over 225 acres of land in Gwinnett County. The Chattowah Land Trust operates in North Georgia, Northeast Alabama and Southern Tennessee. It holds land and easements in 15 Georgia counties. In Gwinnett County, Chattowah currently owns riparian land along the Chattahoochee River.

2C. Targeting Preservation Efforts

This section considers where Gwinnett County should focus its greenspace preservation efforts—both the location and the type of land to be preserved. These preservation targets are based on the primary goals of the Open Space and Greenway Protection Plan as well as on the demographic and natural environment information discussed in Section 1A. Of course, it is also essential to consider the cost and the availability of land. Included in Section 2D are results from a cost analysis. Results of a land availability analysis are reported in Section 5. Both studies were performed by Lose & Associates as part of the master planning process.

Targets for Preservation

1. Streams and Floodplains (to protect water quality). The County should consider developing a buffer/floodplain acquisition program.
2. High-Quality Watersheds (to protect water quality and to provide increased recreation opportunities). The County should consider targeting significant open space acquisition efforts toward the Apalachee, Little Mulberry, Alcovy and Big Haynes watersheds in order to protect high quality watersheds and drinking water sources. Large tracts are available in portions of most of these watersheds, providing opportunities for large passive parks.
3. Park Land in Urbanized Areas (to provide increased recreation opportunities). To the extent these are reasonably available, the County should consider identifying and purchasing properties in the highly developed western and central portions of the County in order to provide recreation opportunities. Acquisition or protection by accepted conservation methods in urbanized areas can include development sites that are under-utilized at the present time.
4. Restoration of Stream Banks in Urbanized Areas (to improve water quality and provide recreation opportunities). The County should consider coordinating greenspace preservation and restoration projects throughout the County, especially in the more urban areas. For example, Crooked Creek, Beaver Ruin Creek and Jackson Creek are currently being studied as part of the County's program to improve stormwater management. As degraded stream banks are restored, they can be permanently protected and added to the County's greenspace system. In some cases, restored riparian zones may be converted to public access greenways.
5. Prime Wildlife Habitat (to reduce the environmental impacts of development). Habitat documented to contain state and federal threatened or endangered species, such as those noted in Section 2A, should be considered a priority. Also, buildings and landscapes on the Historical Register and mapped cultural resource sites should be considered for acquisition.

6. Greenways. The County should consider establishing greenways in locations where they provide the greatest connectivity between existing greenspaces and where they can serve as useful transportation corridors.
7. Distribution of Greenspace. The County should consider acquiring land in both developed and undeveloped areas of the County. Land preserved in less developed areas provides more acreage per dollar, while land preserved in more developed areas provides greenspace that is readily accessible to local residents. As shown in the land acquisition cost analysis reported in Section 2D, both approaches can be considered cost effective.

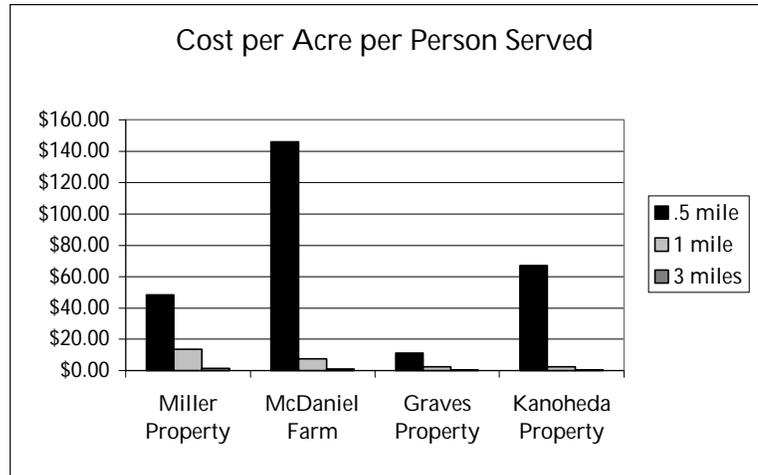
Applying the Targets for Preservation

Section 3A provides policy recommendations related to land acquisition and preservation. Whereas this section discusses *what* lands to preserve, Section 3A discusses *how* those lands can be preserved. Regardless of the method used, however, there are times when it is necessary to evaluate an individual property to determine its value as a target for preservation. A proposed property evaluation system is provided as an appendix. Both ranking criteria and a ranking form are included. This evaluation system is not intended to be the sole determinant of whether a property should be purchased or otherwise protected, but is merely a guide to ensure that various factors are considered in the decision.

Existing park locations and areas suggested for acquisition at public meetings are shown on the following two maps.

2D. Land Acquisition Cost Analysis

Where does Gwinnett County get the most benefit for its greenspace protection dollar? Is it more economically efficient for Gwinnett County to preserve greenspace in high-cost areas, close to many residents, or in low-cost areas with lower local population density? An analysis of recent land acquisition based on cost-per-person-served-by-acre, reveals several interesting findings. The property acquisitions analyzed include the 404-acre Miller tract, 128-acre McDaniel Farm tract, 70-acre Graves tract and the 25-acre Kanoheda tract. All but the Miller tract are located in the highly-developed and rapidly-growing south-central or southwestern section of the County. This is an area where property is becoming difficult to find. However, in this section of the County the population that would be served within a 3 mile radius is much higher than in other sections.



Outlined below are the population and cost per resident served within 0.5-mile radius, an easy walk to a park; a 1-mile radius, a distance many people will walk and a very easy bike ride; and a 3-mile radius, a moderate bike ride or short drive by car.

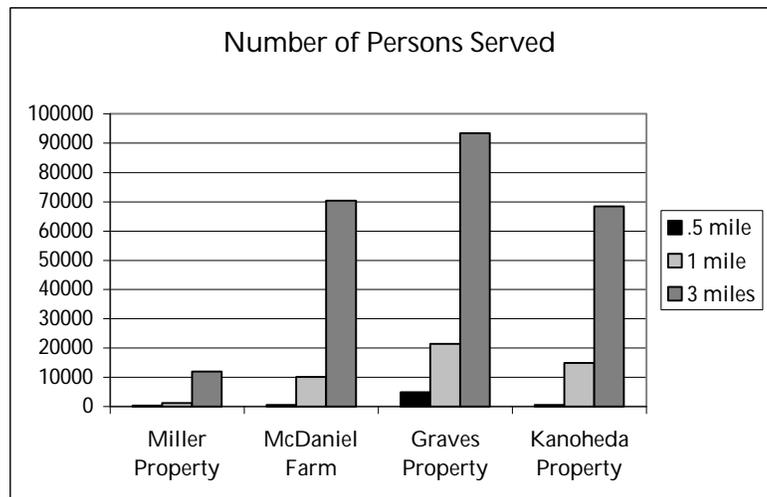
Miller Property	404 acres	\$6.444 million purchase price	\$15,950/Ac.
Distance	Residents Served	Cost Per Resident Served/ Per Acre	
.5 mile	339	\$47.05	
1 mile	1,207	\$13.21	
3 miles	12,061	\$1.32	
McDaniel Farm	128 acres	\$9.886 million purchase price	\$77,234/Ac.
Distance	Residents Served	Cost Per Resident Served/ Per Acre	
.5 mile	518	\$149.10	
1 mile	10,139	\$7.61	
3 miles	70,323	\$1.10	
Graves Property	70 acres	\$3.859 million purchase price	\$55,129/Ac.
Distance	Residents Served	Cost Per Resident Served/ Per Acre	
.5 mile	4,889	\$11.28	
1 mile	21,477	\$2.57	
3 miles	93,477	\$0.59	

Kanoheda Property 25 acres		\$949,000 purchase price	\$37,960/Ac.
Distance	Residents Served	Cost Per Resident Served/ Per Acre	
.5 mile	566	\$67.07	
1 mile	14,926	\$2.54	
3 miles	68,390	\$.55	

The average cost per acre: \$33,713.00
 The average cost per acre/per resident served: \$0.86 @ 3-miles
 The average cost per acre/per resident served: \$33.49 @ 0.5-miles

For these properties, the cost per person served (in the 3-mile radius) ranges from a low of \$0.54 per acre to \$1.32 per acre. This is a cost difference of 240% between the lowest—in the Kanoheda area—and the highest—for the Miller property. In looking at the recent census data for these two areas, the majority of the Kanoheda area grew at a rate of 79% and the Miller property area grew at rates ranging from 87% to 160%, for an average of approximately 133% within the 3-mile service boundary (the service area crosses census tract boundaries, making such estimations somewhat difficult). It is unlikely that the present growth pattern within the Kanoheda area will remain as high as it currently is, since it is reaching a point of build-out.

The growth rate in the area around the Miller property should continue or possibly increase. If residential development within the Kanoheda area were to grow at a modest rate of 50% for ten years, the population in the Kanoheda 3-mile service area will reach 102,585. If the population growth within the Miller 3-mile service area increases to 150%, the population within the service area will increase to approximately 30,152. This would result in a cost per acre per resident of \$0.36 and \$0.52 respectively. If these growth projections are correct, it will take between 15 to 20 years for the cost per acre per person to balance out. If the growth in the Kanoheda area changes from the current pattern, and higher density projects are developed along GA 316, it could be over 20 years before the cost per acre per resident begins to balance out.



Obviously, this is not a comprehensive cost analysis of new parkland. However, it does provide some insight into the value of parkland and open space purchases in different regions of the County. In areas where the County is more fully developed, more residents are served at a lower cost per acre, even though the land values are higher.

Depending on the site selected and the size of the parcel purchased, there is a high probability that the cost per acre within the 0.5-mile radius will be closer to that of large tracts purchased in undeveloped areas.

As fewer undeveloped tracts remain in the southwestern and south central sections of the County, efforts should be made to identify and purchase properties in these highly developed areas. If properties in these areas are not purchased in the near future, there is a good chance that large undeveloped properties will no longer be available, and options for providing open space to residents will be limited to small properties, redevelopment projects and stream restoration projects.

Although they serve fewer local residents, the large tracts of land in the eastern section of the County cost less per acre and provide more overall acres of open space to the County system. Preserving large areas of greenspace now—rather than filling in greenspace once the area develops—can help encourage more efficient development patterns where growth is clustered in nodes rather than spread at a uniform density of three lots per acre. Clustered development reduces traffic and encourages the use of alternative transportation options, ensuring that these areas of greenspace remain readily accessible. It is important to protect some greenspace immediately adjacent to areas targeted for development, to provide greenspace that is accessible to pedestrians. By providing greenspace that is accessible by varied transportation routes, the demand on the roadway system is reduced, providing additional environmental benefits.

To maximize the return on the acquisition of open space, several development factors should be evaluated in addition to environmental factors:

- Current and projected population densities
- Relationship to existing and proposed transportation facilities
- Current and proposed land use
- Potential for modifications to land use
- Accessibility to varied transportation choices including greenway trail routes
- Major developments or civic facilities that will concentrate support facilities
- Potential for various forms of mass transit and the locations of mass transit hubs

By including these factors in the selection process, critical lands can be purchased today for preservation that will be easily accessible to residents in the future.