City of Villa Rica 2026 Comprehensive Plan

August 2005

Chattahoochee-Flint Regional Development Center

Planning Works LLC Leawood, KS

SECTION ONE VILLA RICA WORK PLAN

VILLA RICA COMPREHENSIVE PLAN VISION STATEMENT

Meetings were held with Villa Rica representatives during preparation of the plan:

- ✓ August 13, 2004
- ✓ November 22, 2004
- ✓ March 30, 2005
- ✓ April 18, 2005
- ✓ June 13, 2005

A Community Visioning meeting was held on January 18, 2005. From these meetings the goals and objectives were developed and the following vision statement arose:

Villa Rica is embracing the growth that has propelled it into the 21st Century much as it embraced the gold rush that created it in 1826. Villa Rica builds upon its fortune of being located 30 miles outside of the world-class city of Atlanta yet surrounded by natural beauty and bucolic offerings.

The city seeks to become a unique blend of small town and suburbia that offers its residents and visitors ample recreational opportunities, refreshing green vistas, all while having ready access to all necessary goods and services. Villa Rica is working towards providing citizens of all ages an array of housing choices, a diverse economic base and a quality of history and life that exceeds what could be provided in a typical suburb or a typical small town.

The Comprehensive Plan describes the management framework necessary to achieve the City's vision. Goals, Objectives and Policies are laid out in the areas of Natural Resources, Historic Preservation, Economic Development, Housing and Community Facilities. The Plan also establishes goals, objectives and policy framework for land use, transportation and intergovernmental coordination. The Villa Rica Planning Commission and the Villa Rica City Council have determined that the Comprehensive Plan advances the Rules of Georgia Department of Community Affairs, Chapter 110-12-1-.04(5).

GOALS, OBJECTIVES, POLICIES

NATURAL RESOURCES



GOAL: Conserve, protect and promote natural resources in Villa Rica.

Objective NR-1: New development should be designed to minimize the amount of land consumed and open space should be set aside from development for use as public parks and greenbelts.

- NR-1a: Encourage developers to build open space subdivisions.
- NR-1b: Identify lands that should be permanently protected as open space.
- NR-1c: Require development approvals to be consistent with the Future Land Use Map and other planning directives.
- Objective NR-2 Air quality and environmentally sensitive areas should be protected from the negative impacts of development. Environmentally sensitive areas deserve protection particularly when they are important for maintaining character or quality of life.

- NR-2a: Preserve existing natural historic areas.
- NR-2b: Ensure that all environmental ordinances are properly enforced.
- NR-2c: Provide opportunities for non-motorized transportation within the transportation network.
- NR-2d: Create better public awareness of natural resources and the role they play in quality of life.
- NR-2e: Adopt ordinances in compliance with State law for the protection of water supply watershed, wetlands, groundwater recharge areas, protected mountains and river and corridors, and sedimentation and erosion control.

HISTORIC RESOURCES

- GOAL: Conserve, protect and promote Villa Rica's historic resources.
- Objective HP-1: Maintain Villa Rica's traditional character by preserving and revitalizing historic areas of the community, encouraging new development compatible with the traditional features of the community, and protecting other scenic or natural features that are important to defining the city's character.



- HP-1a: Identify and document Villa Rica's historic properties to Georgia DNR standards.
- HP-1b: Support efforts (such as National Register listings) to recognize Villa Rica's historic resources.
- HP-1c: Adopt local measures to protect and maintain Villa Rica's significant historic resources.
- Objective HP-2: Use Villa Rica's story and related historic resources to promote tourism to the city.



Stockmar Gold Mine

- HP-2a: Restore and use Villa Rica's historic resources to encourage tourism.
- HP-2b: Develop tourism themes based on Villa Rica's story and related historic resources.



- HP-2c: Support efforts to provide heritage education to local residents.
- HP-2d: Participate in county and regional heritage tourism projects and programs.

ECONOMIC DEVELOPMENT

GOAL: Achieve a growing economy that equitably benefits all segments of Villa Rica.



Objective ED-1: Identify and put in place the prerequisites for quality economic growth.

Policies:

- ED-1a: Designate and develop sufficient economic development sites to accommodate long-term employment growth.
- ED-1b: Coordinate the location and development of new housing and infrastructure with the city's economic development planning.
- ED-1c: Support local workforce training programs.
- ED-1d: Encourage professional office and service development near Tanner Medical Center.
- ED-1e: Encourage regional commercial development to occur within close proximity to freeway interchanges to promote regional commerce.
- ED-1f: Strengthen the City's ability to identify potential interjurisdicitional impacts and input from its development authorities and other affected parties.
- Objective ED-2: Strengthen and diversify Villa Rica's economic base.

- ED-2a: Market the City for industry and businesses that pay above average wages.
- ED-2b: Encourage a greater variety of businesses.
- ED-2c: Support initiatives to provide jobs for residents with limited education.
- ED-2d: Support entrepreneurial training and local business development.
- ED-2e: Participate in county and regional initiatives to provide new quality businesses.
- ED-2f: Promote businesses that complement other businesses in the region.

ED-2g:	Encourage businesses with prospects for future expansion
	and for creation of higher skill job opportunities.

- ED-2h: Encourage commercial /retail development that will be compatible to existing land uses
- ED-2i: Promote downtown initiatives that support aesthetic improvements and the redevelopment of obsolete buildings.
- ED-2k: Analyze all financial resources and opportunities and identify an overall economic development strategy for Villa Rica.

HOUSING

- GOAL: Provide opportunities for quality, affordable, safe, and sanitary housing to all residents of the City of Villa Rica.
- Objective H-1: Maintain quality housing and a range of housing size, cost, and density should be provided in Villa Rica, to make it possible for all who work in Villa Rica to also live in Villa Rica.

- H-1a: Eliminate substandard housing in the City of Villa Rica
- H-1b: Stimulate infill housing in existing neighborhoods
- H-1c: Create housing through adaptive reuse of existing buildings
- H-1d: Create affordable housing opportunities to ensure that all who work in the City of Villa Rica have a viable choice or option to live in the community.
- H-1e: Enhance the City's existing supply of housing by promoting conservation practices, supporting rehabilitation programs and encouraging the replacement or restoration of dilapidated structures.
- H-1f: Identify and encourage new and innovative approaches to quality residential development, which expand housing opportunities and minimize public and private costs.
- Objective H-2: Promote traditional neighborhood development patterns, including use of more human scale development, mixing of uses within easy walking distance of one another, and facilitating pedestrian activity.



- H-2a: Change land use and development regulations (such as zoning and subdivision regulations) to allow or promote accessory apartments, "granny flats," and carriage houses as alternative affordable housing; zero lot line or cluster housing development to achieve higher and more affordable densities of residential development; and creation of mixed-income and mixed-use neighborhoods and/or the creation of housing within walking distance to employment and commercial centers.
- Objective H-3: Maximize the use of existing infrastructure and minimize the conversion of undeveloped land at the urban periphery by encouraging development or redevelopment of sites closer to the downtown or traditional urban core of the community.

- H-3a: Take advantage of existing state and federal housing programs that address the identified housing needs and goals of the City of Villa Rica.
- H-3b: Preserve stable residential neighborhoods throughout the City and initiate actions to enhance the character of the historic homes located in and around the downtown area.



- Objective H-4: Assure the provision of adequate, safe, and convenient housing opportunities for existing and future residents.
- Objective H-5: Establish high building standards to ensure quality workmanship and construction for housing in Villa Rica.
 - H-5a: Ensure a licensing and certification program for buildings and developers and assure that all new construction meets minimum building code requirements, is energy and water efficient, that all materials meet quality standards, and that standards for material are equal to or better than the standards set by the manufacturer.
 - H-5b: Strengthen local building code.
 - H-5c: Ensure that building inspectors are thoroughly trained and supervised.

COMMUNITY FACILITIES



(Avanti Buildings – Proposed City Hall and Library)

- GOAL: Ensure that public facilities have the capacity and are in place to maintain or enhance health, safety, and quality of life.
- Objective CF-1: Ensure water supply and wastewater capacity to meet current and future demands



CF-1a:	Require development approvals to be consistent with available capacity.
CF-1b:	Provide water and sewer only within an adopted Urban Growth Boundary.
CF-1c:	Secure future water supply.
CF-1d:	Address the immediate need to expand wastewater treatment capacity.
Objective CF-2:	Provide residents with quality cultural arts and recreation facilities and programs and access to these quality facilities and programs.
Policies:	
CF-2a:	Develop parkland in all parts of the city.
CF-2b:	Promote the development of venues for the arts.
CF-2c:	Expand recreation department staff to meet needs of new facilities.
Objective CF-3:	Expand and upgrade infrastructure in an affordable and equitable manner
Policies:	
CF-3a:	Develop a long-term capital improvement plan.
CF-3b:	Ensure that new development pays for itself through use of regulatory tools such as Impact Fees and development exactions.
Objective CF-4:	Promote community facilities according to need, population density, land use continuity, natural resources suitability, compatibility with historic resources, user safety, neighborhood policies, and the optimum allocation of public funds, all coordinated through planning.

- CF-4a: Extend and improve public services and facilities on a priority basis into areas with an existing need or into areas where the timing for urban development is appropriate.
- CF-4b: Ensure that new development bear an equitable share of and responsibility for the cost of new public services and facilities.
- CF-4c: Coordinate all land use plans and capital improvement plans to assure they are mutually supportive and comply with the area's development concept.
- CF-4d: Ensure that public facilities comply with all county, regional, state and federal government regulations.

LAND USE AND GROWTH



GENERAL LAND USE POLICIES

GOAL: Maintain a balanced, sustainable land use pattern that accommodates projected growth while fostering community vitality, and maintaining or improving the quality of the built environment.

Objective LU-1: Economic Base Expansion – Increase the availability and diversity of employment opportunities for residents and seek to maintain the historical jobs / housing balance.

Policies:

- LU-1a: Participate in joint economic development initiatives with the County that result in fiscal and employment benefits.
- LU-1b: Designate, serve and protect sufficient economic development sites to accommodate long-term employment growth.
- LU-1d: Support economic development initiatives that meet the employment needs of existing residents with limited education and attract higher wage opportunities for the future.
- LU-1e: Link economic development subsidies and programs to specific performance targets (e.g., numbers of jobs at target wage/salary rates, tax generation or payments in lieu of taxes, and other measurable community benefits).
- Objective LU-2: Land Use Compatibility Mitigate land use transitions to ensure that agricultural, residential, industrial, commercial and environmental lands can serve their intended functions (as determined by the Comprehensive Plan) with minimal interference from adjacent land uses.

- LU-2a: Require development approvals to be consistent with the Future Land Use Plan (**Maps 5a-5e**) and other plan directives.
- LU-2b: Adopt appropriate compatibility standards that buffer dissimilar land uses or otherwise mitigate negative impacts through building and site design standards.
- LU-2c: Preclude residential development within planned industrial and business park areas as well as significant flood hazard areas.
- LU-2d: Ensure that new residential development is designed to minimize conflicts with existing development at lower densities.
- LU-2e: Review the Future Land Use Plan and the goals and policies of this Plan on a biannual basis to determine if changing conditions warrant as plan amendments.

Objective LU-3: Urban Growth Areas (UGA) – Execute an agreement with Carroll and Douglas Counties to ensure that development in the City's urban growth area is consistent with applicable City standards for land use and infrastructure.



- LU-3a: Coordinate with Carroll or Douglas County as appropriate to ensure that within the UGA:
 - a. Land uses are consistent with the City's future land use map;
 - b. Densities/intensities are consistent with the City's plans to provide centralized water, sewer and other public facilities;
 - c. All development within the UGA will be served by adequate public facilities at adopted levels of service.
 - d. Public improvements are consistent with applicable City plans and design standards;
 - e. The use of private on-site facilities (e.g., septic tanks and water wells) will be limited and only allowed when they will not present a barrier to coordinated urban growth and the efficient extension of municipal facilities;
 - f. Site design standards are consistent with applicable city standards;
 - g. Buildings will be constructed in accordance with the applicable City building codes;
 - h. Development review procedures are streamlined to encourage planned development, and to minimize procedural redundancy; and
 - i. Regulatory and enforcement responsibilities are clearly assigned to the appropriate jurisdiction.

- LU-3b: Permit interim development within the UGA provided that:
 - a. The land use and transportation facilities are consistent with adopted plans and applicable inter-governmental agreements;
 - b. Development is designed to be compatible with planned land uses;
 - c. Lots are clustered and do not exceed ½ acre, except as necessitated by environmental constraints;
 - d. Centralized water service meeting adopted fire protection standards is available; and
 - e. Funding and design provisions are made for future connection to centralized water and sewer facilities.
- Objective LU-4: Corridor Commercial and Employment Target arterial street corridors for commercial and employment opportunities that support community vitality and enhance the attractiveness of the corridors.

- LU-4a: Avoid shallow strip development along corridors and encourage nodal development patterns where commercial uses interconnect with each other and adjacent residential neighborhoods through common access points along arterial street corridors.
- LU-4b: Facilitate property access from a system of collectors or side streets that are generally parallel to the arterial street corridor.
- LU-4c: Ensure that new development and redevelopment are designed to be compatible with the function of the corridors and to establish an attractive environment for users of corridors. Design standards in corridors should address landscape, building form and materials, parking area design, signs and other site design factors.
- LU-4d: Ensure that Adequate Public Facilities (APF) are available concurrently with development in these corridors. Participate in the development costs of these public facilities when consistent with adopted economic development objectives and policies.
- Objective LU-5 Residential Development Allow high quality residential development and limited support businesses and institutions where adequate infrastructure and services are available.

- LU-5a: Require residential development to fund its proportional share of public facilities required to meet its demands.
- LU-5b: Ensure that public facilities are adequate to meet the demands from new development as development occurs in accordance with adopted level of service standards (see the community facilities and services element for level of service standards).
- LU-5c: Allow neighborhood scale retail and service uses, as well as institutional uses at appropriate locations in residential areas through the planned development process. Such uses shall be located where adequate facilities, including adequate road capacity are available to meet long-term demands to be generated by the uses.
- LU-5.d: Ensure that residential development occurs in a logical growth pattern by precluding premature subdivision, which is evidenced by:
 - a. inadequate roads, water or wastewater service;
 - b. excessive separation from existing suburban development;
 - c. the predominance of agricultural operations in the vicinity; and/or
 - d. inadequate fire and emergency medical service response times.
- LU-5.d: Ensure that residential development is designed and constructed to be a long-term asset to the City through effective design standards addressing open space, building materials and building design.
- Objective LU-6: Downtown Development Use an appropriate mix of zoning, capital investments and other growth management techniques to increase downtown economic activity and residential development.

- LU-6a: Establish a civic center in the Downtown to accommodate City Hall and various community facilities.
- LU-6b: Extend planned pedestrian and parking improvements along the rail corridor and Highway 78 to connect the planned civic center and storefronts along Highway 78 from Stone Street to West Wilson Street.

- LU-6c: Promote compatible residential infill and redevelopment of detached and attached single-family dwellings within walking distance (1/4 mile) of Downtown businesses.
- LU-6d: Facilitate development of a downtown auto museum at the existing Avanti factory through the provision of public improvements that support tourist access and assistance with the process of redeveloping existing structures.

TRANSPORTATION



- GOAL: Ensure that the transportation network supports planned development patterns.
- Objective T-1: Maximize the capacity of the existing and planned transportation network.

- T-1a: Establish and adopt Level of Service (LOS) Standards for transportation facilities and services to be achieved and/or maintained during the first ten-year planning period through capital improvements, service expansions or other strategies.
- T-1b: Ensure the adequacy of the existing and projected transportation system to evacuate populations prior to an impending disaster.

- T-1c: Provide land development regulations and incentives to ensure that new development does not cause the City of Villa Rica's adopted level of service for an individual transportation facility to decline below the established transportation performance measures, and to insure that transportation capital improvements or other strategies needed to accommodate the impacts of development are made concurrent with the development.
- Objective T-2: Greater use of alternate transportation should be encouraged. Alternatives to transportation by automobile, including transit, bicycle routes and pedestrian facilities, should be made available in the community.
 - T-2a: Recommend standards for bicycle and pedestrian facilities, and programs or actions to promote the use of bicycles and walking.
 - T-2b: Provide ways for pedestrians and cyclists to access the City of Villa Rica downtown and its community centers from the residential areas of the City through the provision of sidewalks, nature and bike trails, and safer railroad crossings.



Objective T-3: Traditional downtown areas should be maintained and the development of newer activity centers that serve as community focal points should be encouraged. These community centers should be attractive, mixed-use, pedestrian-friendly places where people choose to gather for shopping, dining, socializing, and entertainment.

- T-3a: Conduct additional detailed sub-plans, such as corridor plans, gateway plans, and use other measures, such as traffic-calming measures, street realignments, intermodal connections, pedestrian or sidewalk plans, bikeway plans, etc., to achieve specific, targeted transportation goals and/or policies.
- T-3b: Conduct a traffic study that examines growth trends and travel patterns and interactions between land use and transportation, and assesses compatibility issues between land use patterns and transportation facilities.

INTERGOVERNMENTAL COORDINATION

- GOAL: Ensure the coordination of local planning efforts with other local service providers and authorities, with neighboring communities and with state and regional plans and programs.
- Objective IC-1: Multi-jurisdictional cooperation should be encouraged in setting priorities, identifying shared needs, and finding collaborative solutions, particularly where it is critical to success of a venture, such as protection of shared natural resources, the placement of educational facilities, etc.

- IC-1a: Mechanisms to share information among surrounding jurisdictions should be developed and strengthened to aid mutual cooperation.
- IC-1b: Conflict resolution should be handled through established mediation processes or informal means.
- IC-1c: Comprehensive plans and implementation actions should be coordinated with surrounding jurisdictions as they are developed.
- Objective IC-2: Multi-jurisdictional solutions to needs shared by more than one local jurisdiction are preferable to separate local approaches, particularly where this will result in greater efficiency and less cost to the taxpayer.

- IC-2a Promote joint funding and operations to meet shared needs.
- IC-2b: Participate in regional discussions affecting service delivery, transportation, water and wastewater needs, and land use.
- IC-2c: Establish joint planning and decision-making on population projections and the location and extension of public facilities.
- IC-2d: Establish joint planning and decision-making for the location of facilities with countywide significance, such as water supply reservoirs, water and wastewater treatment facilities, and solid waste disposal facilities, etc.

INTRODUCTION

Recent and projected changes in the total population and the characteristics of the population have and will continue to create profound impacts on the economic, social and natural environment of Villa Rica. Rapid population increases generated demands for additional facilities and services, straining the City's ability to provide sufficient capacity. The changing age, income and educational composition of the population, will shape demands for housing, services, jobs and infrastructure. For instance, seniors will demand more attached and communal housing types, increased medical services, passive recreational opportunities and public transportation. Increases in families with young children will generate demands for large houses, day care facilities, schools, active recreational opportunities and a mix of transportation options.

This chapter summarizes various demographic indicators relevant to the development of the City's Comprehensive Plan.

CURRENT POPULATION

Situated on the urban fringe of the Atlanta Metropolitan Area, Villa Rica experienced moderate growth between the years 1980 and 2000 (**Exhibits 1 & 2**). De-annexation of more than 2,300 people between the 1990 and 2000 census caused an apparent dip in population between those years. The dashed line in **Exhibit 1** more accurately reflects the actual growth trend between the years 1980 and 2000. However, between 2000 and 2003, Villa Rica nearly doubled its population from 4,134 to 7,812. Recent growth has been stimulated by pressure from the Atlanta Metropolitan area and the development of the Mirror Lake subdivision in the Douglas County portion of Villa Rica.



Exhibit 1: Total Census Populations - Villa Rica



Exhibit 2: Population Growth Trends – Villa Rica, Carroll, Douglas and Georgia

	Villa R	Villa Rica		Carroll County		Douglas County		gia
Year	Population	Change	Population	Change	Population	Change	Population	Change
1980	3,420		56,346		54,570		5,457,566	
1985*	4,981	46%	63,884	13.4%	62,845	15.2%	5,967,891	9.4%
1990	6,542	31%	71,422	11.8%	71,120	13.2%	6,478,216	8.6%
1995*	5,338	-18%	79,345	11.1%	81,647	14.8%	7,332,335	13.2%
2000	4,134	-23%	87,268	10.0%	92,174	12.9%	8,186,453	11.6%

*x5 years are midpoints between the Census years. Source: U.S. Census and do not accurately reflect the city's actual population

Census population counts are available only on a decennial basis (every ten years). Estimates of current population and projections of future population are used to facilitate planning for land use, housing and infrastructure. Various estimating methods are available to meet these needs. **Exhibit 3** shows 2001-2003 population estimates using Census Bureau estimates obtained using a new housing unit (building permit) methodology¹.

Exhibit 3: 2001-2003 Population Estimates –
Villa Rica, Carroll, Douglas and Georgia

villa Rica, Carroli, Douglas and Georgia										
Villa Rica		Carroll County		Douglas (County	Georgia				
Year (April)	Population	Change	Population	Change	Population	Change	Population	Change		
2001	5,511	33%	91,548	4.9%	95,680	3.8%	8,338,460	1.9%		
2002	6,985	27%	94,907	4%	98,650	3%	8,449,130	1%		
2003	7,812	11%								

Source: U.S. Census and local building permits

¹ See <u>http://eire.census.gov/popest/topics/methodology/citymeth.php</u> for complete estimate methodology.

Building permit activity and certificate of occupancy county data evidences the City's rapid population growth in recent years. Of these sources, county data provide the most reliable estimate of the City's population.

U.S. Bureau of Census data indicate that the City's population increased by 73% (from 4,134 to 7,812) between April 2000 and April 2003. Exhibit 4 shows that 1,425 building permits were issued 2001 through 2003.

	2001	2002	2003	Total
Single-Family	364	389	349	1,102
Multi-Family	101	174	48	323
Total	465	563	397	1,425

Exhibit 4: Residential Building Permits (2001-2003) - Villa Rica

Source: U.S. Census

Certificates of occupancy, which provide the most accurate assessment of population growth,² confirm the rapid growth suggested by building permit issuance and Census Bureau estimates. As shown in Exhibit 5, the City issued 1,087 certificates between April 2000 and April 2003, an average annual population growth rate of 19.4%. Exhibit 6 shows population projections to 2025, actual population increase. These projections should be compared with annual estimated population figures based on actual development activity to refine both short and long-term projections during implementation of this plan.

	Value	Comments
Total Dwellings – April 2000	1,769	Source: U.S. Bureau of Census
Occupied Dwellings-April, 2000	1,550	Source: U.S. Bureau of Census
CO – April 2000 to April 2003	1,087	Source: City of Villa Rica
Total Dwellings – April 2003	2,856	Add CO's to Total Dwellings
Occupied Dwellings April 2003	2,637	Assumes the same number of vacant units 219 as indicated in the 2000 Census rather than a consistent vacancy rate ³ .
People per Household	2.67	Source: U.S. Census Bureau
Population – April 2003	7,041	Multiply occupied dwellings by the average number of people per household – note that this total is very close to the April 2003 Census estimate of 7,158
Annual Population Growth Rate 2000-2003	19.4%	Compounded annually from April, 2000 To April, 2003
CO April – December 2003	634	Source: City of Villa Rica

Exhibit 5: Villa Rica Growth (2000-2003)

A CO indicates that a building is ready to be occupied. Building permits reflect new units intended to be constructed, but provide no indication that a new unit is completed. Water taps are issued near the time of occupancy, but the City provides water service to areas outside the city limits and has not historically retained location specific records.

The 12.4% vacancy rate in 2000 is relatively high and indicative of the rapid construction of multi-family units. The number of vacant units is a better proxy for vacancies than the 2000 vacancy rate because: a.

the market has shifted to construction of owner-occupied units; and

b. using an inflated vacancy rate would result in artificially low utility demands.

Estimated Population December 2003	8,734	Multiply occupied dwellings by December 2003 people per household
Annual Growth Rate 2000-2003	22.1%	Compounded annually from April, 2000 To December, 2003
Annual Dwellings 2000-2003	459	1,721 dwellings / 3.75 years
Average Population Increase; 2000 - 2003	1,226	459 dwellings x 2.67 people per dwelling

Source: Planning Works LLC

POPULATION PROJECTIONS

Exhibit 6, projects population growth for the City, Carroll County, Douglas County and Georgia through the year 2025. Projection trends are illustrated in **Exhibit 7**. A linear regression of census trends would not be indicative of current population trends for the City, due to the de-annexation that negatively skews population trends. The projections for Villa Rica reflect market demand. This growth is likely to be suppressed within Villa Rica unless the City resolves its impending wastewater capacity shortfalls.

Exhibit 6: Population Projections - Villa Rica, Carroll, Douglas and Georgia

	Villa R	lica	Carroll C	ounty ²	Douglas County ³		Georg	jia ³
	Population	Change	Population	Change	Population	Change	Population	Change
1980	3,420		56,346		54,570		5,457,566	
1985	4,981	46%	63,884	13.4%	62,845	15.2%	5,967,891	9.4%
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1995	5,338	-18%	79,345	11.1%	81,647	14.8%	7,332,335	13.2%
2000	4,134	-23%	87,268	10.0%	92,174	12.9%	8,186,453	11.6%
2001	5,360	30%	91,548	4.9%	95,020	3.1%	8,338,460	1.9%
2002	6,586	23%	94,907	3.7%	97,263	2.4%	8,449,130	1.3%
2003	7,812	19%	97,165	2.4%	99,567	2.4%	8,560,620	1.3%
2004	9,038	16%	99,477	2.4%	101,847	2.3%	8,670,510	1.3%
2005	10,264	14%	101,844	2.4%	104,172	2.3%	8,784,650	1.3%
2006	11,490	12%	104,268	2.4%	106,411	2.1%	8,895,580	1.3%
2007	12,716	11%	106,749	2.4%	108,715	2.2%	9,008,670	1.3%
2008	13,942	10%	109,289	2.4%	111,006	2.1%	9,122,070	1.3%
2009	15,168	9%	111,889	2.4%	113,309	2.1%	9,235,630	1.2%
2010	16,394	8%	114,551	2.4%	115,599	2.0%	9,349,660	1.2%
2015	22,524		128,844		127,309			
2020	28,654		144,920		139,262			
2025	34,784		163,002		151,517			

1: 2001-2025 Projections based on Actual U.S. Bureau of Census Population plus City's estimated Annual Growth 2000-2003 (1,226 people).

2: From Carroll County Comprehensive Plan

3: From Georgia Department of Community Affairs (DCA) Plan Builder website http://www.georgiaplanning.com/



Exhibit 7: Population Projections Graph - Villa Rica, Carroll, Douglas and Georgia

Source: Georgia DCA Plan Builder ; Carroll County Comprehensive Plan; Planning Works LLC

DWELLING UNITS AND HOUSEHOLDS

The total number of dwelling units in Villa Rica between 1990 and 2000 declined due to de-annexation of 724 units (**Exhibit 8**). Despite the fact that single-family detached units comprised a greater proportion of housing in 2000 than 1990, the percentage of owner occupied units decreased by over 6% in the 1990s (see **Exhibit 9**). With the addition of the Mirror Lake Subdivision and the recent trend of low mortgage rates, the percentage of owner-occupied housing has undoubtedly increased since the year 2000.

Exhibit 6. Villa Rica Dweinings								
	19	990	2000					
Total dwelling units	2,503		1,812					
Occupied dwelling units	2,332	93.2%	1,478	87.6%				
Owner-occupied dwelling units	1,553	66.6%	862	60.1%				
Renter-occupied dwelling units	779	33.4%	616	39.9%				
Source: U.S. Census		•						

Exhibit 8: Villa Rica Dwellings

Villa Rica Number of Households											
	1980 1985 1990 1995 2000 2005 2010 2015 2020 2025 2030										
Total households	1,172	1,752	2,332	1,941	1,550	1,928	2,306	3,818	5,330	11,378	17,426

Source: 2000 Census data was used to make the projection

Exhibit 9: Villa Rica Types of Dwellings									
	Number	Percent	Number	Percent					
1-unit detached	1,688	67.4%	1,405	77.5%					
1-unit attached	35	1.4%	8	0.4%					
2 to 4 units	181	7.2%	218	12.0%					
5 to 9 units	108	4.3%	75	4.1%					
10 or more units	25	1.0%	53	2.9%					
Mobile home, trailer, or other	466	18.6%	53	2.9%					
Total Units	2,503		1,812						

Exhibit 9: Villa Rica Types of Dwellings

Source: U.S. Census

Exhibit 10 shows estimated dwelling units based on county issued since 2000 (see **Exhibit 5** for complete methodology).

2000	2001	2002	2003	2004
1,812	2,271	2,730	3,189	3,648
Sourc	e: Planning W	orks LLC		

Exhibit 10: Villa Rica Estimated Housing Units

The 2000 Census indicates there were 1,550 households in Villa Rica with an average of 2.67 people per household, down 5% from 2.81 persons per household in 1990 (Exhibit 11). According to the 2000 Census, 40.6% of households in the City included persons under the age of 18, (higher than the national average of 36.0% and on par with the State average of 39.1%). This correlates well with **Exhibit 13**, which shows a high percentage of residents in family-aged cohorts, e.g., large portions of preschool and school aged children between 0 and 13 years old and working adults between 25 and 55 years old. According to the 2000 Census, Householders living alone comprised of 22.8% of household and nearly half of those were householders were over the age of 65. Single female householders with children under 18 make up 9.8% of households in 2000 (down from 13.2% in 1990), higher than the State average of 8.6% and the national average of 7.2%, and can be correlated to higher than normal rates of teen pregnancy rates in Carroll County, especially for African-American households. Rates of teen pregnancy between 1990 and 1995 varied between 18% and 28%, although a downward trend has been developing. High teen pregnancy rates can cause potential costs for local governments such as higher drop-out rates, lost tax revenues, public assistance, child health care and foster care.

Exhibit 11: Villa Rica Average Persons per Household

	1990	2000
Persons per Household	2.81	2.67
Source: U.S. Census		

Villa Rica: Average Household Size											
1980 1985 1990 1995 2000 2005 2010 2015 2020 2025 2030											
Persons per household	2.92	2.87	2.81	2.74	2.67	2.61	2.55	2.48	2.42	2.36	2.30

Exhibit 12: Villa Rica Average Household Size

Exhibit 13 shows that property values increased by nearly 54% between 1990 and 2000 while rent prices have stayed constant over the same period, although costs are not adjusted for inflation.

Exhibit 13: Villa Rica Housing Costs

	U	
	1990	2000
Residential Median Property Value	53,400	82,200
Median Rent	338	350

Source: Georgia DCA Plan Builder

AGE DISTRIBUTION

Exhibits 14 and **15** illustrate the historical age distribution and growth trends for the City. The decrease of children and middle-aged persons of childbearing age is most likely due to the de-annexation between 1990 and 2000. **Exhibit 16** provides a more detailed picture of the age distribution as compared to Carroll and Douglas Counties, the State and the Nation for the year 2000. As compared to the neighboring Counties, the State and the Nation, Villa Rica as a whole is younger, which indicates the predominance of family-aged residents.

	19	80	19	90	20	00			
Category	Number	Percent	Number	Percent	Number	Percent			
0 – 4 Years Old	323	10%	536	8%	318	8%			
5 – 13 Years Old	461	14%	1,029	16%	479	12%			
14 – 17 Years Old	279	8%	333	5%	226	5%			
18 – 20 Years Old	171	5%	365	6%	162	4%			
21 – 24 Years Old	205	6%	372	6%	312	8%			
25 – 34 Years Old	445	14%	1,201	18%	477	12%			
35 – 44 Years Old	409	12%	768	12%	621	15%			
45 – 54 Years Old	323	10%	713	11%	475	11%			
55 – 64 Years Old	305	9%	521	8%	366	9%			
65 Years and Over	368	11%	704	11%	453	11%			
Total Population	3,288		6,542		4,134				

Exhibit 14: Villa Rica Age Distribution (1980 – 2000)

Source: Georgia DCA Plan Builder



Exhibit 15: Villa Rica Age Distribution Chart

Source: Georgia DCA Plan Builder

Villa Rica: Population by Age											
	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030
0 – 4 Years Old	247	395	543	445	346	445	544	940	1,336	2,920	4,504
5 – 13 Years Old	496	809	1122	890	657	818	979	1,623	2,267	4,843	7,419
14 – 17 Years Old	312	306	299	227	155	0	0	0	0	0	0
18 – 20 Years Old	181	236	290	231	172	163	154	118	82	0	0
21 – 24 Years Old	205	303	401	320	239	273	307	443	579	1,123	1,667
25 – 34 Years Old	366	761	1155	911	667	968	1269	2,473	3,677	6,363	13,309
35 – 44 Years Old	396	602	807	712	617	838	1059	1,031	2,827	2,951	9,899
45 – 54 Years Old	359	541	723	589	455	551	647	1,059	1,415	2,951	4,487
55 – 64 Years Old	351	430	508	442	375	399	423	519	615	999	1,383
65 and Over	507	601	694	573	451	395	339	115	0	0	0

Exhibit 16: 2000 Population by Age - Villa Rica, Carroll, Douglas and Georgia

	Villa	Rica	Doug Cou		Carr Cou		Georgia		United Sta	ites
	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.
Under 5 years	346	8.4%	6,775	7.3%	6,185	7.1%	595,150	7.3%	19,175,798	6.8%
5 to 9 years	334	8.1%	7,274	7.8%	6,517	7.4%	615,584	7.5%	20,549,505	7.3%
10 to 14 years	323	7.8%	7,327	7.9%	6,322	7.2%	607,759	7.4%	20,528,072	7.3%
15 to 19 years	266	6.4%	6,707	7.2%	7,512	8.6%	596,277	7.3%	20,219,890	7.2%
20 to 24 years	300	7.3%	5,797	6.3%	7,564	8.6%	592,196	7.2%	18,964,001	6.7%
25 to 29 years	327	7.9%	6,747	7.3%	6,506	7.4%	641,750	7.8%	19,381,336	6.9%
30 to 34 years	340	8.2%	7,732	8.3%	6,466	7.4%	657,506	8.0%	20,510,388	7.3%
35 to 39 years	339	8.2%	8,677	9.4%	6,758	7.7%	698,735	8.5%	22,706,664	8.1%
40 to 44 years	278	6.7%	7,895	8.5%	6,531	7.4%	654,773	8.0%	22,441,863	8.0%
45 to 49 years	242	5.9%	6,957	7.5%	5,653	6.4%	573,017	7.0%	20,092,404	7.1%
50 to 54 years	213	5.2%	6,256	6.7%	5,258	6.0%	506,975	6.2%	17,585,548	6.2%
55 to 59 years	216	5.2%	4,508	4.9%	4,243	4.8%	375,651	4.6%	13,469,237	4.8%
60 to 64 years	159	3.8%	3,092	3.3%	3,427	3.9%	285,805	3.5%	10,805,447	3.8%
65 to 69 years	133	3.2%	2,286	2.5%	2,642	3.0%	236,634	2.9%	9,533,545	3.4%
70 to 74 years	115	2.8%	1,862	2.0%	2,164	2.5%	199,061	2.4%	8,857,441	3.1%
75 to 79 years	96	2.3%	1,320	1.4%	1,713	2.0%	157,569	1.9%	7,415,813	2.6%
80 to 84 years	65	1.6%	848	0.9%	1,188	1.4%	104,154	1.3%	4,945,367	1.8%
85 to 89 years	42	1.0%	679	0.7%	1,040	1.2%	87,857	1.1%	4,239,587	1.5%
Total population	4,134		92,739		87,689		8,186,453		281,421,906	

Source: U.S. Census; Georgia DCA Plan Builder

Exhibit 17 provides youth and aged dependency ratios that reflect the number of working age people for every young person and aged person who are not in their prime wage earning years. In general terms, this indicates whether there is a significant imbalance between the workforce and those dependent on the workforce for goods and services. This factor must be considered along with other economic indicators to ascertain the health of the economy. The ratios for Villa Rica lagged slightly behind the other averages in 2000. However, given the strong in-migration since 2000, the gap has most likely narrowed.

	villa Rica, Carroli, Douglas, Georgia and United States									
			Douglas	Douglas		Carroll				
	Villa R	ica	County		County		Georgia		United States	
	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.
Youth (0 - 19)	1,269	31%	7,913	30%	6,399	30%	,414,770	29%	0,473,265	29%
Working (20 - 64)	2,414	58%	7,303	62%	52,158	60%	,986,408	61%	65,956,888	59%
Aged (65+)	451	11%	,958	8%	8,711	10%	85,275	10%	4,991,753	12%
Total Population	4,134		92,174		87,268		8,186,453		281,421,906	
Youth Dependency	1.90		2.05		1.98		2.06		2.06	
Aged Dependency	5.35		8.24		5.99		6.35		4.74	

Exhibit 17: 2000 Age Dependency Ratios – Villa Rica, Carroll, Douglas, Georgia and United States

RACE AND ETHNICITY

As shown in **Exhibit 18**, racial diversity increased slightly between 1990 and 2000, although at least a portion of this change was likely due to de-annexation.

			2000
Race Category	1980	1990	2000
White	82.1%	83.9%	79.3%
Black	17.5%	16.1%	17.9%
American Indian Eskimo or Aleut	0.3%	0.0%	0.8%
Asian or Pacific Islander	0.0%	0.0%	0.3%
Other	0.0%	0.0%	1.1%
Persons of Hispanic Origin ⁴	0.4%	0.2%	2.2%

Exhibit 18: Villa Rica Racial C	omposition by Percent	(1980 – 2000)

Source: Georgia DCA Plan Builder

Exhibit 19 shows that the racial composition of Villa Rica is consistent with those of Carroll and Douglas Counties. Projected racial data specific to the City of Villa Rica is not available. **Exhibit 20** shows the projected racial composition of Carroll and Douglas Counties as well as the two Counties combined. These statistics should be indicative of the projected racial composition of the City as well. It should be noted that the Hispanic classification indicates the origin of nationality, not the person's race. Persons of Hispanic origins are most likely to classify themselves as of black or white race.

⁴ It should be noted that Federal guidelines on race and ethnicity state that people of Hispanic origin can be of any race. It should also be noted that for 2000, the Census for the first time allowed multiple races to be chosen and that minority races were most likely slightly undercounted in previous Censuses. Total percentages may exceed 100% due to rounding.

Race Category	, ,	<u> </u>	Douglas County		United States
White	79.3%	80.5%	77.3%	65.1%	75.1%
Black	17.9%	16.3%	18.5%	28.8%	12.6%
American Indian Eskimo or Aleut	0.8%	0.3%	0.4%	0.6%	1.4%
Asian or Pacific Islander	0.3%	0.6%	1.2%	2.5%	4.4%
Other	1.1%	1.1%	1.2%	2.9%	6.4%
Persons of Hispanic Origin	2.2%	2.6%	2.9%	5.3%	12.5%

Exhibit 19: Racial Population by Percent – Villa Rica, Carroll, Douglas, Georgia and United States

Source: Georgia DCA Plan Builder

Exhibit 20: Projected Racial Composition Trends – Carroll and Douglas

	Doug	las Cou	nty			
Category	2000	2005	2010	2015	2020	2025
White Population	77.0%	74.7%	72.4%	70.1%	67.7%	65.2%
Black Population	18.7%	20.2%	21.7%	23.2%	24.8%	26.5%
Native American	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%
Asian & Pacific Islander	1.2%	1.5%	1.9%	2.2%	2.5%	2.9%
Hispanic, any Race	2.8%	3.3%	3.7%	4.2%	4.6%	5.2%
	Carr	oll Coun	ity			
White Population	80.2%	79.6%	79.1%	78.4%	77.7%	76.9%
Black Population	16.4%	16.8%	17.2%	17.5%	17.9%	18.2%
Native American	0.2%	0.2%	0.2%	0.2%	0.3%	0.3%
Asian & Pacific Islander	0.6%	0.8%	0.9%	1.1%	1.3%	1.5%
Hispanic, any Race	2.6%	2.6%	2.6%	2.7%	2.9%	3.1%
	Counti	es Comb	pined			
White Population	78.6%	77.0%	75.4%	73.8%	72.1%	70.2%
Black Population	17.6%	18.6%	19.6%	20.7%	21.8%	23.0%
Native American	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%
Asian & Pacific Islander	0.9%	1.1%	1.4%	1.7%	2.0%	2.3%
Hispanic, any Race	2.7%	3.0%	3.2%	3.5%	3.9%	4.3%

Source: Georgia DCA Plan Builder

COMMUTING, EDUCATION AND INCOME

The majority Villa Rica workers commute to work alone by automobile as shown in **Exhibit 21**. Changes in commuting pattern statistics likely can be attributed to the de-annexation.

		1990	Č	2000
Workers 16 and over	2,761	100%	1,791	100%
Drove alone	2,005	72.6%	1,237	69.1%
Carpooled	560	20.3%	391	21.8%
Public transportation	16	0.6%	27	1.5%
Other means	48	1.7%	21	1.2%
Walked or worked at home	132	4.8%	115	6.4%

Exhibit 21: Villa Rica Commuting Patterns

Source: U.S. Census

Educational attainment is on the rise for the City, but is still lagging behind the region, State and Nation. Significant increases were made for people having completed high school, some college or college graduate backgrounds. These gains are made more impressive given the de-annexation of predominantly owner occupied single family homes, which tend to be occupied by more educated residents (**Exhibits 22** and **23**).

	1	990	2	2000
Persons 25 years and over	3,907		2392	
Less than 9th grade	916	23.4%	404	16.9%
10th to 12th grade, no diploma	1,198	30.7%	654	27.3%
High school graduate	1,289	33.0%	699	29.2%
Some college, no degree	219	5.6%	343	14.3%
Associate degree	84	2.1%	90	3.8%
Bachelor's degree	125	3.2%	133	5.6%
Graduate or professional degree	76	1.9%	69	2.9%
Source: 11 S. Conque				

Exhibit 22: Villa Rica Educational Attainment

Source: U.S. Census

Exhibit 23: Educational Attainment - Villa Rica, Carroll, Douglas, Georgia and United States

			1990			2000				
Education Level	Villa Rica	Carroll County	Douglas County	Georgia	United States	Villa Rica	Carroll County	Douglas County	Georgia	United States
Less than 9th grade	23.4%	16.6%	9.6%	12.0%	10.4%	16.9%	10.1%	5.5%	7.6%	6.9%
10th to 12th grade, no diploma	30.7%	22.7%	18.1%	17.1%	14.4%	27.3%	18.9%	13.3%	13.9%	11.5%
High school graduate	33.0%	31.9%	38.0%	29.6%	30.0%	29.2%	34.2%	34.6%	28.7%	29.6%
Some college, no degree	5.6%	13.1%	17.5%	17.0%	18.7%	14.3%	16.8%	22.0%	20.4%	20.6%
Associate degree	2.1%	3.6%	4.8%	5.0%	6.2%	3.8%	3.5%	5.2%	5.2%	6.5%
Bachelor's degree	3.2%	6.5%	8.3%	12.9%	13.1%	5.6%	9.8%	13.4%	16.0%	16.1%
Graduate or professional degree	1.9%	5.6%	3.8%	6.4%	7.2%	2.9%	6.7%	5.8%	8.3%	9.0%
Percent high school graduate or higher	45.9%	60.7%	72.3%	70.9%	75.2%	55.8%	71.0%	81.1%	78.6%	81.8%
Percent bachelor's degree or higher	5.1%	12.1%	12.0%	19.3%	20.3%	8.4%	16.5%	19.2%	24.3%	25.1%

Exhibit 24 summarizes various educational statistics for students within Carroll County. Over the past 5 years, annual high school graduation test scores have ranged between 76% (1996) and 58% (2001). High school drop out rates between 1996 and 2001 generally ranged between 6.5% and 9.8%, although during 1999 the drop out rate plunged to 2.8%. Consistently, over one-third of Carroll County high school graduates attend state public colleges. Public technical school attendance by high school graduates has ranged between 6.3% (1997) and 31.1% (1996).

Exhibit 24: Carroll County Educational Statistics (1996 - 2001)

	1996	1997	1998	1999	2000	2001
H.S. Graduation Test Scores	76%	69%	64%	65%	74%	58%
H.S. Dropout Rate	9.80%	6.30%	7.10%	2.80%	6.70%	8.20%
Grads Attending Georgia Public Colleges	35.10%	34.40%	36.30%	34.10%	NA	NA
Grads Attending Georgia Public Technical Schools	31.10%	6.30%	9.60%	13.50%	13.20%	NA

Source: Georgia Department of Education

Pre-secondary student achievement is measured through the Criterion-Referenced Competency Test (CRCT), which is administered annually to students in grades 1 to 8. The General Assembly mandated the Georgia Department of Education (DOE) to developed CRCT testing system:

- Diagnose individual student strength and weaknesses as it related to the DOE's Quality Core Curriculum; and
- To evaluate the quality of education being provided by districts and the state as a whole.

The CRCT tests all students in the academic areas of reading, English/language arts and mathematics.

Exhibit 25 shows the CRCT test results for 4th graders in the Carroll County. Between 2000 and 2002, 4th graders in the Carroll County School District demonstrated marked improvement in all three academic areas, with the greatest improvement occurring in reading competency.

Carroll County Schools									
Test Categories		2000			2001			2002	
	Below	Meets	Exceeds	Below	Meets	Exceeds	Below	Meets	Exceeds
Reading	42%	38%	20%	37%	40%	24%	27%	37%	36%
English/Language Arts	37%	53%	10%	37%	55%	8%	30%	57%	13%
Mathematics	48%	47%	5%	50%	45%	5%	38%	51%	11%

Exhibit 25: Carroll County 4th Grade Test Scores (2000 - 2002)

Source: Georgia Department of Education

Exhibit 26 shows the CRCT results for 8th graders in the County's school districts. Carroll County schools improved in all subject areas between 2000 and 2002.

Carroll County Schools										
Test Categories	2000 2001 2002									
Test Categories	Below	Meets	Exceeds	Below	Meets	Exceeds	Below	Meets	Exceeds	
Reading	36%	40%	24%	26%	38%	36%	27%	40%	33%	
English/Language Arts	48%	45%	7%	45%	44%	11%	36%	47%	17%	
Mathematics	66%	31%	3%	61%	35%	4%	45%	47%	8%	

Exhibit 26: Carroll County 8th Grade Test Scores (2000 - 2002) Carroll County Schools

Source: Georgia Department of Education

In 2000 per capita income for Villa Rica residents was \$14,310 (**Exhibit 27**), well below the per capita income for the State of \$21,154. Median income for Villa Rica households was \$31,161, much lower than the State average of \$42,433 (**Exhibit 28**). **Exhibit 29** shows the range of household incomes.

	Exhibit 2111 of Supra moonio Curron, Bougiao ana Coorgia								
	Villa Rica		Rica Carroll County		Do	uglas County	Georgia		
1970	\$	2,405	\$	7,915	\$	8,795	\$	9,476	
1980	\$	5,029	\$	10,350	\$	11,787	\$	11,730	
1990	\$	9,111	\$	12,526	\$	14,360	\$	14,850	
1995	\$	10,304	\$	13,132	\$	15,122	\$	15,502	
2000	\$	14,310	\$	17,656	\$	21,172	\$	21,154	
Court	raa: I	IS Conque							

Exhibit 27: Per Capita Income – Carroll, Douglas and Georgia

Source: U.S. Census

Exhibit 28: Median Household Income - Villa Rica, Carroll, Douglas and Georgia

	Vi	lla Rica	Carroll County		Carroll County Douglas County		Georgia	
1970	\$	7,560	\$	25,363	\$	31,149	\$	31,140
1980	\$	14,516	\$	29,825	\$	37,910	\$	33,509
1990	\$	24,000	\$	34,194	\$	41,693	\$	39,779
1995	\$	28,440	\$	35,065	\$	42,408	\$	39,324
2000	\$	31,161	\$	38,799	\$	50,108	\$	42,433

Source: U. S. Census

	1980	1990	2000			
Income less than \$5,000	17.2%	13.0%	NA			
Income \$5,000 - \$9,999	19.7%	8.1%	15.3%			
Income \$10,000 - \$14,999	19.1%	12.3%	8.6%			
Income \$15,000 - \$19,999	17.2%	10.4%	11.0%			
Income \$20,000 - \$29,999	11.1%	20.5%	14.7%			
Income \$30,000 - \$34,999	6.0%	9.5%	5.0%			
Income \$35,000 - \$39,999	4.7%	9.3%	7.8%			
Income \$40,000 - \$49,999	1.8%	8.8%	8.3%			
Income \$50,000 - \$59,999	1.3%	3.4%	9.1%			
Income \$60,000 - \$74,999	0.4%	3.4%	9.5%			
Income \$75,000 - \$99,999	1.1%	1.4%	7.6%			
Income \$100,000 or more	0.6%	0.0%	3.2%			

Exhibit 29: Villa Rica Household Income⁵

Source: Georgia DCA Plan Builder

CONCLUSION

Villa Rica is facing significant changes in the size and composition of its population as Atlanta's metropolitan growth continues. After two decades of relatively slow growth, Villa Rica's population doubled in the first four years of this decade and could increase to more than 34,000 by the year 2025, which is more than seven times the City's year 2000 population. The greatest day-to-day challenge will be to provide facilities and services for new residents and businesses. Even more important is the need to ensure that this growth enhances the character of the community, so Villa Rica remains a desirable place to live, work, and play.

⁵ Income data is not adjusted for inflation.

SECTION THREE NATURAL AND CULTURAL RESOURCES

NATURAL ENVIRONMENT

The natural environment places certain opportunities and constraints on the way land is used. Soil characteristics, slope of the land, and flood frequency are a few factors among many that affect where development can safely and feasibly occur. Other areas such as wetlands, prime agricultural and forest areas and sensitive plant and animal habitats, which are particularly vulnerable to the impacts of development, should be given consideration in the planning process and provided appropriate protection. The following examines Villa Rica's natural features as well as its environmentally sensitive and ecologically significant areas.

CLIMATE AND PRECIPITATION

The climate of Carroll County is climate is moist and temperate with short winters and long spring and fall seasons. The County has a mean annual temperature of approximately 62.2 degrees Fahrenheit. Mean annual precipitation ranges from 49 to 53 inches per year. The period of least precipitation occurs from mid summer to late fall. January and March typically receive the most rainfallⁱ. Snowfall averages less than one inch per year.



Exhibit 30: Local Rainfall and Temperature by Month

Hydrologic droughts are frequent in the Southern Piedmont Region, occurring about every 20 years. The most recent drought began in 2000. By the end of 2000, Carroll County had lost almost 30 inches of rain. In response to the drought Carroll County and its municipalities adopted outdoor watering restrictions. As of January 2005 all of Georgia was out of drought conditions.
NATURAL FEATURES

TOPOGRAPHY

Villa Rica lies in the Central Uplands District of the Southern Piedmont Region of the United States. Topography in this area is largely determined by the type of bedrock underlying the soils, by the geology of the area and by the dissection of streams. Relief is generally gently rolling to hilly and includes narrow stream valleys. Elevation in Villa Rica ranges from 1,000 feet to 1,300 feet above sea level. Gently sloping or rolling hills characterizes most of the city's land, although severe slopes can be found along some drainage ways.

STEEP SLOPES

Steep slopes are discussed in the Geology and Soil Characteristics Sections.

GEOLOGY

Schist, biotite gneiss and other metamorphic rock underlie the majority of the Piedmont Plateau. Augen gneiss, horneblende gneiss, granite intrusions and other igneous rocks underlie the remainder. These rock formations have weathered over thousands of years, interacting with various biological processes, to form the soils found in the Villa Rica today.

Depth to bedrock in Villa Rica varies from a few inches to greater than 25 feet, with most areas averaging 10 or more feet. Shallow areas exist in small pockets, located primarily along the west end of Lake Val-Do-Mar and just outside the steep slopes on the lake's north side. Construction of any kind is difficult and costly in areas with shallow depth to bedrock and should be avoided. Shallow depths can also present problems with excessive runoff from rainfall.

Minerals, while present in varying degrees of abundance in the area, do not contribute significantly to the economic well being of the city. Villa Rica is probably best known for its gold mining activities of the 1800s and early 1900s, which produced gold in abundance for a number of years. Today, there are no gold mines in operation.

SOIL CHARACTERISTICS

Soil is the product of parent material (underlying geology), topography, climate, plant and animal life, and time. The nature of soil at any given place depends on the combination of these five factors. Each factor acts on the soil and each modifies the effect of the other four. Because of this interaction, knowledge of soil types in an area provides a good indication of topography (slope), erosion patterns, the presence and depth of rock, and the presence of water, as in wetland and floodplain areas. Soil types are also useful in estimating runoff from precipitation, which is essential in developing stormwater management programs.

The soils in Villa Rica are generally red in color and, with the exception of those found in floodplain areas, are well drained. These soils were formed from a metamorphic and igneous rocks and range in texture from stony, gravelly and sandy loams to clay loams. Much of the original topsoil has been eroded away, leaving red clay subsoil exposed in some areas. Soils of the uplands that have slopes of less than 15 percent are generally thicker and have more distinct horizons than more strongly sloping soils. Soils with slopes of 15 to 40 percent are subject to geologic erosion, which removes soil material almost as quickly as it forms.

Soils in Villa Rica can be grouped into eight associations. The list below shows the soil classifications of Villa Rica. A soil association is a landscape that has a distinctive proportional pattern of soils. It usually consists of one or more major soils, for which it is named, and at least one minor soil. Soils in one association may occur in another, but in a different pattern. Soil associations found in Villa Rica are grouped into three categories according to type and location, as indicated in the following summary. Use limitations related to soil types are defined below.

Soil limitations vary by type and degree. A <u>slight limitation</u> indicates that soil properties are generally favorable for the specified use; any limitation is minor and easily overcome. A <u>moderate limitation</u> indicates that soil properties and site features are unfavorable for the specified use, but that limitations can be overcome or minimized by special planning and design. A <u>severe limitation</u> indicates that one or more soil properties or site features are so unfavorable or difficult to overcome that a major increase in construction effort, special design or intensive maintenance is required. For some soil limitations rated severe, such costly measures may not be feasible.

1. Nearly level soils on bottomlands and low stream terraces:

Because of the flooding hazard, these soils associations have <u>severe</u> <u>limitations</u> if used for utility construction or residential, septic, recreational, commercial or light industrial development. These areas should be limited to suitable wildlife habitat and supporting hardwood stands

Chewacla-Augusta Association

Poorly drained, nearly level soils on frequently flooded bottomlands (floodplains) and low stream terraces. These soils lie along the Little Tallapoosa and Tallapoosa Rivers and along the city's larger streams and creeks.

Conagaree-Buncombe Association

Well-drained to excessively drained, nearly level soils on infrequently flooded bottomlands. These soils lie along the Little Tallapoosa and Tallapoosa Rivers and along the city's larger streams and creeks.

2. Gently sloping and moderately sloping soils of uplands, located throughout the city in slightly to moderately sloping areas outside of the floodplains.

In most areas, <u>limitations are slight</u> for residential and park/recreational development and moderate because of clay for commercial and light industrial development, roads and septic tank drainage fields. However, in the few areas where Louisburg soils predominate, depth to bedrock is very shallow, ranging from a few inches to three feet in depth. In these pockets, which are located at the west end of Lake Val-Do-Mar and just outside the steep slopes on the lake's north side, <u>limitations are severe</u> for most types of utility and building construction and for sanitary facilities.

Madison - Tallapoosa Association

Well-drained micaceous soils with subsoil of red clay or clay loam found on tops and sides of broad and narrow ridges; includes some severely eroded soils.

Hulett-Grover Association

Well-drained soils with subsoil of yellowish-brown to yellowish-red clay or clay loam found on tops and sides of low interstream divides and on low ridges and their sides.

Davidson-Musella Association

Well-drained soils with dark red clay loam or clay subsoil.

Appling-Louisburg Association

Well-drained to excessively-drained strongly acid loamy sands or sandy loams; includes some severely eroded areas.

Strongly sloping and steep soils of uplands, located primarily along portions of the major streambanks, along the south side of Lake Val-Do-Mar and in the southern portion of the city beginning just north of Reed Road:

<u>Limitations are moderate</u> for residential, park and road construction on slopes less than 15 percent and severe for all uses on slopes 15 to 40 percent. Development in these areas is also limited by adverse soil properties.

Madison-Louisa-Tallapoosa Association

Well-drained to excessively drained micaceous soils with moderately thick to think subsoil of red or yellowish-red clay-to-clay loam; includes many severely eroded soils.

Davidson-Musella Association

Well-drained soils with subsoil of dark red clay or clay loam; includes many severely eroded soils.

SOIL EROSION

Soil erosion is fairly prevalent in and around Villa Rica due to soil types that are particularly susceptible to erosion even without man-made intrusions. The amount of erosion that occurs is also influenced by steepness of slope, rainfall intensity and duration, and the construction methods used in development. Excessive erosion can be averted if soil conditions, including composition, permeability, slope and carrying capacity are given careful consideration in the design and construction phases of development. Loss of soil can be minimized through proper installation and placement of control mechanisms such as sediment fences, vegetative cover and retention ponds.

Eroded soil is usually deposited in natural and man-made water channels. Excessive accumulation results in sedimentation, which is the greatest contributor of non-point source pollution. The State of Georgia addresses this problem through the Erosion and Sedimentation Act. Carroll County, Douglas County and the City of Villa Rica have soil erosion control ordinances.

PRIME AGRICULTURAL AND FOREST LAND

The US Department of Agriculture Natural Resources Conservation Service defines prime agricultural land as any soil type ideally suited for the production of crops, timber or livestock. Prime Agricultural Land is a unique resource that is under particular threat in rapidly growing cities such as Villa Rica.

A land use survey conducted in 2003 indicates that approximately 38% of land within Villa Rica's Urban Growth Area (UGA) is vacant or used for agricultural purposes. "The larger tracts of vacant land within the City's UGA are experiencing stronger growth pressures, because parcel size and physical characteristics impose fewer constraints". Although future agricultural land use within the UGA will be extremely limited, growth plans should consider the visual (aesthetic), ecological and economic value this land holds for the present and future residents of the city. Villa Rica Visioning will help determine if there is community wide interest to preserve and protect remaining farmland.

Source: No Food No Farms, Land Use Element (Planning Works LLC)

There is no prime forestry land within the city limits of Villa Rica.

ENVIRONMENTALLY SENSITIVE AND ECOLOGICALLY SIGNIFICANT AREAS

The environment encompasses many areas and resources which are vulnerable to the impacts of development and which require protection by the community. As the city and its surrounding areas continue to grow, the conservation of environmentally sensitive and ecologically significant resources will become increasingly important. In recognizing the importance of land and water resources, the Georgia Department of Natural Resources (DNR) has developed minimum standards for local governments to follow for the protection of water supply watersheds, wetlands and groundwater recharge areas. In addition to these areas, it is important for the community to address the value and protection of such vital and fragile resources as floodplains, steep slopes, prime agricultural and forestland, and sensitive plant and animal habitats.

PUBLIC WATER SUPPLY

The source of raw water for Villa Rica is the Upper Little Tallapoosa River. The City maintains two intakes: one on Cowen's Lake which is fed by Astin Creek, and one on Lake Paradise, which is fed by the Little Tallapoosa River. (See Community Facilities **Map 8**). Douglas County Water and Sewer Authority maintains an intake on The Dog River. A portion of this watershed is located within Villa Rica

WATER SUPPLY WATERSHEDS

Water supply watersheds are defined by DNR as the area where rainfall runoff drains into a river, stream or reservoir used as a source for public drinking water. The majority of the City lies within the Little Tallapoosa River watershed, which serves as the water supply watershed for Villa Rica and the City of Carrollton. A small portion of the City lies within the Dog River watershed that serves Douglas County.

In 2003, the State University of West Georgia's Center for Water Resources and Hayes James and Associates completed a Watershed Assessment and Management Plan for Carroll County and its municipalities. Villa Rica served as the contracting agency and funds administrator for the project, which was funded by the State of Georgia. The project included an assessment of existing conditions in the watershed, water quality and biological monitoring, modeling and recommendations for best management practices.

The resulting report stated, "The Assessment is necessary for the governments within Carroll County to expand or build new water supply or wastewater treatment facilities. The Georgia Environmental Protection Division (GAEPD) requires municipalities to conduct watershed assessments as part of the permitting process for new wastewater discharges and surface water intakes. To obtain a new permit, the county or municipality is required to develop a management plan that addresses nonpoint source pollution within the service area of the water or wastewater treatment plants. Without advance planning, permits for plant expansions or new facilities could be delayed. Advance planning must consider point sources and non-point sources of pollution, wet and dry flow conditions, impacts of growth and development; and upstream and downstream impacts that lie within and beyond your local jurisdiction."

During the assessment four sampling stations located in Villa Rica were monitored weekly over the course of one year (see map below). Results showed all sampled streams to be in compliance with Federal and State water quality standards.

Station	Sample Station Location	Reason for/ Description of Location	Compliance
63	Little Tallapoosa River at Lake Paradise Road	Upper most access point for Little Tallapoosa River. Sample station located downstream of Lake Paradise. Part of drinking water supply for City of Villa Rica.	Yes
54	Mud Creek at North Van Wert Road	A tiny watershed that flows through large industrial park and some residential land uses. Sample station is down stream of Villa Rica Waste Treatment Plant.	Yes
53	Mud Creek at Hwy 101	A tiny watershed that heads in a cow pasture inside the City of Villa Rica. Sample station located where creek exits cow pasture.	Yes
64	Little Tallapoosa River at Hwy 78	Represents a large developing watershed with a mix of commercial, industrial, residential, urban, suburban, agricultural, and institutional land uses. Sample station is downstream of City of Villa Rica. Rapid and extensive residential development occurring in and around Villa Rica.	Yes

Exhibit 31: Villa Rica Stream Sampling Data

Sampling detected low dissolved oxygen (DO) levels at sampling points 64 and 63. The report cautions that although the probable cause of low DO levels at 64 is a natural phenomena, further monitoring is necessary to rule out the possibility that the Villa Rica WPCP is contributing to the problem.

WETLANDS

Federal law defines freshwater wetlands as those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas. Under natural conditions, wetlands help to maintain and enhance water quality by filtering out sediments and associated non-point source pollutants from adjacent land uses. They also store water, thereby stabilizing dry weather stream flows and flood hazards. In addition, wetlands serve important functions as fish, wildlife and plant habitats.

To avoid long-term impairment, land use in wetlands should be limited to timber production and harvesting, wildlife and fisheries management, wastewater treatment, recreation, natural water quality treatment or purification and other uses permitted under Section 404 of the Federal Clean Water Act.

Wetlands within Villa Rica are generally located in the areas surrounding the two lakes and the City's major streams (**Map 1**).

GROUNDWATER RECHARGE AREAS

Recharge is the process by which precipitation infiltrates soil and rock to add to the volume of water stored in pores and other openings within them. Aquifers are soils or rocks that yield water to wells. While recharge takes place throughout practically all of Georgia's land area, the rate or amount of recharge reaching underground aquifers varies from place to place depending on geologic conditions. Recharge areas in Villa Rica are shown on **Map 1**.

Most of northern Georgia is underlain by crystalline rocks with complex geologic character and with little or no porosity within the rocks themselves. While the overall porosity tends to be low, the rocks do contain joints and fractures along which groundwater can move. A weathered zone called saprolite, which is relatively porous, overlies the crystalline rocks. Precipitation infiltrates downward into the soil and saprolite and fills fractures and joints in the rock where they occur. Well water can be obtained either from the saprolite or from the fractures in the rock; however, the most reliable sources of groundwater are from zones where the bedrock has been intensely fractured.

Unfortunately, the relatively flat areas of thick soil are also choice sites for commercial and industrial development as well as for sanitary landfills. For this

and other reasons, DNR has established standards to protect recharge areas The City of Vila Rica has also adopted a groundwater recharge ordinance.

PROTECTED RIVERS AND MOUNTAINS

There are no protected Rivers or Mountains within the city limits of Villa Rica.

FLOODPLAINS

Floodplains in there natural undisturbed state are important water resources serving three major functions: water storage and conveyance, water quality management and groundwater recharge. Development of floodplains has the potential to destroy both the property and lives of the owners as well as the functions of the floodplains.

Floodplains in the City of Villa Rica are located along waterways such as rivers, streams, and lakes. Existing floodplains can be seen on **Map 1**. The two major waterways in the city are the Little Tallapoosa River in the west and Lake Val-Do-Mar and associated feeder streams in the east.

AREAS OF SPECIAL FLOOD HAZARD

The Federal Emergency Management Agency has identified and mapped floodprone areas in Villa Rica based on a potential 100-year or base flood. This is the national standard on which floodplain management and insurance requirements are based. Development in these areas should be carefully monitored to protect floodplain integrity as well as the health and safety of residents.

Also Villa Rica participates in the National Flood Insurance Program, allows a program that property owners to purchase federally subsided flood insurance. The City has a flood damage prevention ordinance that regulates development in floodplains to reduce flood loss. As part of its stormwater management program, Villa Rica will also adopt a Floodplain Management Ordinance. This Ordinance will designate flood-prone areas within the City based on a build-out scenario and govern land use within these areas.

VEGETATION AND WILDLIFE

Pine Oak hickory association with willow-beech poplar in riparian zones. Wildlife includes turkey, waterfowl, morning doves & bobwhites. Deer, beaver, rabbit, and squirrel (pg 41 cccp draft)

The Tallapoosa River Watershed is home to a number of rare and endangered animal and plant species.

The Georgia Department of Natural Resources, Wildlife Resources Division has created a special concern list of federally protected, state protected and other rare or imperiled animals and plants.

The chart on the following page lists special concern animals and plants in Carroll County, Georgia.

	Special Concern Animals and Plants in Carroli County.						
PROTECTION							
<u>STATUS</u>	ANIMALS						
<u>GA</u>	CYPRINELLA GIBBSI TALLAPOOSA SHINER						
GA	ETHEOSTOMA TALLAPOOSAE TALLAPOOSA DARTER						
GA	FUNDULUS BIFAX STIPPLED STUDFISH						
	HYBOPSIS LINEAPUNCTATA LINED CHUB						
	ICHTCHYOMYZON GAGEI SOUTHERN BROOK						
	LAMPREY						
	LYTHRURUS ATRAPICULUS BLACKTIP SHINER						
	MICROPTERUS CATARACTAE SHOAL BASS						
	MOXOSTOMA SP. 1 GREYFIN REDHORSE						
GA	NOTROPIS HYPSILEPIS HIGHSCALE SHINER						
GA	NOTURUS FUNEBRIS BLACK MADTOM						
GA	PERCINA SP. CF. MACROCEPHELA MUSCADINE						
	DARTER						
	PHENACOBIUS CATOSTOMUS RIFFLE MINNOW						
	PIMEPHALES VIGILAX BULLHEAD MINNOW						
	SCARTOMYZON LACHNERI GREATER JUMPROCK						
	PLANTS						
<u>GA</u>	HEXASTYLIS SHUTTLEWORTHII VAR. HARPERI						
	HARPER'S HEARTLEAF						
<u>US</u>	PLATANTHERA INTEGRILABIA MONKEYFACE ORCHID						
<u>GA</u>	<u>SCHISANDRA GLABRA BAY STARVINE</u>						
<u>GA</u>	WALDSTEINIA LOBATA PIEDMONT BARREN						
	STRAWBERRY						
SOURCE: GEORGIA DNR NATURAL HERITAGE PROGRAM							
	PECIES WITH FEDERAL PROTECTION STATUS AND ALSO STATE						
PROTECTION STATUS.							
	PECIES WITH STATE PROTECTION STATUS.						
*BLANK SPACE IN	DICATES NO PROTECTION STATUS.						

Exhibit 32: Special Concern Animals and Plants in Carroll County.

The following chart lists special concern animals and plants in Douglas County, Georgia.

	pecial concern Animals and Flants in Douglas county.							
PROTECTION								
<u>STATUS</u>	Animals							
<u>GA</u>	NOTROPIS HYPSILEPIS HIGHSCALE SHINER							
	SCARTOMYZON LACHNERI GREATER JUMPROCK							
	<u>PLANTS</u>							
<u>US</u>	AMPHIANTHUS PUSILLUS POOL SPRITE							
	ARABIS MISSOURIENSIS MISSOURI ROCKCRESS							
GA	CYPRIPEDIUM ACAULE PINK LADYSLIPPER							
GA	CYPRIPEDIUM PARVIFLORUM VAR. PUBESCENS							
	LARGE-FLOWERED YELLOW LADYSLIPPER							
	PANAX QUINQUEFOLIUS AMERICAN GINSENG							
<u>GA</u>	SCHISANDRA GLABRA BAY STARVINE							
GA	WALDSTEINIA LOBATA PIEDMONT BARREN							
	STRAWBERRY							
SOURCE: GEORGIA DNR NATURAL HERITAGE PROGRAM								
"US" INDICATES SPECIES WITH FEDERAL PROTECTION STATUS AND ALSO STATE								
PROTECTION STATUS.								
"GA" INDICATES SPECIES WITH STATE PROTECTION STATUS.								
*BLANK SPACE IND	*BLANK SPACE INDICATES NO PROTECTION STATUS.							

Exhibit 33: Special Concern Animals and Plants in Douglas County.

MAJOR RECREATION AND CONSERVATION AREAS

Currently there are no major Federal, State or regional recreation and conservation areas located in Villa Rica. The City's existing parks are local in nature and are discussed in the Community Facilities Element, Chapter 7.

SCENIC VIEWS AND SITES

There is a scenic view of the valley, which the city of Villa Rica is located, from Georgia Highway 61 as one approaches Interstate 20.

Van Wert Road, part of which is located within the City of Villa Rica, is considered a scenic road with rural and agricultural landscapes.

WATER RESOURCE DISTRICT ORDINANCE

The City of Villa Rica developed ordinances to protect its water resources using guidance from the Department of Natural Resources and Department of Community Affairs. This ordinance delineates three water resource districts:

- Groundwater Recharge Area District
- Wetlands District
- Water Supply Watershed District

These ordinances regulate land use and impose impervious surface limits for new development. The ordinances govern the entire city limits of Villa Rica including the portion of city that lies in Douglas County. The ordinances are included within the City of Villa Rica zoning ordinance.

FLOOD HAZARD ORDINANCE

Villa Rica's Flood Hazard Ordinance delineates areas of flood hazard as prepared by the Federal Emergency Management Agency by the FEMA.

WATER MANAGEMENT PLANS

In 2001 the Metropolitan North Georgia Water Planning District was formed to develop plans for stormwater and wastewater management, water supply and conservation in a 16-county area that includes Douglas County. Villa Rica has a stormwater management plan that incorporates regulatory actions, educational outreach and monitoring activities to minimize the impact of stormwater.

The goals and strategies of the plan are outlined in a Villa Rica's Notice of Intent, filed with the State's Environmental Protection Division. The City has adopted the following stormwater management ordinances:

- Post Development Stormwater Management for New Development and Redevelopment Ordinance
- Floodplain Management/ Flood Damage Prevention Ordinance
- Conservation Subdivision / Open Space Development Ordinance
- Illicit Discharge and Illegal Connection Ordinance
- Litter Control Ordinance
- Stream Buffer Ordinance

CULTURAL RESOURCES

Cultural resources are addressed in the Historic Resources and Community Facilities Sections.

<u>PURPOSE</u>

Villa Rica is a unique place in space and time. The land, people and events of Villa Rica's history have combined to create a distinct heritage. This heritage is reflected in the built environment surrounding us daily.

Villa Rica retains much of its historic character, defined by mid-nineteenth to midtwentieth century residential, commercial, and institutional buildings and archaeological sites. These properties are cultural, educational and economic development assets.

The purpose of this element is to provide for the preservation of Villa Rica's historic character through the identification, rehabilitation, protection and reuse of the city's historic resources, to promote:

- Building rehabilitation and reuse
- Downtown revitalization
- Heritage tourism, and
- Quality of life.

HISTORIC CONTEXT

Around 1826, farmers and gold miners began to settle on a ridge dividing the waters of the Tallapoosa River and Sweetwater Creek. The first gold miners to this area were from Pennsylvania, Delaware and New Jersey.

William Hix built a tavern and general supply store on what became Main Street. The settlement was called Hixtown. The city was incorporated in 1830. One mile south lay a tract of land known as Chevestown, owned by Allison Cheves.

By 1832 Hixtown had over 2,000 residents, or 60% of young Carroll County's population. 300 men were working in the mines. Gold lots were \$500 per acre, compared to \$2 per acre for land elsewhere in the county. There were at least 19 active gold mines, including a number of English mining companies, the Southern States Mining Company, the Boston and Kennesaw Mines and the Klondyke Mines (**Map 2**).

In 1882 the Georgia-Pacific Railroad was extended through the area. Residents of Hixtown rolled houses and stores on logs pulled by horses to relocate near the railroad. New houses and businesses were also built in the area, and the residents of Hixtown and Chevestown decided to establish a new town along the railroad. Villa Rica, as the new town was named, translates to "city of gold" in Spanish.

The new city was laid out in 1883 and soon a poster appeared throughout the south marketing "94 beautiful lots at auction" in Villa Rica, the "village of gold." The town plan was established as a series of blocks laid out in a gridiron pattern with the railroad line running east to west through the center of the commercial district. The public square was placed on the north side of the rail line. The railroad depot, built in the 1880's to accommodate passengers, freight and livestock, was demolished after 1950.

By 1905, Villa Rica included twenty businesses, seven churches, a bank, a hotel, a newspaper, and a school with a faculty of five. An early entrepreneur was Asa Candler, who brought notoriety to the city when he bottled the first Coca Cola here in 1897.

In 1908 fire destroyed a city block on Montgomery Street. Some years later another fire consumed a business block on Main Street. In 1957, a gas explosion caused many injuries and deaths, and destroyed four stores on the south side of Main.

In 1899 the singer and composer Thomas Andrew Dorsey was born in Villa Rica. Mr. Dorsey wrote over 400 compositions during his career, but is best known for "Take My Hand, Precious Lord," which he wrote in 1932 after his wife and son died in childbirth. Today he is recognized worldwide as "The Father of Gospel Music."

Gold mining was discontinued in this region around 1926 as the costs of mining began to exceed profits. Settlers who stayed turned to agriculture, particularly cotton. The sandy loam soil produced a superior grade of cotton, second only to Egyptian cotton, which rated as the world's finest.

Cotton became king. In an average season, 10,000 bales of cotton were purchased in Villa Rica. The buying and selling of cotton was a mainstay of Villa Rica's economy, and the town supported three cotton gins, three hosiery mills, three cotton warehouses, and a cotton oil mill. Cotton was bought and sold on the city square and then shipped around the world. Other local businesses included furniture brick kilns, blacksmith shops, and general stores.

In the 1940's, Villa Rica's Cotton Era was brought to an end by the boll weevil and army worm. The mill town neighborhood of Fullerville was annexed into Villa Rica.

NORTH VILLA RICA COMMERCIAL HISTORIC DISTRICT

Historic resources include those individual properties and districts that are listed in, or eligible for listing in, the National Register of Historic Places. Generally, to be eligible for the National Register, a property (or majority of properties in a historic district) must be:

- At least 50 years old
- Relatively unchanged in the last 50 years, and
- Significant.

The North Villa Rica Commercial Historic District (**Map 3**) includes five blocks of commercial buildings north of the rail line, constructed for the most part between 1900 and 1923. Within the district are the public square, six buildings that served as commercial cotton warehouses, and several industrial buildings.

The Masonic Lodge, built in 1914 at 113 Temple Street, is the only two-story commercial building in this district. The Pope Brothers Warehouse at 301-319 Temple Street (constructed 1912 and enlarged in 1949) has been rehabilitated as loft apartments, using state and federal tax credits available to National Register listed properties. Other landmark buildings in this district include the two Golden City Hosiery Mill buildings (at 135 Temple Street and on Main Street at the east end of the district), and the Camp Cap Company buildings in the 200 block of Temple Street. In total, there are 18 contributing properties in the North Villa Rica Commercial Historic District.

ADDITIONAL HISTORIC DISTRICTS

Villa Rica has a number of additional districts that appear eligible for the National Register. **Exhibit 34** lists, and **Map 4** shows, the locations of these districts.

District	Location							
South Villa Rica Commercial Historic District	Main Street between Stone and Westview							
North Villa Rica Residential Historic District	East and north of the North Villa Rica							
(Early to mid-20 th century homes)	Commercial District							
North Villa Rica Residential Historic District (Older, late 19 th century homes)	Walker Street and lower Rockmart Road							
Fullerville Mill Village Historic District	Willis Drive, N. Dogwood Blvd, and Rockmart							
	Rd. from Dallas Rd. to Industrial Blvd.							
West Villa Rica Residential Historic District	Bounded by Montgomery Street to the north							
	and Bankhead Hwy to the south							
Bankhead Highway Historic District	Early 20 th century development between							
	Westview and Bankhead Highway							
South Villa Rica Residential Historic District	Area behind the South Villa Rica Commercial							
	District, extending west to Dogwood Street							

Exhibit 34: Villa Rica Potential National Register Districts

LANDMARK PROPERTIES

In 1993 Villa Rica initiated a partial survey of historic properties that found at least 250 structures in the city that may be eligible for the National Register. Further survey work is warranted to document additional significant historic resources in the city.

Exhibit 35 lists, and Map 5 shows, some of these landmark properties.

Proporty	Exhibit 35: Landma	Constructio	Comment			
Property	Location	n Date	Comment			
Auto Repair Shop	0 Montgomery Street	1932	Former Gulf station, placed along then newly built Bankhead Hwy. Oldest service station in Villa Rica.			
Auto Service Center	116 W. Bankhead Hwy	1947	Block construction			
Berry House	203 Peachtree Street	1913	Rehabilitated 2003-04			
Connally House	607 Magnolia	1860	Victorian			
Crawford Estate	318 Westview	1928	Brick, still family owned			
E. J. Simmons Home	303 Rockmart Road	1890	Wood Frame			
First United Methodist Church	206 North Avenue	1905	Ecletic			
Fullerville Jail	121 Ball Park	c. 1880	Small concrete building. Site owned by City.			
Funeral Home and Residence	206 Carroll Street	1892	Rear addition built 2003			
Jeff Henderson Home	228 North Avenue	1892	Now vinyl sided			
Mount Prospect Baptist Church	133 Thomas Dorsey Drive	1940 (present building)	Gospel icon Thomas Dorsey (1899 – 1993) sang here, his father preached here, and church helps sponsor annual Thomas Dorsey Festival			
Simmons Home	311 North Dogwood	1885	Wood frame			
Stockmar Gold Mine	1881 Stockmar Road	Pre 1830 – 1950's.	Archaeological site, with layers of pre-history and history. Site of gold mining, farming, concrete block production, and "Flying J" Dude Ranch. Now City owned, to become recreational park.			
Talley Home	709 Magnolia	1890	Brick			
Ulla Wilson Home	216 Elm Circle	1885	Wood frame			
Victorian	326 North Avenue	1868	Wood frame			
Victorian	117 Peachtree	1913	Wood frame			

Exhibit 35: Landmark Properties

W. B. (House	Candler	303 Church Street	1887	Wood frame
Westside Church	Baptist	631 Spring Street.	1930	Brick. First served as community hospital, then nursing home, now church.
Wicks Tavern		212 Wilson Street	c. 1830's.	Relocated to this site from Dallas Hwy. Rescued and rehabbed by Friends of Wicks Tavern. Now a museum.
Williams Farm	Family	55 Goldworth Avenue	1891 - 1953	Farm complex with historic house, several outbuildings, and historic landscape. 10-acre site nominated to National Register. Remains of CCC camp nearby.
Zack Allen Ho	ome	212 North Avenue	1902	Wood frame

ARCHAEOLOGICAL RESOURCES

Humans have been in the area for at least 11,500 years, so the potential for finding evidence of past human activity (i.e., archaeological sites) is generally high.

Unlike historic buildings, archaeological sites often have no above ground components that would indicate their presence.

While factors such as distance to water and/or old roads, slope, soil drainage, and previous disturbance can help prioritize areas of archaeological concern, the only sure way to know whether an area contains archaeological sites is to conduct an archaeological survey.

To date, a number of archaeological sites have been documented in Villa Rica and the surrounding area (**Map 6**). Most of these sites are located in the northeast section of the city, now the vicinity of the Mirror Lake development, along the Carroll County/Douglas County Line. These sites have ranged from locations where ancient hunters manufactured stone tools 11,500 years ago to remnants of 19th and 20th century gold mine operations.

Section 106 of the National Historic Preservation Act (NHPA) and regulations implementing that act (36 Code of Federal Regulations Part 800) governs archaeological sites. These laws ensure that projects receiving Federal funds or requiring Federal permits take archaeological resources into account.

In addition to Federal laws, there are state laws to consider as well. Official Code of Georgia Annotated (OCGA) 12-3-621 requires written landowner permission and DNR notification of intent to conduct Section 106 archaeology work on private property. OCGA 31-21-6 requires notification of local law enforcement upon discovery or disturbance of human remains.

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SECTION FIVE ECONOMIC DEVELOPMENT

INTRODUCTION

This section provides an inventory and assessment of the factors that contribute to Villa Rica's economic health and potential. This portrait of the City's economic state is the foundation for assessing the performance of wages and job skills, employment and industry patterns, and programs and efforts designed to improve the economy.

The assessment is used to identify trends, conflicts, and opportunities. When combined with information from other elements of the Comprehensive Plan, it provides the basis for setting policies about future economic development and making decisions that will enhance the business climate and quality of life for residents.

The majority of employment and economic data collected by State and federal agencies is compiled at the county level, although we have used City data when available.

ECONOMIC BASE

A city's economic base refers the industrial sectors that are significant to the local economy. The following inventory includes the types of industry present, their earning power and the wages paid. Comparable data for Douglas County and Georgia are included to determine the competitive status of County. Local governments and businesses can use this information to recruit compatible industries and those that would utilize skills of residents that are currently commuting out of the community for employment.

The city of Villa Rica's base is heavily influenced by the following three industries, Services, Manufacturing and Retail Trade. While the manufacturing industry has been on the decline in the past decade, the service and retail industries are on the rise. This is largely due to edge city characteristics of Villa Rica that has been attracting big box businesses. The Super Center Wal-Mart and the Publix Shopping Center has led the way in creating many jobs in the retail sector. Where as the growing population of Villa Rica due to sprawl development influenced by the Atlanta area have increased the need for the Service industry within the City's population.

The Manufacturing Industry still statistically serves as the largest industry in Villa Rica. Yet, over the past decades the numbers employed in Manufacturing have been declining.

EMPLOYMENT BY SECTOR

- Year 2000 Census showed the highest numbers of Carroll County's employees in the three sectors of Manufacturing, Services and Retail Trade, with that trend projected to continue through 2026.
- The city of Villa Rica itself shows that manufacturing is still its largest employer. Yet, there is an economic trend that shows there are and will be a steady decline in the total number of persons employed in manufacturing. The U.S. Census has projected that the percent of the population employed by the manufacturing sector will rapidly decline.
- The Retail sector is expanding within the Villa Rica city limits, and this trend is expected to continue. Exhibit 36 shows a substantial increase in Retail Trade employment in the City, Carroll County, and Douglas County.

EARNINGS BY SECTOR

- There is no specific data for earnings by sector for Villa Rica. Therefore, the data from both Carroll and Douglas County must be observed to gain an understanding for the economic situation of Villa Rica.
- The 2000 earnings data reflect that the sectors of Manufacturing, Services and State and Local Government continue to top the Carroll County economic outlook, and are projected to remain in that order through 2025.
- The 2000 data reflects that, although the Manufacturing sector records the highest percent of earnings, that sector is in a downward trend, mirroring the State's downward trend in this area. The Services sector shows the opposite, trending upward, also patterning after the State.
- A significant difference exists in terms of which sectors contribute the largest earnings within the two counties of Carroll and Douglas. Exhibit 38 shows that Carroll County receives the majority of its earnings from the Manufacturing sector, with projected earnings of \$359,300,000 in 2005. Douglas County receives most of its earnings from the Service sector, with projected earnings of \$309,500,000 in 2005.
- Villa Rica's economy would more likely reflect the Carroll County figure in respect to where the majority of its earnings are derived. Villa Rica's economy is still heavily reliant upon manufacturing, as can be derived from U.S. Census data that show 32% of the population employed in that sector. However, it is also apparent that earnings and employment in the construction sector will steadily increase over the next twenty years, as a result of the city's projected growth.

This city's population expansion will be one of the variables that allows the Retail and Service sectors to continue to grow and generate greater earnings in the city of Villa Rica in the next twenty years. This will result in a need for more public administration in the city. Based on U.S. Census projections, the number of those employed in Villa Rica's public administration will have almost doubled from the years 2000 to 2025, going from 64 persons employed to 118 (Exhibit 36a).

WEEKLY WAGES PAID

- There are no figures available for Villa Rica regarding their average weekly wages and income earned. For that reason, one must review the information of Carroll and Douglas County and also the State, in order to gain a correct perspective on the average weekly wages and income earned with in the city of Villa Rica.
- Carroll County's average weekly wages in 1999 were 28% lower than those of the State.
- When reviewing the data for Carroll and Douglas County one can observe that these counties' average weekly wages are still lagging behind the State of Georgia averages. The data for 1999 shows that even though Georgia's average weekly wage was \$629 for all industries, Carroll County's was \$492 and Douglas County's was \$486.
- In 1999, the Transportation, Communications and Utilities sectors generated the highest weekly wages in Carroll County at \$625 (however this sector was only 3.2% of all industries); while the Manufacturing sector generated the second highest weekly wage, with \$608 in 1999.

As shown in **Exhibits 40** and **40(b)**, the Carroll County area had a notable increase in average weekly wages in 2001. Average weekly manufacturing wages went from \$608 in 1999 to \$682 in 2001.

MAJOR COMMUNITY LEVEL ECONOMIC ACTIVITIES

Villa Rica has experienced significant economic development over the past ten years. The city's larger industries have been expanding, while the Retail and Service sectors have also showed significant growth. At the same time, employment in the Wholesale sector decreased in 2001, with a net loss of 239 jobs, despite the opening of two distribution facilities in Villa Rica -- King Provisions and Sugar Foods.

The Carroll County Development Agency has worked to expand the Villa Rica Industrial Park with additional land purchases. County development officials are of the opinion high quality industrial sites must be available in order to attract more industry to Villa Rica. A Villa Rica manufacturer, PrintPack, plans to have added 150-200 workers to the 200 it currently employs by the end of 2005. According to research done by the University of West Georgia, various tax incentives were provided to this family-owned packaging materials manufacturer to support this job expansion.

Health services employment in the city has benefited greatly from the expansion of Tanner Medical Center in Carrollton with the opening of Tanner's new \$17 million facility and in Villa Rica, including a new 40-bed hospital. Mirror Lake Community is one of the most notable and significant developments in Villa Rica. Additional developments similar to Mirror Lake have contributed increasing economic opportunities in the Construction, Retail and Services sectors. For example, the City of Villa Rica permitted more than 440 single-family units in 2002, almost 19% more than in the first eight months of 2001.

Source: Research conducted by the Department of Economics at the University of West Georgia.

SPECIAL OR UNIQUE ECONOMIC ACTIVITIES

Currently, the county's largest residential development is Mirror Lake. Although Mirror Lake is located mainly in Douglas County, the City of Villa Rica annexed the land containing this development. The city has issued the building permits for new homes here that begin at \$130,000 and range in price up to \$1 million.

Mirror Lake is projected to contain over 2,000 homes and about 450 apartment units when fully developed. The completion of the Liberty Road Bridge over Highway 78 and the opening of a second 18-hole championship golf course contributed to an increase in construction activity in this planned community in 2002.

A new Publix supermarket in the Mirror Lake development has created more jobs and should attract commuters/customers from the smaller surrounding areas of the county.

Source: Research conducted by the Department of Economics at the University of West Georgia.

LABOR FORCE

Villa Rica's labor force is engaged in a variety of occupations. In 2000 the two sectors with the largest percentages of employment were (1) the Machine Operators, Assemblers and Inspectors, with 20.56% of total employment, and (2) the Clerical and Administrative support sectors, with 17.14% of total employment. These percentages showed a notable increase in the Clerical and Administrative sector, which was 13.55% in 1999. While the percentage for Machine Operators only marginally declined, the percentage of employees in the Precision and Production sector had a decline in employment of approximately 8 percent between 1999 and 2000.

EMPLOYMENT STATUS

The local labor force consists of those residents 16 years and older that participate through working or actively seeking work. This Census data includes residents of Villa Rica and those located outside the city. According to the 2000 Census, 1906 persons comprised the total labor force in Villa Rica, out of a population of 3021. This figure of 1906 was about 1,000 fewer than the labor force reported in 1990.

This decline might be attributed to the decline in the percentage of persons employed in the Precision Production, Craft and Repair sector (**Exhibit 45**).

None of the Villa Rica labor force was employed by the Armed Forces in 2000. All of the 1906 persons that were employed held a civilian job. However, this figure may changing due to the introduction of ROTC programs with in the city and county. Yet, the number of persons employed by the Armed Forces should still not increase to over 2%.

The percentage of females in the labor has not had any significant changes, with approximately only a 2% increase between 1990 and 2000. In 2000 approximately 45% of the labor force was composed of women, where as men made up 54% of the labor force. In comparison to Villa Rica, State and national figures were close in terms of the male labor force being slightly higher than the female labor force.

UNEMPLOYMENT RATES

While less than the national average unemployment rate, the 2003 Carroll County average unemployment rate was still relatively high, when compared with surrounding counties and the State.

LABOR FORCE BY PLACE OF WORK

In 2000 47% of Villa Rica's labor force worked inside their county of residence. This was only a 2% increase from 45% in 1990. (**Exhibit 46**)

LOCAL ECONOMIC DEVELOPMENT RESOURCES

- Villa Rica Downtown Development Authority
- Villa Rica Board of Tourism
- Villa Rica Merchants' Association
- Carroll Tomorrow
- West Georgia Nano Business Alliance
- The Center for New Business Ventures at the University of West Georgia
- Georgia Power Company
- Georgia Tech Regional Office

- Carroll County Chamber of Commerce
- Chattahoochee Flint Regional Development Center
- Georgia Department of Labor, Carrollton Field Office
- The Georgia Planning Association
- Douglas Chamber of Commerce
- Douglas County Development Authority

ECONOMIC DEVELOPMENT PROGRAMS

- The Burson Center Small Business Incubator
- Carroll County Community Capacity Assessment
- Target Business Clusters profile
- Villa Rica Downtown Master Plan (proposed)
- NanoTech Tomorrow 2004 symposium
- Small Business Development Center
- Georgia Department of Labor
- Carroll County Chamber of Commerce
- Carroll Tomorrow

SPECIAL ECONOMIC ACTIVITIES

- Thomas Murphy Center for Public Service, University of West Georgia, symposium on environmental health issues
- West Georgia Nano Technology Business Alliance
- Burson Center, center to support entrepreneurship and small business development
- The Farmland Preservation and Sustainable Agriculture Expo on creating sustainable agribusiness opportunities
- University of West Georgia Small Business Development Center

EDUCATION AND TRAINING OPPORTUNITIES

- University of West Georgia
- West Central Technical College
- Carroll and Douglas County school systems

ASSESSMENT:

Since Villa Rica still has most of its employment based in the Manufacturing sector, there is a need to continue diversifying the City's economic profile. This is further emphasized by the fact many sub-sectors within Manufacturing have steadily declining employment. Also, based on the data in the following exhibits, there is a great under-representation of higher paying, higher level jobs within the city, for example, jobs in the Trade and Communication sectors.

The city needs to stress the importance of education and technical skills. This can be accomplished by the continuing development of more adult education and

continuing education classes. Assistance for such classes can be obtained through the Continuing Education Department at Richards College of Business at the University of West Georgia. Also, the City should attempt to attract more jobs that require higher skill levels to keep the high number of commuters from traveling outside the city in search of better wages.

The quality of the workforce is still hindered by the low educational attainment of the city population. The overall percentage of persons completing education beyond high school is low and must be raised in order to create a knowledge based economic structure with in the city. This will also assist the diversification of Villa Rica's Industry.

One improvement that should be sought is to continue developing and creating extensive broadband communications within the city. Thus, this would encourage and strengthen prospective and current business interest in the area. It would meet the modern demands of residential needs.

The county benefits from its location to Metropolitan Atlanta and to its access to Interstate 20. These two factors are very beneficial to the economic development of the City. The infrastructure of the town does create a positive business climate while also attracting residential clients due to proximity to Metro-Area.

Yet, its proximity to Metro-Atlanta has made Villa Rica a bedroom community. The historic low levels of unemployment and lack of skilled jobs preserve the bedroom characteristic. The Villa Rica Downtown Master Plan seeks to address these issues by developing programs, policies and strategies to facilitate economic growth by revitalizing the downtown area and promoting businesses within the city.

The development of small business should be focused on increasing the Service sector as well. This is recommended because such changes would not greatly impact nor require any substantial new infrastructure. This would also serve to further diversify the workforce within the City.

The City currently has several agencies and authorities designed to improve the economic situation. The City needs to continue to support these authorities and agencies by both participation and monetary support. Efforts should be continued by the City to provide them their much-needed resources.

Exhibit 36: Employment by Sector—Carroll and Douglas											
		1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
Total	Carroll	26,179	31,361	35,549	38,180	41,238	43,730	46,036	48,327	50,649	53,042
Employment	Douglas	12,259	18,300	25,350	31,685	40,265	45,793	51,321	56,706	61,781	66,401
Farm	Carroll	1,239	1,146	1,063	1,012	1,026	1,051	1,057	1,051	1,036	1,012
	Douglas	194	176	145	134	143	139	135	132	128	124
Agricultural	Carroll	114	178	248	249	309	374	433	488	539	588
Services, Other	Douglas	101	153	173	255	340	372	401	430	459	486
Mining	Carroll	9	36	92	61	74	77	79	81	83	85
winning	Douglas	52	68	140	90	114	114	116	119	122	126
Construction	Carroll	1,429	1,885	2,449	2,732	3,354	3,572	3,671	3,737	3,794	3,857
Construction	Douglas	1,252	2,159	3,088	3,397	4,166	4,486	4,668	4,786	4,879	4,972
Manufacturing	Carroll	9,973	11,858	11,231	10,882	9,751	9,864	9,980	10,075	10,159	10,240
Manufacturing	Douglas	853	1,174	1,427	1,805	2,817	3,191	3,532	3,809	4,006	4,113
Trans, Comm, &	Carroll	750	638	818	772	1,062	1,125	1,174	1,210	1,233	1,244
Public Utilities	Douglas	646	855	1,282	1,466	1,713	2,029	2,293	2,514	2,697	2,841
Wholesale Trade	Carroll	587	877	771	1,108	1,400	1,544	1,652	1,748	1,842	1,939
	Douglas	374	884	1,352	1,746	2,114	2,649	3,198	3,762	4,319	4,846
Retail Trade	Carroll	3,440	4,644	5,890	6,647	7,187	7,876	8,527	9,166	9,797	10,432
	Douglas	2,335	4,015	5,930	7,662	9,996	11,645	13,352	14,991	16,487	17,787
Finance,	Carroll	1,336	1,523	1,659	1,727	2,249	2,455	2,575	2,682	2,784	2,882
Insurance, & Real Estate	Douglas	910	1,180	1,273	1,439	2,132	2,277	2,409	2,524	2,617	2,686
Services	Carroll	3,255	4,231	6,826	7,872	8,962	9,331	9,845	10,483	11,245	12,141
Services	Douglas	3,008	4,784	6,858	10,053	12,273	13,964	15,848	17,853	19,895	21,900
Federal Civilian	Carroll	151	155	211	201	218	229	238	246	253	258
Government	Douglas	74	93	143	136	176	203	221	234	241	244
Federal Military	Carroll	235	306	318	323	323	328	332	335	336	337
Government	Douglas	229	302	316	338	345	350	355	358	359	360
State & Local	Carroll	3,661	3,884	3,973	4,594	5,323	5,904	6,473	7,025	7,548	8,027
Government	Douglas	2,231	2,457	3,223	3,164	3,936	4,374	4,793	5,194	5,572	5,916

Exhibit 36: Employment By Sector—Carroll and Douglas

Source: Woods & Poole Economics, Inc

Villa Rica: Employment by Industry										
	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
Total Employed Civilian Population	1,284	2,066	2,848	2,329	1,809	1,940	2,072	2,203	2,334	2,465
Agriculture, Forestry, Fishing, hunting & mining	8	24	39	20	0	0	0	0	0	0
Construction	91	242	393	326	259	301	343	385	427	469
Manufacturing	651	782	912	652	391	326	261	196	131	66
Wholesale Trade	28	87	145	109	73	84	96	107	118	129
Retail Trade	115	295	474	376	277	318	358	399	439	480
Transportation, warehousing, and utilities	69	147	225	160	94	100	107	113	119	125
Information	NA	NA	NA	NA	45	NA	NA	NA	NA	NA
Finance, Insurance, & Real Estate	37	83	129	106	82	93	105	116	127	138
Professional, scientific, management, administrative, and waste management services	35	50	64	103	142	169	196	222	249	276
Educational, health and social services	163	239	315	218	120	109	99	88	77	66
Arts, entertainment, recreation, accommodation and food services	54	31	8	103	197	233	269	304	340	376
Other Services	12	57	101	83	65	78	92	105	118	131
Public Administration	21	32	43	54	64	75	86	96	107	118

Exhibit 36 (a): Villa Rica City: Employment by Industry

Georgia: Employment by Industry						
	1980	1990	2000			
Total Employed Civilian Population	NA	3,090,276	3,839,756			
Agriculture, Forestry, Fishing, hunting & mining	NA	82,537	53,201			
Construction	NA	214,359	304,710			
Manufacturing	NA	585,423	568,830			
Wholesale Trade	NA	156,838	148,026			
Retail Trade	NA	508,861	459,548			
Transportation, warehousing, and utilities	NA	263,419	231,304			
Information	NA	NA	135,496			
Finance, Insurance, & Real Estate	NA	201,422	251,240			
Professional, scientific, management, administrative, and waste management services	NA	151,096	362,414			
Educational, health and social services	NA	461,307	675,593			
Arts, entertainment, recreation, accommodation and food services	NA	31,911	274,437			
Other Services	NA	266,053	181,829			
Public Administration	NA	167,050	193,128			

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

United States: Employment by Industry					
	1980	1990	2000		
Total Employed Civilian Population	NA	115,681,202	129,721,512		
Agriculture, Forestry, Fishing, hunting & mining	NA	NA	NA		
Construction	NA	NA	NA		
Manufacturing	NA	NA	NA		
Wholesale Trade	NA	NA	NA		
Retail Trade	NA	NA	NA		
Transportation, warehousing, and utilities	NA	NA	NA		
Information	NA	NA	NA		
Finance, Insurance, & Real Estate	NA	NA	NA		
Professional, scientific, management, administrative, and waste management services	NA	NA	NA		
Educational, health and social services	NA	NA	NA		
Arts, entertainment, recreation, accommodation and food services	NA	NA	NA		
Other Services	NA	NA	NA		
Public Administration	NA	NA	NA		

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

Villa Rica: Percent Employment by Industry			
	1980	1990	2000
Total Employed Civilian Population	100.0%	100.0%	100.0%
Agriculture, Forestry, Fishing, hunting & mining	0.6%	1.4%	0.0%
Construction	7.1%	13.8%	14.3%
Manufacturing	50.7%	32.0%	21.6%
Wholesale Trade	2.2%	5.1%	4.0%
Retail Trade	9.0%	16.6%	15.3%
Transportation, warehousing, and utilities	5.4%	7.9%	5.2%
Information	NA	NA	2.5%
Finance, Insurance, & Real Estate	2.9%	4.5%	4.5%
Professional, scientific, management, administrative, and waste management services	2.7%	2.2%	7.8%
Educational, health and social services	12.7%	11.1%	6.6%
Arts, entertainment, recreation, accommodation and food services	4.2%	0.3%	10.9%
Other Services	0.9%	3.5%	3.6%
Public Administration	1.6%	1.5%	3.5%

Exhibit: 36 (b): Villa Rica: Percent Employment by Industry

Farm Carroll 4.73 3.65 2.99 2.65 2.49 2.40 2.30 2.17 2.05 1.91 Georgia 3.51 2.55 2.01 1.63 1.39 1.24 1.11 1.00 0.90 0.82 Agricultural Douglas 0.82 0.84 0.66 0.80 0.84 0.81 0.75 0.86 0.94 1.01 1.06 1.11 Services, Other Georgia 0.60 0.76 0.55 0.28 0.28 0.28 0.28 0.28 0.21 0.20 0.16 0.18 0.17 0.17 0.16 0.16 Georgia 0.32 0.22 0.20 0.28 0.28 0.28 0.23 0.21 0.20 0.18 0.17 0.17 0.16 0.15 Carroll 5.46 6.01 6.89 7.16 8.13 8.17 7.97 7.73 7.49 7.27 Construction Georgia 5.07 6.10		bit 37: Pe	1	1				1				
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Mining Douglas 0.42 0.37 0.55 0.28 0.28 0.25 0.23 0.21 0.20 0.19 Georgia 0.32 0.32 0.32 0.29 0.22 0.20 0.18 0.17 0.17 0.16 0.15 Construction Douglas 10.21 11.80 12.18 10.72 10.35 9.80 9.10 8.44 7.90 7.49 7.27 7.49 7.27 7.49 7.27 7.49 7.27 7.49 7.27 7.49 7.27 7.49 7.27 7.49 7.27 7.49 7.27 7.49 7.28 7.49 7.49 7.28 7.49 7.28 7.49 7.23 7.49 7.23 7.49 7.23 7.49 7.23 7.49 7.23 7.49 7.23 7.49 7.23 7.49 7.23 7.49 7.23 7.40 6.32 6.25 2.16 2.06 8.4 8.13 3.35 12.05 1.55 1.55 1.5		Georgia	0.60		0.85			1.15		1.17	1.17	1.16
Georgia 0.32 0.32 0.29 0.22 0.20 0.18 0.17 0.16 0.15 Construction Georgia 5.46 6.01 6.89 7.16 8.13 8.17 7.97 7.33 7.49 7.27 Douglas 10.21 11.80 12.18 10.72 10.35 9.80 9.10 8.44 7.90 7.49 7.27 Douglas 6.07 6.11 5.75 5.86 10 6.05 5.94 5.80 5.60 5.52 Manufacturing Douglas 6.96 6.42 5.63 5.70 7.00 6.97 6.88 6.72 6.48 6.19 Georgia 17.53 15.51 14.27 12.63 12.07 11.56 11.03 10.50 9.97 Trans, Comm, & Carroll 2.86 2.03 2.30 2.02 2.58 2.57 2.50 2.43 2.35 Douglas 5.27 4.67 5.06 4.53 4.		Carroll		i.				t		t	t	
Carroll 5.46 6.01 6.89 7.16 8.13 8.17 7.97 7.73 7.49 7.27 Construction Douglas 10.21 11.80 12.18 10.72 10.35 9.80 9.10 8.44 7.90 7.49 7.43 7.49 7.43 7.43<	Mining	Douglas	0.42	0.37	0.55	0.28	0.28	0.25	0.23	0.21	0.20	0.19
Construction Douglas 10.21 11.80 12.18 10.72 10.35 9.80 9.10 8.44 7.90 7.49 Georgia 5.07 6.11 5.75 5.58 6.10 6.05 5.94 5.80 5.66 5.52 Manufacturing Carroll 38.10 37.81 31.59 28.50 23.65 22.56 21.68 20.85 20.06 19.31 Manufacturing Georgia 19.25 17.53 15.51 14.27 12.63 12.07 11.56 11.03 10.50 9.97 Trans, Comm, & Carroll 2.86 2.03 2.02 2.58 2.57 2.55 2.50 2.43 2.35 Public Utilities Georgia 5.55 5.51 5.86 5.72 6.10 6.17 6.19 6.16 6.09 5.97 Molesale Trade Douglas 3.05 4.83 5.33 5.51 5.76 5.73 6.23 6.63 6.99 7.30		Georgia	0.32	1	0.29			0.18			0.16	
Georgia 5.07 6.11 5.75 5.58 6.10 6.05 5.94 5.80 5.66 5.52 Manufacturing Douglas 6.96 6.42 5.63 5.70 7.00 6.97 6.88 6.72 6.48 6.19 Georgia 19.25 17.53 15.51 14.27 12.63 12.07 11.56 11.03 10.50 9.97 Trans, Comm, & Douglas 5.27 4.67 5.06 4.63 4.25 4.43 4.47 4.43 4.37 4.28 Public Utilities Georgia 5.55 5.51 5.86 5.72 6.10 6.17 6.19 6.16 6.09 5.97 Molesale Trade Douglas 3.05 4.83 5.33 5.51 5.25 5.78 6.23 6.63 6.99 7.30 Georgia 6.34 6.56 6.18 5.74 5.74 5.73 5.71 5.66 5.66 Retail Trade Douglas 19.0		Carroll		6.01	6.89	7.16	8.13	8.17	7.97	7.73	7.49	7.27
Carroli 38.10 37.81 31.59 28.50 23.65 22.56 21.68 20.85 20.06 19.31 Manufacturing Douglas 6.96 6.42 5.63 5.70 7.00 6.97 6.88 6.72 6.48 6.19 Georgia 19.25 17.53 15.51 14.27 12.63 12.07 11.56 11.03 10.50 9.97 Trans, Comm, & Public Utilities Carroll 2.86 2.03 2.30 2.02 2.58 2.57 2.55 2.50 2.43 2.35 Douglas 5.27 4.67 5.06 4.63 4.25 4.43 4.47 4.43 4.37 4.28 Georgia 5.55 5.51 5.86 5.72 6.10 6.17 6.19 6.16 6.09 7.30 Georgia 6.34 6.65 6.18 5.73 5.69 5.74 5.73 5.71 5.69 5.66 Carroll 13.14 14.81 16.57	Construction	Douglas	10.21	11.80	12.18	10.72	10.35	9.80	9.10	8.44	7.90	7.49
Manufacturing Douglas 6.96 6.42 5.63 5.70 7.00 6.97 6.88 6.72 6.48 6.19 Georgia 19.25 17.53 15.51 14.27 12.63 12.07 11.56 11.03 10.50 9.97 Trans, Comm, & Public Utilities Carroll 2.86 2.03 2.30 2.02 2.58 2.57 2.55 2.50 2.43 2.35 Douglas 5.27 4.67 5.06 4.63 4.25 4.43 4.47 4.43 4.37 4.28 Georgia 5.55 5.51 5.86 5.72 6.10 6.17 6.19 6.16 6.09 5.97 Wholesale Trade Carroll 2.24 2.80 2.17 2.90 3.39 3.53 3.62 3.64 3.66 Carroll 13.14 14.81 16.57 17.41 17.43 18.01 18.52 18.97 19.34 19.67 Retail Trade Carroll 13.14		Georgia	5.07	6.11	5.75	5.58	6.10	6.05	5.94	5.80	5.66	5.52
Georgia 19.25 17.53 15.51 14.27 12.63 12.07 11.56 11.03 10.50 9.97 Trans, Comm, & Public Utilities Carroll 2.86 2.03 2.30 2.02 2.58 2.57 2.55 2.50 2.43 2.35 Public Utilities Georgia 5.55 5.51 5.86 5.72 6.10 6.17 6.19 6.16 6.09 5.97 Questa 3.05 4.83 5.33 5.51 5.55 5.78 6.23 6.63 6.99 7.30 Georgia 6.34 6.65 6.18 5.73 5.69 5.74 5.71 5.69 5.66 Carroll 13.14 14.81 16.57 17.41 17.43 18.01 18.52 18.97 19.34 19.67 Carroll 13.14 14.81 16.44 17.14 17.43 18.01 18.52 18.97 19.34 19.67 Finance, Insurace, & Real Estate Carroll 5.10 <td></td> <td>Carroll</td> <td>38.10</td> <td>37.81</td> <td>31.59</td> <td></td> <td>23.65</td> <td>22.56</td> <td>21.68</td> <td>20.85</td> <td>20.06</td> <td>19.31</td>		Carroll	38.10	37.81	31.59		23.65	22.56	21.68	20.85	20.06	19.31
Trans, Comm, & Public Utilities Carroll 2.86 2.03 2.30 2.02 2.58 2.57 2.55 2.50 2.43 2.35 Public Utilities Douglas 5.27 4.67 5.06 4.63 4.25 4.43 4.47 4.43 4.37 4.28 Georgia 5.55 5.51 5.86 5.72 6.10 6.17 6.19 6.16 6.09 5.97 Wholesale Trade Carroll 2.24 2.80 2.17 2.90 3.39 3.53 3.59 3.62 3.64 3.66 Georgia 6.34 6.65 6.18 5.73 5.69 5.74 5.73 5.71 5.69 5.66 Georgia 13.14 14.81 16.57 17.41 17.43 18.01 18.52 18.97 19.34 19.67 Georgia 14.84 16.13 16.44 17.14 16.80 17.08 17.32 17.51 17.65 17.76 Finance, Insurance, & Real Estate	Manufacturing	Douglas	6.96	6.42	5.63	5.70	7.00	6.97	6.88	6.72	6.48	6.19
Trans, Comm, & Public Utilities Douglas 5.27 4.67 5.06 4.63 4.25 4.43 4.47 4.43 4.37 4.28 Public Utilities Georgia 5.55 5.51 5.86 5.72 6.10 6.17 6.19 6.16 6.09 5.97 Wholesale Trade Douglas 3.05 4.83 5.33 5.51 5.25 5.78 6.23 6.63 6.99 7.30 Georgia 6.34 6.65 6.18 5.73 5.69 5.74 5.73 5.71 5.69 5.66 Georgia 13.14 14.81 16.57 17.41 17.43 18.01 18.52 18.97 19.34 19.67 Georgia 14.84 16.13 16.44 17.14 16.80 17.08 17.32 17.51 17.65 17.76 Finance, Insurance, & Real Estate Carroll 5.02 4.54 5.29 4.97 4.69 4.45 4.24 4.05 Georgia 7.42 <td></td> <td>Georgia</td> <td>19.25</td> <td>17.53</td> <td>15.51</td> <td>14.27</td> <td>12.63</td> <td>12.07</td> <td>11.56</td> <td>11.03</td> <td>10.50</td> <td>9.97</td>		Georgia	19.25	17.53	15.51	14.27	12.63	12.07	11.56	11.03	10.50	9.97
Public Utilities Douglas 5.27 4.67 5.06 4.63 4.25 4.43 4.47 4.43 4.37 4.28 Georgia 5.55 5.51 5.86 5.72 6.10 6.17 6.19 6.16 6.09 5.97 Wholesale Trade Carroll 2.24 2.80 2.17 2.90 3.39 3.53 3.59 3.62 3.64 3.66 Wholesale Trade Carroll 13.14 14.81 16.57 17.41 17.43 18.01 18.52 18.97 19.34 19.67 Carroll 13.14 14.81 16.57 17.41 17.43 18.01 18.52 18.97 19.34 19.67 Douglas 19.05 21.94 23.39 24.18 24.83 25.43 26.02 26.44 26.69 26.79 Georgia 14.84 16.13 16.44 17.14 16.80 17.08 17.32 17.51 17.65 17.76 Finance, Insurance, & Real Estate </td <td>T</td> <td>Carroll</td> <td>2.86</td> <td>2.03</td> <td>2.30</td> <td>2.02</td> <td>2.58</td> <td>2.57</td> <td>2.55</td> <td>2.50</td> <td>2.43</td> <td>2.35</td>	T	Carroll	2.86	2.03	2.30	2.02	2.58	2.57	2.55	2.50	2.43	2.35
Georgia 5.55 5.51 5.86 5.72 6.10 6.17 6.19 6.16 6.09 5.97 Wholesale Trade Carroll 2.24 2.80 2.17 2.90 3.39 3.53 3.59 3.62 3.64 3.66 Wholesale Trade Douglas 3.05 4.83 5.33 5.51 5.25 5.78 6.23 6.63 6.99 7.30 Georgia 6.34 6.65 6.18 5.73 5.69 5.74 5.73 5.71 5.69 5.66 Retail Trade Douglas 19.05 21.94 23.39 24.18 24.83 25.43 26.02 26.44 26.69 26.79 Georgia 14.84 16.13 16.44 17.14 16.80 17.08 17.32 17.51 17.65 17.76 Finance, Insurance, & Real Estate Carroll 5.10 4.86 4.67 4.52 5.45 5.61 5.59 5.50 5.50 5.43 Services		Douglas	5.27	4.67	5.06	4.63	4.25	4.43	4.47	4.43	4.37	4.28
Wholesale Trade Carroll 2.24 2.80 2.17 2.90 3.39 3.53 3.59 3.62 3.64 3.66 Bouglas 3.05 4.83 5.33 5.51 5.25 5.78 6.23 6.63 6.99 7.30 Georgia 6.34 6.65 6.18 5.73 5.69 5.74 5.73 5.71 5.69 5.66 Retail Trade Carroll 13.14 14.81 16.57 17.41 17.43 18.01 18.52 18.97 19.34 19.67 Georgia 14.84 16.13 16.44 17.14 16.80 17.08 17.32 17.51 17.65 17.76 Finance, Insurance, Rate Carroll 5.10 4.86 4.67 4.52 5.45 5.61 5.59 5.55 5.50 5.43 Beorgia 7.42 6.45 5.02 4.54 5.29 4.97 4.69 4.45 4.24 4.05 Georgia 7.28 6.9	Fublic Otilities			5.51	5.86		6.10				6.09	5.97
Wholesale Trade Douglas 3.05 4.83 5.33 5.51 5.25 5.78 6.23 6.63 6.99 7.30 Retail Trade Georgia 6.34 6.65 6.18 5.73 5.69 5.74 5.73 5.71 5.69 5.66 Retail Trade Carroll 13.14 14.81 16.57 17.41 17.43 18.01 18.52 18.97 19.34 19.67 Georgia 14.84 16.13 16.44 17.14 16.80 17.08 17.32 17.51 17.65 17.76 Finance, Insurance, Raroll Carroll 5.10 4.86 4.67 4.52 5.45 5.61 5.59 5.55 5.50 5.43 Meal Estate Carroll 12.43 13.49 19.20 20.62 21.73 21.34 21.39 21.69 22.20 22.89 Services Douglas 24.54 26.14 27.05 31.73 30.48 30.49 30.88 31.48 32.20 <td></td> <td>Ŭ Ŭ</td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td>		Ŭ Ŭ		1						-		
Georgia 6.34 6.65 6.18 5.73 5.69 5.74 5.73 5.71 5.69 5.66 Retail Trade Carroll 13.14 14.81 16.57 17.41 17.43 18.01 18.52 18.97 19.34 19.67 Georgia 14.84 16.13 16.44 17.14 16.80 17.08 17.32 17.51 17.65 17.76 Finance, Insurance, & Real Estate Carroll 5.10 4.86 4.67 4.52 5.45 5.61 5.59 5.55 5.50 5.43 Bouglas 7.42 6.45 5.02 4.54 5.29 4.97 4.69 4.45 4.24 4.05 Georgia 7.28 6.98 6.64 6.36 7.12 7.05 6.98 6.91 6.83 6.76 Services Carroll 12.43 13.49 19.20 20.62 21.73 21.34 21.39 21.69 22.20 22.89 Douglas	Wholesale Trade							t				
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Georgia 14.84 16.13 16.44 17.14 16.80 17.08 17.32 17.51 17.65 17.76 Finance, Insurance, & Real Estate Carroll 5.10 4.86 4.67 4.52 5.45 5.61 5.59 5.55 5.50 5.43 Douglas 7.42 6.45 5.02 4.54 5.29 4.97 4.69 4.45 4.24 4.05 Georgia 7.28 6.98 6.64 6.36 7.12 7.05 6.98 6.91 6.83 6.76 Carroll 12.43 13.49 19.20 20.62 21.73 21.34 21.39 21.69 22.20 22.89 Services Douglas 24.54 26.14 27.05 31.73 30.48 30.49 30.88 31.48 32.20 32.98 Georgia 18.30 20.61 23.75 26.61 28.63 29.27 30.10 31.07 32.16 33.35 Federal Civilian Government Douglas				14.81	16.57	17.41	17.43	18.01	18.52	18.97	19.34	19.67
Finance, Insurance, & Carroll 5.10 4.86 4.67 4.52 5.45 5.61 5.59 5.55 5.50 5.43 Beal Estate Douglas 7.42 6.45 5.02 4.54 5.29 4.97 4.69 4.45 4.24 4.05 Georgia 7.28 6.98 6.64 6.36 7.12 7.05 6.98 6.91 6.83 6.76 Carroll 12.43 13.49 19.20 20.62 21.73 21.34 21.39 21.69 22.20 22.89 Douglas 24.54 26.14 27.05 31.73 30.48 30.49 30.88 31.48 32.20 32.98 Georgia 18.30 20.61 23.75 26.61 28.63 29.27 30.10 31.07 32.16 33.35 Federal Civilian Carroll 0.58 0.49 0.59 0.53 0.53 0.52 0.51 0.50 0.49 Douglas 0.60 0.51 0.56 0.43 0.44 0.44 0.43 0.41 0.39 0.37 <tr< td=""><td>Retail Trade</td><td>Douglas</td><td>19.05</td><td>21.94</td><td>23.39</td><td>24.18</td><td>24.83</td><td>25.43</td><td>26.02</td><td>26.44</td><td>26.69</td><td>26.79</td></tr<>	Retail Trade	Douglas	19.05	21.94	23.39	24.18	24.83	25.43	26.02	26.44	26.69	26.79
Finance, Insurance, & Real Estate Carroll 5.10 4.86 4.67 4.52 5.45 5.61 5.59 5.55 5.50 5.43 Beal Estate Douglas 7.42 6.45 5.02 4.54 5.29 4.97 4.69 4.45 4.24 4.05 Georgia 7.28 6.98 6.64 6.36 7.12 7.05 6.98 6.91 6.83 6.76 Carroll 12.43 13.49 19.20 20.62 21.73 21.34 21.39 21.69 22.20 22.89 Services Douglas 24.54 26.14 27.05 31.73 30.48 30.49 30.88 31.48 32.20 32.98 Georgia 18.30 20.61 23.75 26.61 28.63 29.27 30.10 31.07 32.16 33.35 Federal Civilian Carroll 0.58 0.49 0.59 0.53 0.53 0.52 0.51 0.50 0.49 Government <td< td=""><td></td><td>Georgia</td><td>14.84</td><td>16.13</td><td>16.44</td><td>17.14</td><td>16.80</td><td>17.08</td><td>17.32</td><td>17.51</td><td>17.65</td><td>17.76</td></td<>		Georgia	14.84	16.13	16.44	17.14	16.80	17.08	17.32	17.51	17.65	17.76
Finance, Insurance, & Real Estate Douglas 7.42 6.45 5.02 4.54 5.29 4.97 4.69 4.45 4.24 4.05 Georgia 7.28 6.98 6.64 6.36 7.12 7.05 6.98 6.91 6.83 6.76 Services Carroll 12.43 13.49 19.20 20.62 21.73 21.34 21.39 21.69 22.20 22.89 Douglas 24.54 26.14 27.05 31.73 30.48 30.49 30.88 31.48 32.20 32.98 Georgia 18.30 20.61 23.75 26.61 28.63 29.27 30.10 31.07 32.16 33.35 Federal Civilian Government Carroll 0.58 0.49 0.59 0.53 0.53 0.52 0.51 0.50 0.49 Douglas 0.60 0.51 0.56 0.43 0.44 0.43 0.41 0.39 0.37 Georgia 3.08 2.87 2.79 2.33 1.90 1.76 1.63 1.53 1.43 1.35 <td></td> <td></td> <td>5.10</td> <td>4.86</td> <td>4.67</td> <td>4.52</td> <td>5.45</td> <td>5.61</td> <td>5.59</td> <td>5.55</td> <td>5.50</td> <td>5.43</td>			5.10	4.86	4.67	4.52	5.45	5.61	5.59	5.55	5.50	5.43
Georgia 7.28 6.98 6.64 6.36 7.12 7.05 6.98 6.91 6.83 6.76 Services Carroll 12.43 13.49 19.20 20.62 21.73 21.34 21.39 21.69 22.20 22.89 Services Douglas 24.54 26.14 27.05 31.73 30.48 30.49 30.88 31.48 32.20 32.98 Georgia 18.30 20.61 23.75 26.61 28.63 29.27 30.10 31.07 32.16 33.35 Federal Civilian Government Carroll 0.58 0.49 0.59 0.53 0.53 0.52 0.52 0.51 0.50 0.49 Douglas 0.60 0.51 0.56 0.43 0.44 0.44 0.43 0.41 0.39 0.37 Georgia 3.08 2.87 2.79 2.33 1.90 1.76 1.63 1.53 1.43 1.35 Federal Military Government Car							5.29		4.69		4.24	4.05
Services Carroll 12.43 13.49 19.20 20.62 21.73 21.34 21.39 21.69 22.20 22.89 Douglas 24.54 26.14 27.05 31.73 30.48 30.49 30.88 31.48 32.20 32.98 Georgia 18.30 20.61 23.75 26.61 28.63 29.27 30.10 31.07 32.16 33.35 Federal Civilian Government Carroll 0.58 0.49 0.59 0.53 0.53 0.52 0.51 0.50 0.49 Douglas 0.60 0.51 0.56 0.43 0.44 0.43 0.41 0.39 0.37 Georgia 3.08 2.87 2.79 2.33 1.90 1.76 1.63 1.53 1.43 1.35 Federal Military Government Carroll 0.90 0.98 0.89 0.85 0.78 0.75 0.72 0.69 0.66 0.64 Douglas 1.87 1.65 1.25	a Real Estate							_			_	
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Georgia 18.30 20.61 23.75 26.61 28.63 29.27 30.10 31.07 32.16 33.35 Federal Civilian Government 0.58 0.49 0.59 0.53 0.53 0.52 0.52 0.51 0.50 0.49 Douglas 0.60 0.51 0.56 0.43 0.44 0.44 0.43 0.41 0.39 0.37 Georgia 3.08 2.87 2.79 2.33 1.90 1.76 1.63 1.53 1.43 1.35 Federal Military Government Carroll 0.90 0.98 0.89 0.85 0.78 0.75 0.72 0.69 0.66 0.64 Douglas 1.87 1.65 1.25 1.07 0.86 0.76 0.69 0.63 0.58 0.54 Georgia 3.36 3.05 2.46 2.24 1.93 1.82 1.71 1.61 1.51 1.42 State & Local Carroll 13.98 12.38 <t< td=""><td>Services</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	Services											
Carroll 0.58 0.49 0.59 0.53 0.53 0.52 0.51 0.50 0.49 Government Douglas 0.60 0.51 0.56 0.43 0.44 0.44 0.43 0.41 0.39 0.37 Georgia 3.08 2.87 2.79 2.33 1.90 1.76 1.63 1.53 1.43 1.35 Federal Military Government Carroll 0.90 0.98 0.89 0.85 0.78 0.75 0.72 0.69 0.66 0.64 Douglas 1.87 1.65 1.25 1.07 0.86 0.76 0.69 0.63 0.58 0.54 State & Local Carroll 13.98 12.38 11.18 12.03 12.91 13.50 14.06 14.54 14.90 15.13								_			_	
Douglas 0.60 0.51 0.56 0.43 0.44 0.43 0.41 0.39 0.37 Government Georgia 3.08 2.87 2.79 2.33 1.90 1.76 1.63 1.53 1.43 1.35 Federal Military Government Carroll 0.90 0.98 0.89 0.85 0.78 0.75 0.72 0.69 0.66 0.64 Douglas 1.87 1.65 1.25 1.07 0.86 0.76 0.69 0.63 0.58 0.54 State & Local Carroll 13.98 12.38 11.18 12.03 12.91 13.50 14.06 14.54 14.90 15.13												
Georgia 3.08 2.87 2.79 2.33 1.90 1.76 1.63 1.53 1.43 1.35 Federal Military Government Carroll 0.90 0.98 0.89 0.85 0.78 0.75 0.72 0.69 0.66 0.64 Douglas 1.87 1.65 1.25 1.07 0.86 0.76 0.69 0.63 0.58 0.54 Georgia 3.36 3.05 2.46 2.24 1.93 1.82 1.71 1.61 1.51 1.42 State & Local Carroll 13.98 12.38 11.18 12.03 12.91 13.50 14.06 14.54 14.90 15.13	-			0.51		0.43	0.44	0.44	0.43	0.41		
Carroll 0.90 0.98 0.89 0.85 0.78 0.75 0.72 0.69 0.66 0.64 Government Douglas 1.87 1.65 1.25 1.07 0.86 0.76 0.69 0.63 0.58 0.54 Georgia 3.36 3.05 2.46 2.24 1.93 1.82 1.71 1.61 1.51 1.42 State & Local Carroll 13.98 12.38 11.18 12.03 12.91 13.50 14.06 14.54 14.90 15.13	Government			2.87		2.33	1.90	1.76		1.53	1.43	1.35
Douglas 1.87 1.65 1.25 1.07 0.86 0.76 0.69 0.63 0.58 0.54 Government Georgia 3.36 3.05 2.46 2.24 1.93 1.82 1.71 1.61 1.51 1.42 State & Local Carroll 13.98 12.38 11.18 12.03 12.91 13.50 14.06 14.54 14.90 15.13												
Government Georgia 3.36 3.05 2.46 2.24 1.93 1.82 1.71 1.61 1.51 1.42 State & Local Carroll 13.98 12.38 11.18 12.03 12.91 13.50 14.06 14.54 14.90 15.13 State & Local Douglas 18.20 13.42 12.71 0.00 0.78 0.55 0.34 0.16 0.02 8.01												
Carroll 13.98 12.38 11.18 12.03 12.91 13.50 14.06 14.54 14.90 15.13 State & Local Douglas 18.20 13.43 12.71 0.00 0.78 0.55 0.34 0.16 0.02 8.01	Government							_				
State & Local Douglas 18 20 13 43 12 71 0 00 0 78 0 55 0 34 0 16 0 02 8 01		1										
Georgia 12.51 10.92 11.46 11.11 10.39 10.44 10.40 10.33 10.22 10.10												

Exhibit 37: Percentage Employment by Sector—Carroll, Douglas and Georgia

Source: Woods & Poole Economics, Inc

Exhibit 38: Earnings by Sector—Carroll and Douglas											
		1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
Total	Carroll	542.5	656.2	804.2	885.7	1,087.4	1,206.2	1,324.6	1,447.5	1,576.4	1,712.9
Earnings ¹	Douglas	235.6	369.7	542.4	690.5	965.5	1,147.9	1,338.2	1,534.6	1,732.5	1,926.9
Farm	Carroll	2.2	7.1	17.0	20.1	20.9	24.2	27.3	30.5	33.6	36.6
i aini	Douglas	0.1	0.5	0.8	0.0	0.4	0.4	0.4	0.4	0.4	0.4
Agricultural	Carroll	1.3	2.0	3.0	2.6	4.2	5.3	6.4	7.5	8.6	9.8
Services, Other	Douglas	0.9	1.3	0.9	2.0	3.1	3.6	4.0	4.6	5.1	5.7
Mining	Carroll	1.1	0.9	1.0	0.9	1.4	1.5	1.5	1.6	1.6	1.7
wiining	Douglas	2.1	2.9	4.0	3.5	5.4	5.5	5.6	5.9	6.1	6.3
Construction	Carroll	35.7	49.5	65.3	71.3	104.5	114.8	121.3	126.7	132.0	137.6
Construction	Douglas	31.1	53.9	80.7	86.4	121.4	134.5	143.4	150.6	157.0	163.6
Manufacturing	Carroll	244.2	275.5	304.0	311.9	334.4	359.3	384.7	410.0	435.2	460.6
wanulacturing	Douglas	20.3	26.5	35.6	55.5	86.2	104.4	123.0	140.8	156.7	169.8
Trans, Comm, &	Carroll	25.0	20.6	26.5	25.2	37.3	41.7	45.7	49.2	52.3	54.8
Public Utilities	Douglas	19.3	25.9	36.1	48.7	61.7	77.3	92.0	106.0	118.9	130.6
Wholesale	Carroll	18.1	26.6	23.5	30.0	43.0	48.5	53.0	57.2	61.4	65.8
Trade	Douglas	9.4	22.2	41.1	54.3	73.2	94.0	116.1	139.6	163.6	187.3
Retail Trade	Carroll	53.7	72.5	78.6	89.4	106.2	118.9	131.5	144.4	157.6	171.4
Relaii Haue	Douglas	39.2	70.1	88.5	122.7	178.0	211.9	248.2	284.7	319.7	352.1
Finance,	Carroll	17.1	20.0	28.7	35.4	44.8	52.5	58.7	64.9	71.1	77.4
Insurance, & Real Estate	Douglas	7.6	9.1	20.2	25.6	32.8	37.5	42.4	47.1	51.6	55.6
Sonvioon	Carroll	59.1	75.2	134.7	164.7	218.0	243.0	273.1	308.7	350.5	399.7
Services	Douglas	55.4	85.9	134.1	189.6	255.6	309.5	372.0	442.2	518.7	599.7
Federal Civilian	Carroll	6.4	6.9	8.6	9.0	10.6	11.5	12.4	13.2	14.0	14.8
Government	Douglas	3.3	4.5	6.1	6.4	9.3	11.2	12.6	13.9	14.8	15.5
	Carroll	1.7	3.6	3.5	3.7	4.2	4.5	4.7	5.0	5.2	5.4
Government	Douglas	1.7	3.5	3.5	3.8	4.4	4.7	5.0	5.2	5.5	5.8
State & Local	Carroll	77.0	95.7	109.9	121.4	158.0	180.7	204.3	228.7	253.2	277.4
Government	Douglas	45.2	63.3	90.8	91.9	134.0	153.5	173.4	193.8	214.3	234.4
	anda 0 Dani		ing lag								

Exhibit 38: Earnings by Sector—Carroll and Douglas

Source: Woods & Poole Economics, Inc

¹ Millions of dollars

	EXIIIDIL	33. Fen		inngs n	y Sector	-Carro	n, Dougi	as anu c	eorgia		
		1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
	Carroll	0.40	1.08	2.11	2.27	1.92	2.00	2.06	2.11	2.13	2.14
Farm	Douglas	0.04	0.13	0.15	0.00	0.04	0.04	0.03	0.03	0.02	0.02
	Georgia	0.16	1.27	1.36	1.40	0.98	0.93	0.89	0.85	0.82	0.79
C	Carroll	0.25	0.30	0.37	0.30	0.38	0.44	0.48	0.52	0.55	0.57
Agricultural Services, Other	Douglas	0.38	0.35	0.17	0.29	0.32	0.31	0.30	0.30	0.30	0.30
Services, Other	Georgia	0.37	0.41	0.46	0.53	0.59	0.60	0.61	0.62	0.62	0.62
	Carroll	0.20	0.13	0.13	0.10	0.13	0.12	0.11	0.11	0.10	0.10
Mining	Douglas	0.87	0.79	0.74	0.51	0.56	0.48	0.42	0.38	0.35	0.33
	Georgia	0.65	0.48	0.36	0.29	0.27	0.25	0.22	0.21	0.19	0.18
	Carroll	6.59	7.54	8.12	8.05	9.61	9.52	9.15	8.75	8.37	8.03
Construction	Douglas	13.20	14.57	14.88	12.51	12.58	11.72	10.72	9.81	9.06	8.49
	Georgia	5.66	6.57	5.82	5.39	6.00	5.86	5.67	5.46	5.26	5.06
	Carroll	45.01	41.99	37.80	35.22	30.75	29.79	29.05	28.32	27.60	26.89
Manufacturing	Douglas	8.62	7.17	6.57	8.04	8.93	9.09	9.19	9.17	9.05	8.81
	Georgia	22.54	20.03	17.51	16.84	14.86	14.45	14.05	13.59	13.08	12.53
Trans Camp 8	Carroll	4.60	3.14	3.30	2.85	3.43	3.46	3.45	3.40	3.32	3.20
Trans, Comm, & Public Utilities	Douglas	8.19	7.00	6.66	7.06	6.39	6.73	6.88	6.90	6.86	6.78
	Georgia	9.33	8.85	8.75	9.43	9.89	9.99	10.01	9.96	9.84	9.63
	Carroll	3.34	4.05	2.92	3.39	3.96	4.02	4.00	3.95	3.89	3.84
Wholesale Trade	Douglas	3.98	6.01	7.58	7.87	7.59	8.19	8.67	9.09	9.44	9.72
	Georgia	8.87	9.04	8.86	8.17	8.44	8.36	8.21	8.05	7.88	7.71
	Carroll	9.89	11.04	9.77	10.09	9.76	9.86	9.93	9.98	10.00	10.00
Retail Trade	Douglas	16.63	18.97	16.31	17.77	18.43	18.46	18.55	18.55	18.45	18.28
	Georgia	10.33	10.64	9.17	9.08	8.99	8.97	8.93	8.87	8.80	8.71
Finance,	Carroll	3.15	3.05	3.56	3.99	4.12	4.35	4.43	4.48	4.51	4.52
Insurance, &	Douglas	3.25	2.47	3.72	3.71	3.39	3.27	3.17	3.07	2.98	2.89
Real Estate	Georgia	5.44	5.59	6.43	6.86	7.57	7.66	7.73	7.78	7.81	7.82
	Carroll	10.89	11.46	16.75	18.60	20.05	20.15	20.62	21.32	22.23	23.33
Services	Douglas	23.52	23.23	24.72	27.46	26.48	26.97	27.79	28.82	29.94	31.12
	Georgia	15.63	17.36	21.95	24.33	26.77	27.78	29.02	30.44	32.02	33.73
	Carroll	1.17	1.06	1.07	1.02	0.97	0.95	0.94	0.91	0.89	0.86
Federal Civilian	Douglas	1.40	1.22	1.12	0.92	0.96	0.97	0.94	0.90	0.86	0.81
	Georgia	5.64	5.11	4.66	4.17	3.39	3.11	2.87	2.67	2.49	2.33
Enderel Militerry	Carroll	0.31	0.55	0.44	0.41	0.39	0.37	0.36	0.34	0.33	0.32
Federal Military Government	Douglas	0.72	0.96	0.64	0.55	0.46	0.41	0.37	0.34	0.32	0.30
	Georgia	3.72	3.68	2.69	2.49	2.06	1.94	1.83	1.72	1.62	1.53
State 9 Less	Carroll	14.19	14.59	13.66	13.70	14.53	14.98	15.42	15.80	16.06	16.20
State & Local Government	Douglas	19.20	17.13	16.74	13.31	13.88	13.37	12.96	12.63	12.37	12.17
Government	Georgia	11.67	10.97	11.97	11.01	10.18	10.10	9.95	9.78	9.58	9.37

Exhibit 39: Percent Earnings by Sector—Carroll, Douglas and Georgia

Source: Woods & Poole Economics, Inc

Exhibit	40: Averag											
	_	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
	Carroll	333	353	367	375	387	392	406	429	444	471	492
All Industries	Douglas	330	351	359	378	384	393	409	419	437	458	486
	Georgia	404	424	444	471	480	488	509	531	562	598	629
	Carroll	246	242	243	269	268	296	NA	NA	NA	341	NA
Agri, Forestry, Fishing	Douglas	295	295	324	305	319	NA	300	299	NA	289	330
	Georgia	267	276	285	297	304	312	322	336	347	373	390
	Carroll	NA										
Mining	Douglas	NA										
	Georgia	561	589	605	NA	NA	698	734	741	781	832	866
	Carroll	NA	388	407	412	415	428	483	508	525	548	554
Construction	Douglas	NA	436	412	439	446	484	506	531	NA	585	NA
	Georgia	NA	434	439	451	461	479	508	534	556	590	623
	Carroll	NA	389	401	408	429	444	465	504	522	563	608
Manufacturing	Douglas	NA	357	394	406	424	439	482	NA	522	NA	NA
	Georgia	NA	450	473	503	511	531	555	588	620	656	684
	Carroll	NA	519	520	554	542	533	570	573	637	615	625
Transportation, Comm,	Douglas	NA	441	493	536	559	599	622	636	652	683	673
Util	Georgia	NA	603	635	689	709	720	737	769	805	842	895
	Carroll	NA	423	447	465	466	NA	455	NA	NA	NA	NA
Wholesale	Douglas	NA	468	500	504	545	561	529	559	598	632	650
	Georgia	NA	603	632	669	695	711	729	762	809	873	932
	Carroll	NA	203	213	224	226	233	229	236	239	254	268
Retail	Douglas	NA	232	251	268	268	278	291	289	306	324	343
	Georgia	NA	236	244	255	260	267	275	286	299	318	335
	Carroll	NA	419	430	437	469	476	495	509	542	543	516
Financial, Insurance,	Douglas	NA	405	457	536	535	492	475	499	513	491	536
Real Estate	Georgia	NA	544	569	627	648	648	693	741	799	872	900
	Carroll	NA	333	355	372	389	381	406	433	446	468	483
Services	Douglas	NA	355	339	360	354	358	378	380	NA	399	NA
	Georgia	NA	414	439	464	471	475	501	519	551	580	611
	Carroll	NA										
Federal Gov	Douglas	NA										
	Georgia	NA	543	584	612	651	667	666	701	774	791	808
State Gov	Carroll	NA	NA	NA	NA	NA	NA	466	495	490	504	513
	Douglas	NA	402	NA	NA	NA	NA	NA	NA	510	529	554
	Georgia	NA	451	462	460	471	NA	493	517	533	561	579
	Carroll	NA	NA	NA	NA	NA	NA	362	383	NA	NA	NA
Local Gov	Douglas	NA	NA	NA	417	421	433	453	476	514	558	569
	Georgia	NA	387	401	401	410	420	440	461	480	506	523

Exhibit 40: Average Weekly Wages (in dollars)—Carroll, Douglas and Georgia

Source: U.S. Bureau of Labor Statistics

Villa Rica: Personal Income by Type (in	dollars)	
	1990	2000
Total income	59,035,976	54,985,800
Aggregate wage or salary income for households	46,301,223	42,559,500
Aggregate other types of income for households	1,100,747	1,326,100
Aggregate self employment income for households	2,038,254	2,909,200
Aggregate interest, dividends, or net rental income	2,627,535	1,063,500
Aggregate social security income for households	4,501,754	4,205,000
Aggregate public assistance income for households	830,942	735,100
Aggregate retirement income for households	1,635,521	2,187,400

Exhibit 40 (a): Villa Rica: Personal Income by Type (in dollars)

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

Exhibit 40 (b): Average Weekly Wage For Carroll County (2001) Carroll County Agriculture \$524.00

carron county right and to a not
Manufacturing \$682.00
Retail Trade \$353.00
Services \$465.00
Government \$546.00
Source: Georgia Department of Industry, Trade & Tourism
Hourly manufacturing rates: starting/unskilled - \$8.02 skilled - \$10.90
Average/unskilled - \$9.56 skilled - \$13.11
Average benefit package – 27%

Source: Carroll County Chamber of Commerce

Exhibit 41: Income Earned (in millions)-Carroll, Douglas and Georgia

		1980	1985	1990	1995	2000
	Carroll	\$767.0	\$968.3	\$1,196.6	\$1,383.6	\$1,748.3
Total (in 1996 \$)	Douglas	\$854.3	\$1,109.8	\$1,342.9	\$1,672.6	\$2,142.2
	Georgia	\$84,202.1	\$110,382.0	\$134,782.0	\$163,230.0	\$209,309.0
	Carroll	\$426.9	\$512.1	\$619.4	\$687.4	\$834.6
Wages & Salaries	Douglas	\$175.6	\$277.4	\$425.4	\$545.6	\$773.2
	Georgia	\$53,972.9	\$68,598.8	\$81,355.6	\$96,422.8	\$128,049.0
	Carroll	\$56.8	\$67.4	\$90.4	\$99.6	\$99.2
Other Labor Income	Douglas	\$20.3	\$34.6	\$55.2	\$68.3	\$79.2
	Georgia	\$7,079.4	\$9,626.2	\$11,702.3	\$14,092.0	\$14,308.0
	Carroll	\$58.9	\$76.7	\$94.4	\$98.6	\$153.5
Proprietors Income	Douglas	\$39.8	\$57.7	\$61.7	\$76.6	\$113.1
	Georgia	\$5,484.9	\$7,694.7	\$9,584.3	\$12,998.9	\$18,105.4
Dividends, Interest, & Rent	Carroll	\$93.2	\$149.5	\$195.6	\$204.9	\$273.8
	Douglas	\$72.4	\$118.1	\$156.4	\$190.1	\$253.0
	Georgia	\$10,987.0	\$17,428.3	\$23,366.9	\$26,625.0	\$35,169.0

		1980	1985	1990	1995	2000
	Carroll	\$109.1	\$129.0	\$161.6	\$234.4	\$267.6
Transfer Payments to Persons	Douglas	\$72.7	\$91.4	\$118.6	\$180.9	\$214.1
	Georgia	\$9,867.4	\$11,841.3	\$14,749.8	\$20,606.7	\$23,300.9
		1980	1985	1990	1995	2000
Less: Social Ins.	Carroll	\$25.1	\$35.8	\$47.4	\$54.4	\$64.0
Contributions	Douglas	\$10.4	\$20.0	\$31.9	\$43.6	\$58.5
Contributions	Georgia	\$2,978.2	\$4,527.9	\$5,839.7	\$7,270.3	\$9,398.0
	Carroll	\$47.3	\$69.4	\$82.6	\$113.0	\$183.5
Residence Adjustment	Douglas	\$484.1	\$550.6	\$557.4	\$654.9	\$768.1
	Georgia	(\$211.2)	(\$279.8)	(\$136.8)	(\$245.3)	(\$224.7)
		2005	2010	2015	2020	2025
	Carroll	\$1,942.6	\$2,143.1	\$2,356.1	\$2,584.6	\$2,831.5
Total (in 1996 \$)	Douglas	\$2,534.1	\$2,946.5	\$3,378.3	\$3,824.4	\$4,279.6
	Georgia	\$236,962.0	\$266,921.0	\$299,617.0	\$335,164.0	\$373,728.0
	Carroll	\$928.8	\$1,022.6	\$1,120.3	\$1,223.2	\$1,332.8
Wages & Salaries	Douglas	\$921.7	\$1,076.9	\$1,237.7	\$1,400.4	\$1,561.1
	Georgia	\$144,760.0	\$162,812.0	\$182,588.0	\$204,172.0	\$227,684.0
	Carroll	\$108.9	\$118.4	\$127.9	\$137.8	\$148.1
Other Labor Income	Douglas	\$93.2	\$107.4	\$121.8	\$136.0	\$149.5
	Georgia	\$15,909.5	\$17,605.1	\$19,429.5	\$21,384.6	\$23,476.2
	Carroll	\$168.5	\$183.7	\$199.2	\$215.3	\$232.0
Proprietors Income	Douglas	\$133.0	\$153.9	\$175.1	\$196.1	\$216.2
	Georgia	\$20,196.6	\$22,501.7	\$25,001.5	\$27,696.8	\$30,597.4
	Carroll	\$305.9	\$340.2	\$376.4	\$414.7	\$454.8
Dividends, Interest, & Rent	Douglas	\$302.4	\$355.7	\$413.0	\$474.0	\$538.8
	Georgia	\$39,713.0	\$44,582.2	\$49,772.6	\$55,274.6	\$61,073.9
Frencher Deumente te	Carroll	\$304.9	\$347.5	\$396.1	\$451.7	\$515.3
Transfer Payments to Persons	Douglas	\$260.9	\$314.6	\$376.2	\$447.0	\$528.5
croond	Georgia	\$26,662.0	\$30,514.5	\$34,921.9	\$39,972.8	\$45,770.2
ana Canial Ina	Carroll	\$74.0	\$84.8	\$96.1	\$108.2	\$120.8
_ess: Social Ins. Contributions	Douglas	\$72.5	\$88.2	\$104.9	\$122.4	\$139.9
	Georgia	\$11,070.6	\$12,973.8	\$15,086.6	\$17,406.5	\$19,929.4
	Carroll	\$199.7	\$215.6	\$232.3	\$250.0	\$269.3
Residence Adjustment	Douglas	\$895.4	\$1,026.1	\$1,159.5	\$1,293.3	\$1,425.3
	Georgia	\$791.4	\$1,879.2	\$2,989.8	\$4,070.2	\$5,055.3

Source: Woods & Poole Economics, Inc

Exhibit 42: Pe	rcentage o					
	1	1980	1985	1990	1995	2000
	Carroll	100.00	100.00	100.00	100.00	100.00
Total (in 1996 \$)	Douglas	100.00	100.00	100.00	100.00	100.00
	Georgia	100.00	100.00	100.00	100.00	100.00
	Carroll	55.66	52.89	51.76	49.69	47.74
Wages & Salaries	Douglas	20.55	25.00	31.68	32.62	36.09
	Georgia	64.10	62.15	60.36	59.07	61.18
	Carroll	7.40	6.96	7.56	7.20	5.68
Other Labor Income	Douglas	2.38	3.11	4.11	4.08	3.70
	Georgia	8.41	8.72	8.68	8.63	6.84
	Carroll	7.68	7.92	7.89	7.12	8.78
Proprietors Income	Douglas	4.65	5.20	4.60	4.58	5.28
	Georgia	6.51	6.97	7.11	7.96	8.65
	Carroll	12.15	15.44	16.34	14.81	15.66
Dividends, Interest, & Ren	t Douglas	8.47	10.64	11.65	11.36	11.81
	Georgia	13.05	15.79	17.34	16.31	16.80
	Ŭ	1980	1985	1990	1995	2000
	Carroll	14.23	13.33	13.51	16.95	15.31
Transfer Payments to Persons	Douglas	8.50	8.24	8.83	10.81	9.99
	Georgia	11.72	10.73	10.94	12.62	11.13
	Carroll	3.27	3.70	3.96	3.94	3.66
Less: Social Ins.	Douglas	1.22	1.80	2.38	2.61	2.73
Contributions	Georgia	3.54	4.10	4.33	4.45	4.49
	Carroll	6.17	7.16	6.90	8.17	10.50
Residence Adjustment	Douglas	56.66	49.61	41.51	39.15	35.86
	Georgia	(0.25)	(0.25)	(0.10)	(0.15)	(0.11)
	Ocorgia	2005	2010	2015	2020	2025
	Carroll	100.00	100.00	100.00	100.00	100.00
Total (in 1996 \$)	Douglas	100.00	100.00	100.00	100.00	100.00
	Georgia	100.00	100.00	100.00	100.00	100.00
	Carroll	47.81	47.71	47.55	47.33	47.07
Wages & Salaries	Douglas	36.37	36.55	36.64	36.62	36.48
ragee a calarice	Georgia	61.09	61.00	60.94	60.92	60.92
	Carroll	5.61	5.52	5.43	5.33	5.23
Other Labor Income	Douglas	3.68	3.65	3.61	3.56	3.49
	Georgia	6.71	6.60	6.48	6.38	6.28
	Carroll	8.67	8.57	8.46	8.33	8.19
Proprietors Income			5.22	5.18	5.13	5.05
	Douglas Georgia	5.25 8.52	8.43	8.34	8.26	8.19
	Georgia Carroll	15.75	15.87	15.98	16.05	16.06
Dividends, Interest, & Ren				12.22		
		11.93	12.07 16.70	16.61	12.39 16.49	12.59 16.34
	Georgia	16.76				
Persons	Carroll	15.69	16.21	16.81	17.48	18.20
	Douglas	10.30	10.68	11.14	11.69	12.35
	Georgia	11.25	11.43	11.66	11.93	12.25
Less: Social Ins.	Carroll	3.81	3.96	4.08	4.18	4.27
Contributions	Douglas	2.86	2.99	3.11	3.20	3.27
	Georgia	4.67	4.86	5.04	5.19	5.33

Exhibit 42: Percentage of Income Earned—Carroll, Douglas and Georgia
		2005	2010	2015	2020	2025
Residence Adjustment	Carroll	10.28	10.06	9.86	9.67	0.10
	Douglas	35.33	34.82	34.32	33.82	33.30
	Georgia	0.33	0.70	1.00	1.21	0.01

Exhibit 43: Major Employers in Carroll County

Company	Туре	Employment
Carroll County Schools	Service	2,400
Southwire Company	Manufacturing	1,585
Tanner Medical Center	Service	1,650
University of West Georgia	Service	965
Gold Kist, Inc.	Manufacturing	700
City of Carrollton Schools	Education	536
Fresh Advantage	Vegetable Processing	430
Bremen Bowden Investment	Clothing	400
Trintex	Rubber products	316
OFS Brightwave	Fiber optic cable	287
Aubrey Silvey	Construction	250
Janus International	Roll up metal doors	210
Wal-Mart.com	Fulfillment Center	250
Maplehurst	Baked goods	200
Sony	Distribution	190

Source: Carroll County Chamber of Commerce

Exhibit 44: New and Expanding Industries Major Plant Openings—Carroll County

Company	Product/Service	Employment
Printpack	Plastic packaging	364
DecoStar InternationI	Automotive Parts	300
Flowers	Baked goods	250
Sugar Foods	Sugar substitutes	210
Flowers Baking Co.	Baked Goods	276
AirTran Airways Call		
Center	Call Center	200
Arch. Aluminum	Door/window frames	150
King Provision	Food distribution	140
Leggett & Platt	Wiping cloths	100
Mary Ann Industries	Carpet padding	100
IKKA Technology	Plastic Components	80

Source: Carroll County Chamber of Commerce, Carroll Tomorrow

Villa Rica, Carrol	1, Douglas, Ge 1990	sorgia anu t			
	Villa Rica	Carroll	Douglas	Georgia	US
Executive, Administrative and Managerial (not Farm)	5.06%	8.09%	13.66%	12.26%	12.32%
Professional and Technical Specialty	5.69%	10.28%	8.88%	12.39%	14.11%
Technicians & Related Support	1.40%	2.67%	3.20%	3.58%	3.68%
Sales	6.07%	11.14%	11.11%	12.28%	11.79%
Clerical and Administrative Support	13.55%	12.87%	20.79%	16.00%	16.26%
Private Household Services	0.74%	0.31%	0.15%	0.51%	0.45%
Protective Services	0.77%	1.52%	1.91%	1.70%	1.72%
Service Occupations (not Protective & Household)	7.16%	8.61%	8.36%	9.77%	11.04%
Farming, Fishing and Forestry	0.53%	2.04%	0.99%	2.20%	2.46%
Precision Production, Craft, and Repair	18.43%	15.64%	14.98%	11.86%	11.33%
Machine Operators, Assemblers & Inspectors	21.07%	14.50%	6.06%	8.50%	6.83%
Transportation & Material Moving	9.45%	5.88%	5.77%	4.60%	4.08%
Handlers, Equipment Cleaners, helpers & Laborers	10.08%	6.44%	4.14%	4.34%	3.94%
	2000				
	VILLA RICA	Carroll	Douglas	Georgia	US
Executive, Administrative and Managerial (not Farm)	5.91%	10.21%	13.82%	14.03%	13.45%
Professional and Technical Specialty	10.06%	16.34%	15.69%	18.68%	20.20%
Technicians & Related Support	NA	NA	NA	NA	NA
Sales	9.95%	11.11%	12.08%	11.64%	11.25%
Clerical and Administrative Support	17.14%	14.16%	18.68%	15.14%	15.44%
Private Household Services	NA	NA	NA	NA	NA
Protective Services	NA	NA	NA	NA	NA
Service Occupations (not Protective & Household)	11.61%	11.85%	11.26%	11.57%	12.01%
Farming, Fishing and Forestry	0.00%	0.29%	0.17%	0.64%	0.73%
Precision Production, Craft, and Repair	10.01%	11.88%	6.89%	9.02%	8.49%
Machine Operators, Assemblers & Inspectors	20.56%	14.06%	13.40%	10.83%	9.45%
Transportation & Material Moving	11.50%	7.91%	7.84%	6.63%	6.14%
Handlers, Equipment Cleaners, helpers &					

Exhibit 45: Percent Employment by Occupation— Villa Rica, Carroll, Douglas, Georgia and United States

Source: US Census Bureau

EXHIBIT 46: LABOR FORCE	anticipation-	1990	ron, bougias an		
	Villa Rica	Carroll	Douglas	Georgia	US
TOTAL Males and Females	4,792	54,577	53,247	4,939,774	191,293,337
In Labor Force	3,007	36,172	39,501	3,353,372	124,882,409
Civilian Labor Force	3,007	36,137	39,401	3,280,314	123,176,636
Civilian Employed	2,848	34,189	37,431	3,092,374	115,431,436
Civilian Unemployed	159	1,948	1,970	187,940	7,745,200
In Armed Forces	0	35	100	73,058	1,705,773
Not in Labor Force	1,785	18,405	13,746	1,586,402	66,410,928
TOTAL Males	2,242	25,964	25,962	2,357,580	91,866,829
Male In Labor Force	1,695	19,504	21,296	1,807,053	68,417,853
Male Civilian Labor Force	1,695	19,486	21,208	1,741,609	66,897,041
Male Civilian Employed	1,632	18,647	20,346	1,652,016	62,639,048
Male Civilian Unemployed	63	839	862	89,593	4,257,993
Male In Armed Forces	0	18	88	65,444	1,520,812
Male Not in Labor Force	547	6,460	4,666	550,527	23,448,976
TOTAL Females	2,550	28,613	27,285	2,582,194	99,426,508
Female In Labor Force	1,312	16,668	18,205	1,546,319	56,464,556
Female Civilian Labor Force	1,312	16,651	18,193	1,538,705	56,279,595
Female Civilian Employed	1,216	15,542	17,085	1,440,358	52,792,388
Female Civilian Unemployed	96	1,109	1,108	98,347	3,487,207
Female In Armed Forces	0	17	12	7,614	184,961
Female Not in Labor Force	1,238	11,945	9,080	1,035,875	42,961,952
	1,230	2000	9,000	1,035,075	42,901,952
	Villa Rica	Carroll	Douglas	Georgia	US
TOTAL Males and Females	3,021	67,034	69,334	6,250,687	217,168,077
In Labor Force	1,906	42,630	48,921	4,129,666	138,820,935
Civilian Labor Force	1,906	42,589	48,822	4,062,808	137,668,798
Civilian Employed	1,809	40,527	46,944	3,839,756	129,721,512
Civilian Unemployed	97	2,062	1,878	223,052	7,947,286
In Armed Forces	0	41	99	66,858	1,152,137
Not in Labor Force	1,115	24,404	20,413	2,121,021	78,347,142
TOTAL Males	1,445	31,953	33,648	3,032,442	104,982,282
Male In Labor Force	1,032	22,832	26,199	2,217,015	74,273,203
Male Civilian Labor Force	1,032	22,791	26,132	2,159,175	73,285,305
Male Civilian Employed	1,008	21,879	25,216	2,051,523	69,091,443
Male Civilian Unemployed	24	912	916	107,652	4,193,862
Male In Armed Forces	0	41	67	57,840	987,898
Male Not in Labor Force	413	9,121	7,449	815,427	30,709,079
TOTAL Females	1,576	35,081	35,686	3,218,245	112,185,795
Female In Labor Force	874	19,798	22,722	1,912,651	64,547,732
Female Civilian Labor Force	874	19,798	22,690	1,903,633	64,383,493
Female Civilian Employed	801	18,648	21,728	1,788,233	60,630,069
Female Civilian Unemployed	73	1,150	962	115,400	3,753,424
Female In Armed Forces	0	0	32	9,018	164,239
	n /			171 11 10	
Female Not in Labor Force	702	15,283	12,964	1,305,594	47,638,063

Exhibit 46: Labor Force Participation--Villa Rica, Carroll, Douglas and United States

Source: US Census Bureau

	Carroll County										
	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Carroll County											
Labor Force	37,831	38,769	39,450	40,959	43,143	44,410	45,413	45,090	45,710	46,627	47,846
Employed	35,591	36,937	37,401	38,864	40,988	42,412	43,364	43,215	43,379	43,986	45,313
Unemployed	2,240	1,832	2,049	2,095	2,155	1,998	2,049	1,875	2,331	2,641	2,533
Unemployment Rate	5.90%	4.70%	5.20%	5.10%	5.00%	4.50%	4.50%	4.20%	5.10%	5.70%	5.30%
			Surrou	Inding C	ounties,	Georgia	and US				
Coweta	5.30%	4.20%	4.10%	3.80%	4.00%	3.30%	2.80%	3.60%	3.40%	4.70%	4.60%
Douglas	4.60%	4.00%	3.60%	3.20%	3.10%	3.00%	2.90%	2.80%	2.90%	4.90%	4.80%
Haralson	9.50%	6.10%	7.80%	8.00%	6.90%	6.00%	4.90%	4.40%	5.50%	5.90%	5.20%
Heard	7.40%	6.80%	5.90%	8.20%	6.30%	5.10%	6.60%	5.30%	5.20%	5.60%	5.60%
Paulding	4.60%	3.60%	3.50%	2.60%	2.60%	2.30%	2.10%	2.20%	2.40%	4.00%	4.10%
Georgia	5.80%	5.20%	4.90%	4.60%	4.50%	4.20%	4.00%	3.70%	4.00%	5.10%	4.70%
	6.90%	6.10%	5.60%	5.40%	4.90%	4.50%	4.20%	4.00%	4.70%	5.80%	6.00%

Exhibit 47: Unemployment Percentages— Carroll, Surrounding Counties, Georgia and United States

Source: U.S. Bureau of Labor Statistics

While less than the National average unemployment rate, the 2003 Carroll County average unemployment rate is still relatively high, when compared with surrounding counties and the State.

Exhibit 48: Villa Rica Labor Force by Place of Work						
Category	1990	2000				
Worked in County of Residence	1,229	833				
Percent of Labor Force working in County of Residence	45%	47%				
Worked outside county of Residence	1,532	948				
Percent of Labor Force working outside County of Residence	55%	53%				

Source: U.S. Census Bureau

Unemployment Rates for Villa Rica and Nearby Cities						
	Census 2000	2003	2004			
Carrollton	3.9	6.3	5.9			
Douglasville	3.7	5.9	5.8			
Newnan	4.5	5.9	4.6			
Atlanta	4.5	6.9	7.6			
Villa Rica	3.2	N/A	N/A			
Bremen	2.9	N/A	N/A			
Temple	2.8	N/A	N/A			
Dallas	2.6	N/A	N/A			

Source: U.S. Census Bureau and Bureau of Labor Statistics

HOUSING CHARACTERISTICS

The following is an inventory of the existing housing units, their age, condition and price. Future trends are estimated by data collected regarding building permits and certificates of occupancy over the past few years.

Total Housing Ur Units Ge Vil Single Units Ur detached Ge Vil	cation hited States eorgia Region la Rica hited States eorgia Region la Rica	1980 NA NA 62,701 1215 NA NA 48,113	1990 102,021,752 2,638,418 82,520 2498 60,261,836 1,638,847	2000 115,904,641 2,107,317 10,4796 1812 69,865,957
Units Ge CF Vil Single Units Ur detached Ge CF	eorgia F Region Ia Rica hited States eorgia F Region	NA 62,701 1215 NA NA	2,638,418 82,520 2498 60,261,836	2,107,317 10,4796 1812
CF Vil Single Units Ur detached Ge CF Vil	F Region la Rica hited States eorgia F Region	62,701 1215 NA NA	82,520 2498 60,261,836	10,4796 1812
Vil Single Units Ur detached Ge CF Vil	la Rica hited States eorgia Region	1215 NA NA	2498 60,261,836	1812
Single Units Ur detached Ge CF Vil	nited States eorgia - Region	NA NA	60,261,836	
detached Ge CF Vil	eorgia Region	NA		69,865,957
CF	Region		1 638 847	
Vil		48 113	1,000,047	2,107,317
	la Rica	40,110	57,249	76,812
Single Unite Un		1044	1676	1405
	nited States	NA	5,373,235	6,447,453
attached Ge	eorgia	NA	1638847	2,107,317
CF	Region	670	792	1,229
Vil	la Rica	15	55	8
Double Units Ur	nited States	NA	4,904,645	4,995,350
Ge	eorgia	NA	89,368	90,370
CF	Region	2425	2492	2745
Vil	la Rica	101	129	164
3 to 9 Units Ur	nited States	NA	9,819,483	10,909,268
Ge	eorgia	NA	276,220	305,920
CF	Region	3330	5211	5880
Vil	la Rica	23	155	129
10 to 19 Units Ur	nited States	NA	4,894,415	4,636,717
Ge	eorgia	NA	138,876	129,276
CF	Region	749	1,773	1,679
Vil	la Rica	0	27	27
20 to 49 Units Ur	nited States	NA	3,862,110	3,873,383
Ge	eorgia	NA	55,704	57,825
CF	Region	244	356	676
Vil	la Rica	0	0	18
50 or more Ur	nited States	NA	4,388,824	6,134,675
Ge	eorgia	NA	38,103	97,628
CF	Region	596	245	818
Vil	la Rica	6	0	8
Mobile Home or Ur	nited States	NA	7,398,191	8,779,228
Trailer Ge	eorgia	NA	305,055	394,938
CF	- Region	6,574	13,830	14,872
	la Rica	26	456	53

Exhibit 49: Villa Rica Types of Housing

The 2000 Census shows a decrease in housing units between 1990 and 2000. However, this is not indicative of a decrease in population but rather, reflects a deannexation of property from the corporate limits of Villa Rica.

Condition and age of housing is an important consideration when planning to decrease the number of substandard housing in the city. The following is a comparison of standard and substandard housing in the state, county and city. As expected the standard housing numbers increase and substandard housing numbers decrease. The exception is the state numbers. Substandard housing increased 4% from 1990 to 2000.

Category	Location	1980	1990	2000
Complete	Georgia	NA	2609956	3252197
Plumbing	CF Region	58,589	81,116	103,719
Facilities	Carroll	19,439	27,375	33,815
	Douglas	17,460	26,383	34,713
	Villa Rica	1129	2451	1796
Lacking	Georgia	35,769	28,462	29,540
Plumbing	CF Region	4256	1404	1077
Facilities	Carroll	882	361	252
	Douglas	298	112	112
	Villa Rica	86	47	16

Exhibit 50: Villa Rica Condition of Housing (1980-2000)

Source: U.S Census Bureau

Exhibit 51: Villa Rica Age of Housing (1980-2000)

Category	Location	1980	1990	2000			
1939 or Earlier	Georgia	296,662	212,294	192,972			
	CF Region	14,997	10,516	9,344			
	Carroll	3,835	2,768	2,517			
	Douglas	1223	742	800			
	Villa Rica	328	251	233			

Source: U.S. Census Bureau

Villa Rica shows a marked decrease in substandard housing from 1980 to 2000. This is a decrease of 19% over the last twenty years.

Category	Location	1980	1990	2000
Total Households	Georgia	1,869,754	2,366,615	3,007,678
	Region	NA	7,119	7,575
	Carroll	NA	27,736	34,067
	Douglas	NA	26,495	34,825
	Villa Rica	NA	2,498	1,769
Housing Units	Georgia	NA	271,803	275,368
Vacant	Region	NA	7,119	7,575
	Carroll	NA	2,366	2,499
	Douglas	NA	2,218	2,003
	Villa Rica	NA	166	134
Housing Units	Georgia	1,215,206	1,536,759	2,029,293
owner Occupied	Region	41,109	52,603	70,157
	Carroll	13,297	17,616	22,259
	Douglas	14,067	18,880	24,555
	Villa Rica	772	1,553	862
Housing Units	Georgia	654,548	829,856	977,076
Renter Occupied	Region	17,736	22,798	27,064
	Carroll	5,705	7,754	9,309
	Douglas	2844	5397	8267
	Villa Rica	400	779	616
Owner to Renter	Georgia	NA	0.32	0.51
Ratio of Vacancy	Region	NA	NA	0.842
	Carroll	NA	NA	0.54
	Douglas	NA	NA	0.74
	Villa Rica	NA	NA	1.18
Owner Vacancy	Georgia	NA	2.36	2.24
Rate	Region	NA	NA	2.178
	Carroll	NA	NA	2.03
	Douglas	NA	NA	2.31
	Villa Rica	NA	NA	12.49
Renter Vacancy	Georgia	NA	12.36	8.46
Rate	Region	NA	NA	7.552
	Carroll	NA	NA	8.38
	Douglas	NA	NA	8.66
	Villa Rica	NA	NA	14.44

Exhibit 52: Villa Rica Housing Occupancy Characteristics (1980 – 2000)

Source: U.S. Census Bureau

The following tables indicate the median housing costs for the state region, Carroll County, Douglas County and Villa Rica. These numbers indicate that housing costs in the Chattahoochee-Flint region are below state averages and that Villa Rica's housing costs are below those in the region. Villa Rica's median property values are 18% below the Georgia average.

Location	1980	1990	2000
Georgia	\$23,100	\$71,278	\$100,600
Region	NA	\$58,057	\$94,154
Carroll	\$32,000	\$60,200	\$87,800
Douglas	\$41,100	\$73,400	\$99,600
Villa Rica	\$22,500	\$53,400	\$82,200
Georgia	\$153	\$365	\$505
Region	NA	\$270	\$388
Carroll	\$126	\$351	\$378
Douglas	\$189	\$549	\$620
Villa Rica	\$85	\$338	\$350
	Georgia Region Carroll Douglas Villa Rica Georgia Region Carroll Douglas	Georgia \$23,100 Region NA Carroll \$32,000 Douglas \$41,100 Villa Rica \$22,500 Georgia \$153 Region NA Carroll \$126 Douglas \$189	Georgia\$23,100\$71,278RegionNA\$58,057Carroll\$32,000\$60,200Douglas\$41,100\$73,400Villa Rica\$22,500\$53,400Georgia\$153\$365RegionNA\$270Carroll\$126\$351Douglas\$189\$549

Exhibit 53: Villa Rica Housing Costs (1980-2000)

Source: U.S. Census Bureau

The following tables show the extent that homeowners and renters are cost burdened. Any household that spends more than 30% of their total monthly income on home costs (mortgages, utilities, insurance, etc.) is considered to be cost burdened. Expenses exceeding 50% of income indicate severely cost burdened households.

Legend and Special Notes:

The data tables are broken out by the following income categories: 0 to 30% MFI (MFI30), 31 to 50% MFI (MFI50), 51 to 80% MFI (MFI80), and 81% of MFI and over (MFI100). HUD's adjusted median family incomes (MFI) are estimated for a family of four. HUD defines "any housing problems" as cost burden greater than 30% of income and/or overcrowding and/or without complete kitchen or plumbing facilities.

The Affordable Housing Units table provides an estimate of housing units "affordable" to Georgia's households. "Affordable" units are defined as units for which a renter would pay no more than 30% of their income for rent and an owner would pay less than or equal to 30% of annual gross income for annual owner costs.

HUD household types are defined as (1) elderly: one or two member households (family or nonfamily) with head or spouse age 62 or older; (2) small related households: non-elderly family households with two to four members; and (3) large related households: family households with five or more members. Subtracting these three household types from total households may derive data on "other" households. "Other" households are defined as households of one or more persons that do not meet the definition of an elderly household, small-related household.

Please note the following disclaimer regarding this data on HUD's State of the Cities Data System web site:

Users of these data should be aware that the Census Bureau uses a special rounding scheme on

special tabulation data. As a result, users should expect a small discrepancy between the data reported here and data reported from SF3 (such as total renter households). The SOCDS CHAS tables were created from very disaggregated files. These "base files" are also available from HUDUSER. On each of the SOCDS CHAS tables, we [HUD] indicate the source base file.

Source: U.S. Department of Housing and Urban Development, Comprehensive Housing Affordability Strategy 2000.

Available online: http://www.huduser.org/datasets/cp.html

	Renter	Househo	olds		Owner	Househo		agiuo
	Total	Elderly	Small Family	Large Family	Total	Elderly	Small Family	Large Family
MFI 30								
Carroll	2,290	534	743	126	1656	760	538	127
Douglas	1,173	155	589	107	1,066	317	409	168
MFI 50								
Carroll	900	86	476	93	1237	264	602	201
Douglas	1,085	168	457	144	976	183	465	183
MFI 80								
Carroll	295	12	114	114	1,331	140	706	250
Douglas	865	50	386	128	1633	183	830	307
MFI 100								
Carroll	122	0	18	96	867	88	488	164
Douglas	161	10	55	47	1607	129	984	306
MFI								
Total								
Carroll	3,602	632	1352	429	5,098	1253	2332	741
Douglas	3,284	383	1,487	426	5,285	810	2,690	964

Exhibit 54: Households with Housing Problems—Carroll and Douglas

Exhibit 55: Households with Cost Burden 30-50%--Carroll and Douglas

	Rente	r Househ	olds		Owner	Househol	ds	- ig.u.c
	Total	Elderly	Small Family	Large Family	Total	Elderly	Small Family	Large Family
MFI 30								
Carroll	734	194	275	22	436	269	110	18
Douglas	187	40	98	0	172	94	54	14
MFI 50								
Carroll	646	54	345	24	694	170	342	91
Douglas	664	89	368	24	450	91	243	46
MFI 80								
Carroll	126	12	74	0	912	80	565	89
Douglas	633	50	298	18	1,222	183	633	148
MFI 100								
Carroll	24	0	14	10	912	80	565	89
Douglas	46	0	15	0	1,061	129	749	37

	Renter	Househo	olds		Owner	Househo	lds	
	Total	Elderly	Small Family	Large Family	Total	Elderly	Small Family	Large Family
MFI 30								
Carroll	1,326	320	382	48	1,145	479	420	55
Douglas	819	115	412	48	833	219	345	107
MFI 50								
Carroll	124	28	73	0	440	94	251	14
Douglas	249	69	46	20	473	92	208	109
MFI 80								
Carroll	0	0	0	0	212	52	88	14
Douglas	25	0	0	0	248	0	164	28
MFI 100								
Carroll	0	0	0	0	73	8	33	14
Douglas	0	0	0	0	99	0	67	15

Exhibit 56: Household with Cost Burden >50%--Carroll and Douglas

Exhibit 57: Affordable Housing Units—Carroll and Douglas

	Renter	Units			Owner Units				
	Total	0-1	2 BR	3+	Total	0-1	2 BR	3+	
		BR		BR		BR		BR	
MFI 30									
Carroll	3,635	718	1,497	1,420	N/A	N/A	N/A	N/A	
Douglas	1,362	202	498	662	N/A	N/A	N/A	N/A	
MFI 50									
Carroll	5,169	1,347	2,243	1,579	11,770	232	2,811	8,727	
Douglas	2,254	321	1,002	931	9,298	229	1,564	7,505	
MFI 80									
Carroll	1,131	189	460	482	6,797	157	973	5,667	
Douglas	5,039	1,370	2,284	1,385	10,428	129	734	9,565	
MFI 100									
Carroll	140	34	78	28	4,211	66	402	3,743	
Douglas	362	220	44	98	5,421	92	423	4,906	

		IDIL 30. IN	enter anu	Owner I	iousenoid—Carroli and Douglas					
	Renter	Househo	olds			Owner I	lousehol	ds		
	Total	Elderly	Small	Large		Total	Elderly	Small	Large	
			Family	Family			-	Family	Family	
MFI 30			-	-				-		
Carroll	3,111	812	994	144		2,778	1,447	789	153	
Douglas	1,560	297	696	142		1,581	620	492	183	
MFI 50										
Carroll	2,032	236	1,035	225		2,572	976	1,041	288	
Douglas	1,327	242	596	148		1,921	737	730	215	
MFI 80										
Carroll	1,876	110	970	189		4,702	1,026	2,502	615	
Douglas	2,116	104	1,007	270		4,510	1,018	2,213	622	
MFI 100										
Carroll	2,170	146	1,186	256		12,209	1,624	8,139	1,203	
Douglas	3,289	157	1,401	253		16,571	1,718	11,182	1,867	
Total										
Carroll	9,189	1,304	4,185	814		22,261	5,073	12,471	2,259	
Douglas	8,292	800	3,700	813		24,583	4,093	14,617	2,887	

Exhibit 58: Renter and Owner Household—Carroll and Douglas

Many factors affect housing stock for any jurisdiction. The following tables show some of the factors that affect housing prices in Villa Rica.

Villa Rica city: Population	Villa Rica city: Population by Age								
Category	1980	1990	2000						
TOTAL Population	3420	6542	4134						
0 – 4 Years Old	247	536	318						
5 – 13 Years Old	496	1029	479						
14 – 17 Years Old	312	333	226						
18 – 20 Years Old	181	365	162						
21 – 24 Years Old	205	372	312						
25 – 34 Years Old	366	1201	477						
35 – 44 Years Old	396	768	621						
45 – 54 Years Old	359	713	475						
55 – 64 Years Old	351	521	366						
65 Years and Over	507	704	453						

Exhibit 59: Villa Rica Population by Age

The City of Villa Rica's population is aging. In 1980 the over 65 population was 507, in 1990 it was 704. The number appears to decrease in 2000 but the numbers are skewed due to a deannexation of property.

Villa Rica city:	Villa Rica city: Household Income Distribution									
Category	1980	1990	2000							
TOTAL Households	1172	2346	1469							
Income less than \$5000	187	304	NA							
Income \$5000 - \$9999	214	190	224							
Income \$10000 - \$14999	208	288	126							
Income \$15000 - \$19999	187	245	162							
Income \$20000 - \$29999	121	481	216							
Income \$30000 - \$34999	65	222	74							
Income \$35000 - \$39999	51	217	114							
Income \$40000 - \$49999	19	207	122							
Income \$50000 - \$59999	14	80	133							
Income \$60000 - \$74999	4	79	140							
Income \$75000 - \$99999	12	33	111							
Income \$100000 or more	6	0	47							

Exhibit 60: Villa Rica Household Income Distribution

Exhibit 61: Carroll County Average Household Size

Carroll County: Average Household Size										
Category	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
Persons per Household	2.850	2.750	2.710	2.690	2.660	2.620	2.600	2.590	2.600	2.620

Household size for Carroll County has decreased over the last twenty years and is projected to continue decrease through the planning period. This means Villa Rica can expect a general decrease in house size that will result in smaller houses, but the per square foot cost is increasing. There should be no appreciable decrease in housing prices.

Carroll County:	Averag	le Wee	kly Wa	iges							
Category	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
All Industries	\$333	\$353	\$367	\$375	\$387	\$392	\$406	\$429	\$444	\$471	\$492
Agri, Forestry, Fishing	246	242	243	269	268	296	NA	NA	NA	341	NA
Mining	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Construction	NA	388	407	412	415	428	483	508	525	548	554
Manufacturing	NA	389	401	408	429	444	465	504	522	563	608
Transportation, Comm, Util	NA	519	520	554	542	533	570	573	637	615	625
Wholesale	NA	423	447	465	466	NA	455	NA	NA	NA	NA
Retail	NA	203	213	224	226	233	229	236	239	254	268
Financial, Insurance, Real Estate	NA	419	430	437	469	476	495	509	542	543	516
Services	NA	333	355	372	389	381	406	433	446	468	483
Federal Gov	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
State Gov	NA	NA	NA	NA	NA	NA	466	495	490	504	513
Local Gov	NA	NA	NA	NA	NA	NA	362	383	NA	NA	NA

Exhibit 62: Carroll County Average Weekly Wages

Exhibit 63: Villa Rica Commuting Times

Villa Rica city							
Category	1980	1990	2000				
TOTAL Population by Travel Time to Work	NA	2741	NA				
Under 10 Minutes or Work at Home	NA	573	NA				
10 to 29 Minutes	NA	871	NA				
30 to 59 Minutes	NA	1007	NA				
60 to 89 Minutes	NA	274	NA				
90 Minutes or More	NA	16	NA				
Aggregate Travel Time	NA	NA	NA				

Commuting patterns for the City of Villa Rica indicate the average commuting time is thirty to fifty-nine minutes. This is an indication that most people who live in Villa Rica do not work in the city.

The City of Villa Rica predominant employment is the service industry, government and manufacturing. These predominant job categories conform to trends in employment throughout Georgia and the U.S. The housing market appears to be in line with the wages, but as Villa Rica expands in to Douglas County commuting trends may change to accommodate people commuting to Atlanta.

SPECIAL NEEDS HOUSING

Villa Rica special needs populations include people living with AIDS, homeless, workers, victims of domestic violence and the elderly.

People living with AIDS in Georgia number approximately 23,575. The Atlanta metropolitan statistical area (which includes Villa Rica) reported 16,423 cumulative AIDS cases among residents in June 2001. The Centers for Disease Control rates Atlanta as the tenth leading metropolitan area in the nation reporting the highest number of cumulative AIDS cases among residents.

According to the Georgia Department of Human Resources, "Georgia has the fourth fastest growing 60+ population and the third fastest growing 85+ population in the United States". The population of 60 and older is expected to increase 52.6 % between 1990 and 2010. In Census 2000, persons 65 and over occupied 16.5 % of housing units in Georgia. Individuals with AIDS in the city of Villa Rica do not have designated housing or living centers. Yet, according to the Carroll County Health Department there is not a significant AIDS population that would warrant a specialized housing.

The Carroll County Domestic Violence Center and Emergency Shelter service the victims of Domestic Violence and homeless individuals for Villa Rica. This facility is located at an undisclosed location in the City of Carrollton. It is a complete gated living center with 24-hour staff and supervision. The Shelter receives funds from local, state and federal sources. The shelter is typically able to house up to 30 residents; however this number is dependent on the case and size of families admitted. In special circumstances homeless individuals are issued vouchers to stay in a local hotel. This stay will not typically exceed five days. The shelter also holds classes and workshops to assist individuals outside of the shelter who are or were victims of domestic violence.

The shelter also holds GED classes to help local individuals obtain their GED to broaden their education and career opportunities. The caseload and number of persons serviced at the Shelter varies from fiscal year to fiscal year. Yet, the shelter will usually have serviced over 200 residents in a year.

The elderly residents within Villa Rica do not have any designated assisted living units or nursing homes. This is a growing but neglected segment of the population. For the elderly residents in Villa Rica they can receive Hospice or Home health care in their already exiting homes.

ASSESSMENT OF CURRENT AND FUTURE NEEDS

The number of housing units in the City of Villa Rica continues to grow and expand as metro-Atlanta continues to grow and edge westward down Interstate 20. The rapid pace in the past five years will continue as the projections forecast. Also, the city's number of building permits has rapidly increased in the past few years. As evident from the above tables Villa Rica has a variety of housing options. From the tables above it can be noted that traditionally single-family dwelling has dominated the housing market. However, with the metro area expanding the multi-family units are beginning to increase, especially near the Interstate 20 corridors. In the rent years the increased development offers more options for housing for all families within the city of Villa Rica.

Initiating or expanding housing directed for them could better serve the populations with special needs in Villa Rica. Of the special need populations within the city, Elderly, persons with HIV/Aids and victims of domestic violence or homeless, all of them must go outside of the city to find specified housing. The three special need groups that warrant housing are the elderly and the victims of domestic abuse and homeless individuals. There are several financial tools, Federal, State and local that could fund such an initiative, HUD Homeless Continuum of Care Programs, AIDS HOPWA Programs and Emergency Shelter Grants on federal and state levels.

The city of Villa Rica would benefit from the availability of an assisted living complex or a nursing home within the City limits. This would also create more skilled and professional jobs that would aid in helping residents stay within the city to work. This would lessen the bedroom characteristic of the town. The only barrier that exists to prevent a significant proportion of the community's nonresidents from living there is the fact that most of the land within the City has already been developed. Map 11 "Development Constraints" and Map 12 "Growth Alternatives" addresses some of these issues. There are areas, which are currently designated as Rural Development, which is vital to preserving the green space of the community. The city should minimize the conversion of undeveloped land at the urban periphery by encouraging redevelopment of sites closer to the downtown area or the existing urban core of the community. However, since most of the city has been developed Villa Rica should focus on developing desirable infill residential projects. This would also serve to increase the multifamily residences, which only composed 0.4% of Villa Rica's land use. Also, the city could enhance its existing supply of housing by identifying and encouraging innovative approaches to guality residential development, which expand housing opportunities and minimize public and private costs.

The housing element reveals that Villa Rica is a bedroom community to the nearby metro areas. Whereas this is good for the residential development the community must look at the economic effects of such. The low level of employment within the city forces its residents to commute outside the city limits. In the Villa Rica Downtown Master Plan the idea of incorporating mixed use areas would allow residential areas to generate economic vitality through the availability of jobs to all of those who live in the community.

The Villa Rica Downtown Master Plan will improve code enforcement programs and policy aimed at neighborhood revitalization and preservation. This will be implemented through the designation of housing districts while also incorporating architectural and landscaping design guidelines.

The cost burdened housing in Carroll County, in comparison to the local government's resident and non-resident workforces does not establish a deficiency in its economic base and housing affordability. Only a very small percent of the city's population is in the cost burdened group of 50% or more of their income. Most of those individuals appear to be part of the elderly population, which is not relative to the greater portion of the labor force. This would shift the focus back to providing specified housing for the aging population. Also, the data for both Douglas and Carroll County suggests that there is currently an adequate amount of affordable housing in comparison to individuals and households experiencing cost burdens.

SECTION SEVEN COMMUNITY FACILITIES

Community facilities describe a group of services and amenities that largely define the quality of life in a community. Factors such as public safety, sufficient public infrastructure and access to quality education, healthcare, cultural activities and recreation determine a community's ability to attract and retain residential, commercial and industrial development. The economic vitality of a community is closely tied to the level of services provided to its citizens

The City's rapid population growth poses two challenges in providing adequate services. First, increased demand for additional facilities and services is straining the City's ability to provide sufficient capacity. Secondly, shifting demographics create intensified needs for specific types. For instance, seniors will demand increased medical services, passive recreational opportunities and public transportation. Increases in families with young children will generate demands day care facilities, schools, active recreational opportunities and a mix of transportation options.

This section evaluates Vila Rica's existing facilities, describes community expressed needs, and identifies key issues.

KEY ISSUES FACING PUBLICLY FUNDED INFRASTRUCTURE:

- Defining the utility service area
- Timing growth to coincide with capacity (building permits)
- Develop a equitable and affordable plan to fund infrastructure expansion

WATER SUPPLY AND TREATMENT

Villa Rica operates its own water distribution system. The primary source of water for Villa Rica is the Upper Little Tallapoosa River (ULTR). The city maintains two intakes: one on Cowen's Lake which is fed by Astin Creek, and one on Lake Paradise, which is fed by the Little Tallapoosa River.

Frank Smith Water Treatment Plant, located on North Van Wert Road, has a permitted capacity of 1.7 million gallons daily. The plant uses coagulation, flocculation, sedimentation, filtration, and disinfection to treat the water. Actual production ranges from .4 MGD in the winter to 1.4 MGD in the summer. Villa Rica also buys between 0.3MGD and 0.65MGD of water from both Douglas Water and Sewer Authority and Carroll County Water Authority. The water system maintains four storage tanks (**Map 7**), with a total storage capacity of 2.87 MG.

EXhibit 64: Villa Rica	water Tanks
Storage Tank	Capacity
Carrollton Highway	.41 MG
Hickory Level	1.66 MG
Sunset Road	.3 MG
Mirror Lake	.5 MG
Total Storage Capacity	2.87 MG

Exhibit 64: Villa Rica Water Tanks

In 2004, Villa Rica's water system served a total of 4,442 customers. There were 3069 residential customers inside the city, 839 residential customers outside the city, 20 commercial customers outside the city, 446 commercial customers inside the city, and 68 industrial customers inside the city. The city does not intend to offer future service outside the Urban Growth Area. Estimated needs are 2.29 MGD by 2008.

Exhibit 65: Villa Rica Projected Water Customers and Needs, 2005-2008

	2005	2006	2007	2008
Customers*	6,461	7,272	8,985	10,133
Water Needs	1.77MGD	1.93MGD	2.11MGD	2.29MDG

*Based on build out of projects approved by City Council

KEY ISSUES:

- Increasing storage capacity by 2010
- Increase and secure water supply

WASTE WATER TREATMENT

Villa Rica's Wastewater Department operates and maintains the city's sewer and treatment system (**Map 7**). There are two water treatment plants. The main facility, West Water Pollution Control Plant, is located in the City's Industrial Park. This plant has a total treatment capacity of .78 MGD and a current demand of 0.38 MGD. The North Water Pollution Control Plant located near Mirror Lake has a total treatment capacity of .52 MGD and a current demand of .30 MGD.

Exhibit 66: Villa Rica Wastewater Treatment Plants							
Current Demand	Capacity						
.36 MGD	.78MGD						
.30 MGD	.52MGD						
.66 MGD	1.3 MGD						
	Current Demand .36 MGD .30 MGD						

Exhibit 66: Villa Rica Wastewater Treatment Plants

Source: Villa Rica Public Works

Approximately 78% of Villa Rica residents and all commercial and industrial development are served by this system. There are a limited number of connections outside the city limits and Urban Growth Area. The City has no plans to provide sewer outside the UGA. Although the city would like to connect all residents to sewer, there are no immediate plans to do so. Septic systems are allowed for new development on ½ acre lots or larger.

Although the table above shows that the system is currently operating at approximately half its capacity, the population of Villa Rica and demand for sewer service is growing faster than the city's plans for expansion. Coordinating growth with plant expansion to meet increased need for sewer service is one of the city's most important and urgent issues. As of January 2005, approved building permits exceeded the city's sewer capacity. The projected sewer demand at build out is 5 MGD.

The City has already competed a Watershed Assessment and Management Plan (*West Georgia Watershed Assessment and Management Plan, 2003*, see Natural Resources Element). Georgia's Environmental Protection Division requires municipalities to conduct such an assessment as part of the permitting process for the expansion of water plants or the construction of new facilities. Assessment sampling downstream of Frank Smith Water Plant detected low dissolved oxygen (DO). The plan cautioned that although the probable cause of low DO levels is a natural phenomenon, further monitoring is necessary to rule out the possibility that the Villa Rica Water Pollution Control Plant is contributing to the problem. The City will likely have to address this issue in the permitting process.

SOLID WASTE MANAGEMENT

Villa Rica contracts with a private provider (Waste Management Inc) for curbside residential solid waste pick-up. The provider transfers waste to the Carroll County Transfer Station for final disposal. City residents also have disposal access at a county-run waste convenience center located on Dyer Road south of Villa Rica

on Highway 61. The Dryer Road facility also recycles paper products, glass, and aluminum.

Citizens have expressed the need for a recycling center within the city.

STORMWATER MANAGEMENT

In 2001 the Metropolitan North Georgia Water Planning District (MNGWPD) was formed to develop plans for stormwater and wastewater management, water supply and conservation in a 16-county area that includes Douglas County. As part of the MNGWPD, the City of Villa Rica developed a Stormwater Management Program that incorporates regulatory actions, educational outreach, and monitoring activities to minimize the impact of stormwater.

Goals and strategies of the Villa Rica program are outlined in its Notice of Intent, which was filed with the Environmental Protection Division in 2004. The city has adopted the following stormwater management ordinances:

- Post Development Stormwater Management for New Development and Redevelopment Ordinance
- Floodplain Management/ Flood Damage Prevention Ordinance
- Conservation Subdivision / Open Space Development Ordinance
- Illicit Discharge and Illegal Connection Ordinance
- Litter Control Ordinance
- Stream Buffer Ordinance

The City does not own or operate any detention facilities or storm drains. It maintains stormwater conveyance ditches in the right of way throughout the City. Stormwater outfalls have not been mapped.

GENERAL GOVERNMENT

Villa Rica City Hall is located on 571 Bankhead Highway. The 5,000 square foot facility was built in 1989 and houses the City Administration Office, City Clerk, Community Development (Planning and Zoning and Building and Codes Enforcement), Downtown Development, Finance, Payroll, and Utilities Billing.

The City Hall building is in excellent condition but is currently at maximum capacity. There has been a 25% increase in the number of employees working in the building since 2000 (from 10 to 15). The city intends to build a new facility in the future but presently has no specific plans for expansion. The post office, library and recreation buildings each occupy separate buildings.

The City in is great need for a new city hall building and/or site. It is at maximum functional capacity and in need for expansion or relocation. No formal plans have been made at this time in alleviating this situation.

RECREATIONAL FACILITIES

The Villa Rica Recreation Department operates five parks comprising over 200 acres. The table below shows the type and number of facilities at each park. The department employs 10 fulltime and eight part time staff, as well as instructors for various classes. The City is in the process of developing three new parks. Pine Mountain Gold Museum, opening in late 2005 will have walking trails, a pavilion and a museum. Spring Lake Nature Park and a park designated for batting cages will open in 2006.

The City's rapidly growing population is creating increased demand for recreation. **Exhibit 67** shows how its current level of service compares with the National Parks and Recreation Association Level of Service Standards. Current facilities are relatively new and in good condition. Use does not exceed capacity except for parking deficiencies at both Gold Dust and Fullerville. **Exhibit 68** shows the type and number of facilities needed to meet standards based on 2015 population projections.

The recreation department also offers organized athletic programs, classes and special events. As is illustrated in **Exhibit 69** there has been a large increase in participation in nearly all programs. Those programs designed specifically for school aged children have had the largest increases. This is consistent with population projections. Large enrollment in new programs **Exhibit 70** indicates a high level of interest by the population.

Facilities											
	Acres	Ball Fields	Soccer Fields	Basketball courts	Tennis Courts	Football Fields	Gymnasium	Rec. Building	Picnic Tables	Walking Trails	Boat Ramps
Powell Park	13	2						1			
Gold Dust Park	31	4		2	3		1	1		1 mile	
Cleghorn Street Park	10			1							
Fullerville Soccer Complex	21		4								
Lamar Moody Recreation Area	130										1
Bicentennial Park									1		
Prospector's Park									1		
Villa Rica Civic Center & Sports Complex	48	10				1					
TOTAL	253	16	4	3	3	1	1	2	2	1 mile	1

Exhibit 67: Villa Rica Existing Recreational Facilities 2004

Facility Type	Existing	National Standard	Standard Met	Additional Facilities Needed
Ball fields	6	1 per 1,500	No	1
Soccer Fields	4	1 per 4,000	Yes	
Basketball	3	1 per 3,000	No	1
Courts				
Tennis Courts	3	1 per 1,500	No	4
Football Field	1	1 per 4,000	No	1
Picnic Tables		1 per 125		
Walking Trails	1mile	1mi. per	No	1/4mi
		7,500		
Boat Ramp	1	1 per	Yes	

Exhibit 68: Villa Rica Recreational Needs Based on 2005 Population Estimate

Estimated 2005 population – 10,264

Facility Type	Existing	Additional Facilities Needed in 2015
Ball fields	6	9
Soccer Fields	4	2
Basketball	3	5
Courts		
Tennis Courts	3	12
Football Field***	1	5
Picnic Tables		
Walking Trails	1mile	2 miles
Boat Ramp	1	

Exhibit 69: Villa Rica Recreational Needs Based on 2015 Population Estimates

Program	Regis Partic	Percent	
	2000	2004	increase
Spring Track	11	52	372%
Summer Day Camp	95	237	150%
Spring Soccer (Age 4-16)	92	236	156%
Football	109	175	60%
Cheerleading	75	111	48%
Gymnastics	618	771	25%
Baseball / Softball	347	381	9.8%
Youth Basketball	211	212	>1%
Adult Basketball	120	TBA	TBA
Karate	234	221	-5%
Cultural Arts	180	104	-42%
PM Aerobics	90	41	-54%
Am Aerobics	102	27	-73%

Exhibit 70: Villa Rica Recreation Program Enrollment, 2000-2004

Exhibit 71: New Program Enrollment 2004

Program	Enrollment
Fall Soccer (Age 4-19)	281
Start Smart	28
Yoga	40
Adult softball	216
Summer track	94

As the City endeavors to meet the recreational demands of its growing population the following issues should be considered:

- Establishing level of service goals that reflect public demand and City's fiscal abilities
- Increasing staff, particularly maintenance staff as facilities expand
- Establishing small parks throughout the city (community vision)
- Promoting health through active & passive recreation
- Creating trails between parks, schools and other public facilities

LIBRARIES

The Villa Rica Public Library is part of the West Georgia Regional Library System and part of the statewide PINES network, which allows patrons to borrow materials from participating libraries across the state. The library primarily serves City residents, which comprises the majority of the 8,200 registered patrons as shown in **Exhibit 71 (c)**.

The library is housed in a 5,000 square foot building at 70 Horace Luther Drive. Its resources consist of 24,424 volumes, four on-line public access card catalogue computers, 10 public-access Internet computers, one microfilm reader, two listening stations and one meeting room. The library currently employs five full-time and two part-time staff. This staff has handled 40,883 reference questions during the fiscal year 2004, **Exhibit 71 (c)**. During the first six months of the fiscal year (2005) they have already handled 64,315 reference questions. Also, the library and its staff offer several programs as resources for the community. These programs include a preschool story hour, infant and parent activity time summer programs for school aged children and book discussion groups. Library Program attendance often exceeds the capacity of the library's meeting room, causing an overflow of participants into the main library area, **Exhibit 71 (b)**.

The building is currently at maximum capacity. There is no space for collection expansion, displays or additional work and storage areas One can note from **Exhibit 71 (a)**, that there was not a substantial increase in the volumes added from the fiscal years 2001-2005. this figure stands in contrast to the numbers of patrons and patron visits that have increased over the same time period as demonstrated in **Exhibit 71 (c)**.

Furthermore, with the library building being at full capacity there is no room for additional computers, which is in particularly high demand. As illustrated **in Exhibit 71 (d)**, the need for public access computers is increasing. When the library first offered public access to the Internet it began with eight computers to ten public access computers, even though computer use has significantly increased over the past years.

Exhibit 71 (a)			Exhibit 71 (b)		
FY	Volumes	Community	FY	Programs	Program
(July 1 – June 30)		Meeting	(July 1 – June 30)		Attendance
2000	13274		2000	97	1267
2001	20441		2001	108	3053
2002	22345		2002	40833	2521
2003	23139	60	2003	148	4447
2004	24089	72	2004	128	3018
2005*	24814	45	2005*	57	1381
*The fiscal year 2005 still had six months remaining when this figure was calculated			*The fiscal year 2005 remaining when this f		

Exhibit 71 (c)

FY (July 1 – June 30)	Registered Patrons	Patron Visits	Reference Questions				
2000	5897	46473	8511				
2001	8242	53968	13247				
2002	3225	55889	17432				
2003	5067	63530	34321				
2004	6806	67002	40883				
2005*	8200	61788	64315				
*The fiscal year 2005 still had six months remaining when this figure was calculated							

Exhibit 71 (d)

FY (July 1 – June 30)	Computer Use	Number of Public Access Computers
1999	1473	8
2000	2406	8
2001	4800	8
2002	6102	10

CULTURAL FACILITIES

Cultural facilities are limited but expanding in Villa Rica. There is a small stage at Prospector's Park, which is used for summer concerts. Pine Mountain Gold Museum, which is scheduled to open in 2005, will have an interpretive museum and pavilion.

During the Public Visioning portion of this plan participants repeatedly expressed the need for better access to the arts. Most wanted the City to provide venues for the arts such as building a new arts center or renovating an existing building to serve that purpose.

HEALTH FACILITIES

The Tanner Health System operates a 92- bed hospital in Villa Rica that serves northeastern Carroll County, western Douglas County, and southeastern Paulding County. The facility completed an expansion in 2004 and now offers a new birthing center, MRI, High Speed CT and PET Scanning as well as a full range of medical services. Tanner clients have access to 170 physicians practicing 34 specialties.

The Carroll County Health Department and West Georgia Family Medicine provide public health services. A county clinic is located at 158 Wilson Street. It is open two (2) days a week and employs three fulltime staff, including a nurse and a nutritionist. The staff administers the Federal Women Infant and Children Program (WIC) for approximately 500 clients and provides infant and children immunizations. The clinic refers clients to the Carrollton clinic for prenatal care, baby care, wellness and adult immunizations. It is not able to provide

interpreters for non-English speaking clients. Spanish speaking clients who do not speak English are also referred to the Carrollton Clinic, which employs five Spanish language interpreters. West Georgia Family Medicine located at 116 South Carroll Street also provides indigent care.

Tanner has a policy of expansion as demand rises. There are no plans, however to expand the County Health Department clinic in Villa Rica. Staff at the clinic reports a high demand for services and cliental that is increasingly multi-ethnic.

EDUCATIONAL FACILITIES

The Carroll County Board of Education (BOE) operates the schools serving Villa Rica. A small number of students living in the Mirror Lake Subdivision may elect to go Mirror Lake Elementary, which is operated by the Douglas County Board of Education. The Carroll BOE schools serving Villa Rica include four (4) elementary schools, two (2) middle and one (1) high school. **Exhibit 72** below shows the projected enrollment of the schools through 2010.

			Enro	llment	Projecti	ons		Growth
School	2005	2006	2007	2008	2009	2010	School Capacity	2005-2010
Ithica Elementary	393	417	442	468	496	526	600	34%
Sand Hill Elementary	744	781	820	861	904	950	625	28%
Bay Springs Middle School	670	704	739	776	814	855	775	28%
Glanton-Hindsman Elementary	596	638	682	730	781	836	650	40%
Villa Rica Elementary	568	608	650	696	745	797	550	40%
Villa Rica Middle	504	539	577	617	661	707	625	40%
Villa Rica High	1204	1288	1378	1475	1578	1689	975	40%
TOTAL	4679	4975	5288	5623	5979	6360	7800	

Exhibit 72: Villa Rica Projected School Enrollment Through 2010

Source: Carroll County Board of Education 2005

Serving the educational needs of the growing population will require building new schools. **Exhibit 73** shows student the capacity of each school and the amount over capacity based on enrollment projections. Carroll County BOE will complete its update of the Comprehensive Facilities Plan by 2006. At the time this data was collected, no information was available regarding the expansion of schools serving Villa Rica. The public cited a need for additional schools.

		Number of Students Over Capacity					
School	Capacity	2005	2006	2007	2008	2009	2010
Ithaca Elementary	600	0	0	0	0	0	0
Sand Hill Elementary	625	119	156	195	236	279	325
Bay Springs Middle School	775	0	0	0	1	39	80
Glanton-Hindsman Elementary	650	0	0	32	80	113	186
Villa Rica Elementary	550	18	58	100	146	195	247
Villa Rica Middle	625	0	0	0	0	36	82
Villa Rica High	975	229	313	403	500	603	714
TOTAL	4800	366	527	730	963	1265	1634

Exhibit 73: Students Over Capacity Through 2010

Source: Carroll County Board of Education 2005

PUBLIC SAFETY

Villa Rica Police Department is located at 101 Main Street at the Holt-Bishop Justice Center. The 16,000 square foot building, expanded in 2003, houses the Police Department as well as Community Service, the City Mechanic Shop, and the Municipal Court. The Police Department occupies approximately 10,000 square feet. The City has plans to renovate the old firehouse to house Community Service and future expansion. The department employs forty-nine (49) full-time officers with the following ranks and positions:

- 1 Chief
- 2 Majors
- 2 Captains
- 6 Sgt 1st Class
- 12 Patrol Officers
- 2 Detectives
- 2 Drug Task Force
- 2 School Resource Officers
- 2 ICE/CSU

The department also employs ten (10) support staff including four (4) receptionists, two (2) public safety Records Specialists, two (2) mechanics, one (1) Clerk of Court and three (3) Community Service personnel (prisoners). The department maintains a fleet of forty-six (46) vehicles including two (2) motorcycles.

Villa Rica's rapidly growing population combined with a recent sharp increase in property crime indicates that increasing staff and equipment will be an important

future concern. The City has added several grant-funded positions in the last five years and needs to consider increasing the budget to hire additional permanent staff. There are current staffing needs in the Police Department and the Municipal Court. The police department would also like to establish a Traffic Unit.

Capital equipment needs include a fully automated IT system and a wireless system (laptop computers for patrol cars), and high-speed traffic cameras at congested intersections.

During the public comment process, participants repeatedly cited a desire for community policing and the need for increased staff and equipment.

FIRE PROTECTION

Carroll County and Douglas County have an Automatic Aid Agreement, which assures that both departments are available to respond to all calls within the City. The 911 system routes calls to the fire station in the jurisdiction where calls originate. Staff at the receiving station then makes a determination regarding the need for additional help.

The Douglas County Fire Department provides first response fire and emergency services to the portion of Villa Rica that is in Douglas County. Station #2 built in 1998, is the primary station serving this area. It houses one engine truck, one 100' ladder truck and one Advanced Life Support (ASL) ambulance. Five to seven firefighters are at the station at all times. In 2004, the station responded to 299 calls with an average response time of 10 minutes 21 seconds. The county has an ISO (Insurance Services Organization) rating of 4/9.

By 2007 the county plans to complete construction of an additional fire station to serve the western part of the county, including Mirror Lake. The project will be funded through Douglas County SPLOST funds.

The Carroll County Fire Department provides first response fire and emergency services to the portion of Villa Rica that is in Carroll County. Station # 9 is located on Industrial Boulevard. It houses one 1,500 G/M pumper truck, one tanker truck and one ladder truck.

In 2003, Station #9 was the busiest engine company in the county. It received 1272 calls, or 21% of the calls for all twelve stations. The second and third busiest stations where Station #3 in Sand Hill and Station #2 in Temple. These three engine companies had 2948 responses, which represent 49.09% of the county responses in 2003. Due to the large demand for services in this area of the county, Carroll County Fire Department is building and additional station on Tumlin Lake Road in Villa Rica (source: *CC Fire and Rescue 2003 Annual Report*).

During the public comment process, participants cited the need for better fire protection in Douglas County, and increased staff and equipment in both counties.

EMERGENCY MEDICAL SERVICES

Carroll County Fire Rescue and EMA responds to medical emergencies within the twelve (12) response districts in Carroll County. On average, this service provides a medical first responder on the scene of each medical emergency within 6 minutes and 18 seconds.

EMERGENCY MANAGEMENT

The Carroll County Fire Department 2003 Annual Report states that:

"Villa Rica in under the protection of the Carroll County Emergency Management Agency, which is responsible for assisting in the protection of lives and property of Carroll County citizens in the event of natural or man-made disasters. Emergency Management anticipates emergencies, takes steps to prevent loss of life and property and provides quick response when disasters strike."

Attached to Carroll County Fire Rescue, the Emergency Management Agency was established by the commissioners to develop and implement a countywide program. The backbone of the countywide program is that all emergency agencies and support agencies work together. Emergency Management and other emergency agencies identify hazards that face each community and develop contingency plans for each potential emergency. Emergency Management provides the expertise; training and coordination that local governments need to protect lives and property.

LEPC stands for Local Emergency Planning Committee. The West Georgia Regional LEPC is composed of concerned citizens from the three west Georgia counties of Carroll, Haralson and Heard who represent business, industry, public safety, local government, law enforcement, fire, emergency management, emergency medical services, health departments, schools, environmental groups and the news media.

An LEPC is required to develop an emergency plan to educate, communicate and protect the local community during an accidental release of toxic chemicals. The LEPC also collects inventories of regulated chemicals each year and responds to inquiries from the public regarding community right-to-know issues. The LEPC acts as a source of information for anyone interested in chemical safety, including maintaining a library of Material Safety Data Sheet (MSDS) for chemicals in use in the three counties. "

COMMUNITY FACILITIES ISSUES

Map 8 shows the locations of Villa Rica's community facilities. The following items are a summary of the major issues that need to be addressed. They were identified during this assessment and by public comment.

- Securing an adequate future water supply
- Increasing wastewater capacity
- Expanding police department
- Increasing the amount of and access to parks
- Constructing a new, larger city hall
- Creating venues for the arts

SERVICE DELIVERY STRATEGY

In addition to the arrangements with Carroll County, Douglas County and other governments for community services described in this chapter, the City of Villa Rica is also part of the Carroll County Service Delivery Strategy adopted in September 1999.

The Carroll County Service Delivery Strategy is a well coordinated agreement for community services in Carroll County and its local governments of Bowdon, Bremen, Carrollton, Mt. Zion, Roopville, Temple, Villa Rica and Whitesburg. The strategy also includes the counties of Haralson, Douglas and other areas outside of Carroll County for the provision of certain services, such as airport and water. A copy of this Service Delivery Strategy is provided at the end of this chapter.

WATER PLANNING DISTRICTS

In 1998, the City of Villa Rica annexed the portion of Douglas County where the Mirror Lake subdivision is located. Douglas County is included in the Metropolitan North Georgia Water Planning District. When the planning district was formed in 2001, this portion of the City of Villa Rica which lies in Douglas County is now included in the water planning district.

The Metropolitan North Georgia Water Planning district is also mentioned on page 42 in the Natural Resources section of the plan.

OVERVIEW

Primary forces that shape future land use patterns include: existing land use, zoning, infrastructure, topography, hydrology, population growth and migration, economics, and cultural preference. This land use element:

- assesses existing land use and zoning patterns,
- considers various other land use constraints and opportunities,
- recommends a future land use pattern to accommodate projected population and employment growth; and
- establishes goals, objectives and policies to guide public and private decision-makers.

EXISTING LAND USE

Existing land use patterns define the community character, and influence future growth alternatives. As shown in **Map 9**, low-density residential development is the primary land use in and around the City of Villa Rica. Future land use in Villa Rica should be compatible with the existing low intensity land use patterns. This does not mean that all development should be on large lots. However, infill development must provide for compatible land use transitions where higher density development abuts existing large lot development.

Exhibit 74 lists the number of acres used for specific land use categories within the City and in the urban growth area (UGA) surrounding the City.¹ While much of the City (38.8%) currently is vacant or used for agricultural purposes, portions of this land are constrained by topography, floodplains wetlands, and fragmented ownership patterns. The larger tracts of vacant land within the City's UGA are experiencing stronger growth pressures, because parcel size and physical characteristics impose fewer constraints. After vacant land, the primary land uses within the City are residential (25.2 %) and industrial (4.9%) and commercial (6.4%).

¹ The Urban Growth Area is the area where the City intends to provide municipal sewer serviced over the next 20 years. See Policies LU-3a through LU-3b.

-	City		UGA	
Existing Land Use Categories	Acres	Percent	Acres	Percent
Single Family Residential	2,749.7	24.3%	1,249	34.9%
Multi Family Residential	29	0.4%	-	
Mobile Home	37	0.5%	111.6	3.1%
Commercial	511	6.4%	133	3.7%
Industrial	378	4.9%	-	
Public	590	7.2%	136.3	3.8%
Parks and Recreation	543	1.7%	86	2.4%
Utilities	5	0.1%	3	0.1%
Agricultural	324	4.1%	535	14.9%
Vacant	2,742	34.7%	1325	37.0%
Total	7,908		3,579	

Exhibit 74: Existing Land Use within the City and UGA

Source: Carroll and Douglas County GIS

Land use patterns are heavily influenced by public and private infrastructure investment. Major transportation routes, such as Highways 78 and 61, and the I-20 interchanges provide traffic and access needed to sustain commercial and industrial development. These corridors also connect residential development to employment and shopping opportunities. Municipal water and sewer facilities allow development at greater densities than can be supported in rural areas.

Villa Rica has adopted and enforces land use controls through zoning and subdivision regulations throughout its corporate limits. Carroll County applies similar zoning throughout the unincorporated areas, which includes the UGA. **Exhibit 75** lists the City and County zoning districts and the amount of land within each district as illustrated in **Map 10**. The prevalence of the PUD zoning illustrates the City's preference for that flexible district as a means of trading higher residential densities for improved design.

Zoning District	Acreage	Percentage		
City				
R14 – Multi-family	458	5.8%		
R20 – Single Family	1,052	13.3%		
RD – Rural Development	1,770	22.4%		
CR – Commercial-Residential	21	0.3%		
GC – General Commercial	600	7.6%		
LI – Limited Industrial	563	7.1%		
OI – Office and Institutional	106	1.3%		
PUD – Planned Unit Development	2,718	34.4%		
Unclassified	20	0.3%		
Subtotal	7,910			
UGA				
A – Agricultural	2,440	68.2%		
R	98	2.7%		
R1 – Low Density Residential	39	1.1%		
R2 – Medium Density Residential	240	6.7%		
R3 – High Density Residential	46	1.3%		
MHS – Manufactured Home Subdivision	183	5.1%		
HDDR – Higher Density Detached				
Residential	147	4.1%		
C – Commercial	153	4.3%		
OI – Office and Institutional	39	1.1%		
Unclassified	193	5.4%		
Subtotal	3,579			
Total	11,489			

Exhibit 75: Existing Zoning

Source: Carroll County Office of the Tax Assessor, 2002

Map 11 shows the primary constraints to development and redevelopment within Villa Rica and its UGA. These primary physical constraints include floodplains and wetland areas. Also shown in the map is a buffer area adjacent to the railroad tracks, which is a constraint for residential development. Throughout most to the City, the primary constraint is the availability of developable land. In the UGA, the primary development constraint is the lack of municipal sewer service.

LAND USE ISSUES

The following land use and issues must be addressed to retain and enhance Villa Rica's quality of life.

Coordinating City and County Growth - The City's comprehensive plan must be coordinated with the County. The comprehensive plan should address land use patterns and infrastructure within the City and in the extraterritorial areas where urban growth is anticipated. Carroll County has proposed the creation of an urban growth area to facilitate long-term municipal growth. The City will need to pursue an inter-governmental agreement to implement the County's proposal.

Ensuring a balanced land-use mix - Villa Rica and its UGA encompasses urban, suburban and rural areas that are under pressure for residential development to serve the housing demands from the Atlanta Metropolitan Area. Until recently, much of this demand was for starter homes that generate greater fiscal burdens than benefits for the City. The City's fiscal and economic health depends on balancing the mix of residential and non-residential land uses as well as increasing the proportion of up-scale housing.

Maintaining land use compatibility - Land use compatibility is essential to protect the integrity of existing neighborhoods, the viability of commercial operations and the desirability/function of industrial areas. To these ends, the Comprehensive Plan should identify effective strategies to:

Protect neighborhoods from encroachment of incompatible uses -This does not mean that all neighborhoods will be homogenous; it means that a combination of buffers, design features and limited land use segregation through zoning will ensure that transitions between different land uses will mitigate potential off-site impacts (noise, traffic, glare) that would infringe on neighbors. Neighborhood compatibility is an issue for both for in-city development and for existing rural residential developments in the UGA.

Protect industrial and commercial areas from encroachment - Villa Rica's emphasis on economic development mandates the protection of industrial and commercial areas from encroachment by uses that would interfere with industrial and commercial operations. These uses frequently generate noise, glare, traffic and odors that are undesirable to adjacent residents. By designating areas intended for these operations and protecting those areas from residential encroachment, the County can increase the long-term viability of these vital economic engines.

Planning for growth and development - Villa Rica has experienced extraordinary growth over the last 5 years. This has emphasized the importance of planning for and effectively managing growth through a growth management process that:

- Results in predictable and equitable development decisions;
- Involves stakeholders in decisions early in the planning and development process – at times when they can have the most significant impact on development patterns;
- Ensures that new development pays its proportional share of the costs of growth; and
- Facilitates effective enforcement of zoning, development and building codes.

Increasing Downtown Vitality – Public and private investment in the Downtown has improved its economic health in recent years. The City has the opportunity to support existing businesses through the creation of a downtown civic center and to support the private sector creation of a regional tourism attraction through infrastructure investments that improve access across between existing businesses and the Avanti site, which could be developed as a downtown auto museum.

FUTURE LAND USE

GROWTH ALTERNATIVES

Map 12 highlights existing vacant lands and shows the surrounding land zoning, which is largely consistent with existing land uses. The map also illustrates the potential mix of land uses throughout the City and its UGA. **Exhibit 76** generally describes each land use category; more detailed descriptions of allowed uses will be provided in the land development regulations. **Exhibit 77** summarizes existing plan designations and alternatives for each development area within the City and the desired character of each potential land use. The implications of each of the alternative are summarized in Appendix A of this Plan. The resulting development potential for undeveloped land for each of these alternatives is summarized in **Exhibit 78**. The City's Comprehensive Plan Steering Committee evaluated each of the potential land uses, considering the impacts of the development on the character of the community and the ability of the City to provide adequate facilities and services.

Category	Description
Residential	· ·
Suburban	Predominantly detached single-family units at gross density of 4 dwellings per acre or less. Higher densities may be achieved through bonuses established in the land development regulations. A mix of residential unit types may be allowed through the planned development process.
Medium Density	A mix of detached and attached single-family and multi-family dwellings at a gross density of 8 or fewer dwellings per acre. Higher densities may be achieved through bonuses established in the land development regulations.
 High Density 	Primarily attached single-family and multi-family dwellings at densities of up to 10 dwellings per acre. Higher densities may be achieved through bonuses established in the land development regulations.
Mixed Use	A mix of residential and commercial uses may be included within a single site. Sites may be used for a single use, but the land development regulations shall encourage the development of an integrated mix of residential and commercial uses on larger parcels.
Commercial	Retail and service uses, including stores, offices, restaurants and other uses that draw customers to the sites
Industrial	Production, warehouse, distribution and other business and public service uses that do not serve retail customers. These areas may include outdoor operations and storage.
Business Park	Includes commercial and industrial uses not primarily engaged in retail sales or service provision. These areas are intended to be developed to higher aesthetic standards than industrial areas, with limits placed on outdoor storage, display and operations.
Parks and Recreation	Includes public and private parks and recreation facilities for active and passive recreation.
Public/Quasi- Public	Includes schools, governmental offices, museums, religious facilities and other facilities providing governmental, educational, cultural or spiritual services for the public. Note that many of these facilities may be authorized under other land use categories pursuant to the City's land development regulations

Exhibit 76: Future Land Use Categories
	Existing Plan	Alternatives for Vacant Land				
Area	Designations	Uses	Intensity	Character		
Downtown	Commercial	Mixed use	Low to medium density at 1-2 stories	Walkable, interconnected land uses		
		Commercial	Medium to high intensity at 2-3 stories			
Neighborhood Infill	Residential	Exclusively residential	Reflect existing low densities	Reflect existing suburban and rural character		
		Residential and neighborhood services at specified locations	Medium densities with stringent compatibility standards	Urban street cross- sections with sidewalks, curbs and gutters. Buffering required where densities differ.		
North Dallas Road Corridor	Residential	Residential	Low to medium	Compatible mix of detached and attached units.		
		Mixed use	Medium	Compatible mix of detached and attached units with commercial development at major intersections		
		Commercial	Medium, with higher intensity near hospital	Mix of 1 and 2- story office, service and retail uses along the corridor		
Loop/NE Quadrant	Commercial	Commercial mix	Medium	Primarily retail, office and service uses		
		Commercial/industrial mix	Medium	Mix of retail, office and business park uses		
Mirror Lake Area –	Commercial and Unmapped	Residential	Low to high	Mix of residential types		
Unplatted		Mixed use	Medium	Mix of residential types with supporting retail, office and service uses		
E Hwy 8/78 Corridor	Industrial	Strip Commercial	Low to medium	Mix of all types of commercial uses lining roadway		

Exhibit 77: Alternatives for Vacant and Underdeveloped Areas

		Alternatives for Vac	cant Land	
		Nodal Commercial w/	Low to	Retail near
		interspersed service uses	medium	intersections, mix of service and
				other uses in coordinated centers with internal access to lots
Liberty Road Interchange	Commercial	Highway oriented commercial	Medium	Auto mobile- oriented highway services
		Highway oriented commercial	Medium	Truck facilities
		Business Park	Medium to high intensity at interchange	Business park with limited services at interchange
SE Quadrant	Residential, Public/Institutional and Unmapped	Single-family residential	Low to medium density	Primarily single family residential served by centralized utilities
		Mixed residential	Low to medium density	Mix of unit types interspersed with a usable system of green space
		Mixed use – predominantly residential	Low to medium density	Mix of unit types, with neighborhood commercial and service uses at key intersections
Hwy 61 South	Commercial and	Commercial	Medium	Strip commercial
Corridor	Unmapped	Mixed use	Medium	Centers accessed through frontage roads or parallel collectors
W Hwy 8/78 Corridor	Commercial and Industrial	Mixed use	Medium	Compatible mix of residential and service uses
		Commercial	Medium	Primarily small- scale commercial and service uses
		Commercial/industrial	Medium	Primarily small scale commercial and industrial uses
Van Wert Corridor	Unmapped	Mixed use	Medium	Compatible mix of residential and service uses
		Commercial	Medium	Primarily small- scale commercial and service uses
		Commercial/industrial	Medium	Primarily small scale commercial and industrial uses

Exhibit 76. Development Alternatives for Currently Ondeveloped Land						
	Alternative 1		Alternat	tive 2	Alternati	ve 3
Land Use	Acres	Percentage	Acres	Percentage	Acres	Percentage
Residential						
Rural	127	2.2%	291	5.1%	387	6.8%
Suburban	4,204	73.8%	3,778	66.3%	3,218	56.6%
Medium Density	225	3.9%	256	4.5%	598	10.5%
Sub-Total	4,556	80.0%	4,325	75.9%	4,203	73.8%
Mixed Use	425	7.5%	425	7.5%	846	14.8%
Commercial	303	5.3%	303	5.3%	234	4.1%
Industrial	8	0.1%	8	0.1%	8	0.1%
Business Park	378	6.6%	636	11.2%	406	7.1%
Public	27	0.5%	0	0%	0	0%
Total	5,697		5,697		5.697	

Exhibit 78: Development Alternatives for Currently Undeveloped Land

PREFERRED GROWTH ALTERNATIVE / FUTURE LAND USE

Map 13 illustrates the planning area boundaries for Villa Rica and its UGA. The future land uses for each of these planning areas are illustrated in Maps 14 through 18. Exhibit 79 shows the future land use mix for the City and its UGA. Exhibit 80 shows the additional residential development potential for each planning area that would result from build-out of currently vacant land.²

Population growth creates the need for shelter and demand for jobs, goods and services, both public and private. The amount of future non-residential development is in part a function of employment projects, population growth and the City's ability to capture regional demand for goods and services. **Exhibit 81** quantifies the non-residential acreage for each planning area of the City based on the vacant land supply and the future land use categories.

² These totals do not reflect platted, but undeveloped lots.

Land Use	City		UGA		Total		
Category	Acreage	Percent	Acreage	Percent	Acreage	Percent	
Residential							
Existing Residential	2,665	33.7%	891	24.9%	3,557	31.0%	
Existing Multi- Family	29	0.4%	0		29	0.2%	
Low Density	1,314	16.6%	1,652	46.2%	2,967	25.8%	
Medium Density	603	7.6%	337	9.4%	941	8.2%	
High Density	120	1.5%	55	1.5%	174	1.5%	
Mobile Home	37	0.5%	110	3.1%	147	1.3%	
Mixed Use	220	2.8%	73	2.0%	293	2.6%	
Commercial	1,165	14.7%	265	7.4%	1,431	12.5%	
Industrial	704	8.9%	56	1.6%	760	6.6%	
Public/Parks	1,046	13.2%	136	3.8%	1,182	10.3%	
Utilities	5	0.1%	3	0.1%	9	0.1%	
Total	7,908		3,579		11,487		

Exhibit 79: Future Land Use Mix

Exhibit 80: Residential Development Potential

Category	Acreage	Density Assumption	New Dwellings
Planning Area 1			
 Suburban Residential 	152.3	3.5 du/a	533
Medium Density	14.3	8 du/a	114
Mixed Use	26.1	6 du/a	157
Subtotal	192.7		804
Planning Area 2			
 Suburban Residential 	716.7	3.5 du/a	2,508
Medium Density	75.4	8 du/a	603
Subtotal	792.1		3,112
Planning Area 3			
 Suburban Residential 	344.9	3.5 du/a	1,207
Medium Density	258.9	8 du/a	2,071
Mixed Use	194.2	6 du/a	1,165
Subtotal	798.0		4,444
Planning Area 4			
 Suburban Residential 	2,161.2	3.5 du/a	7,564
Medium Density	504.6	8 du/a	4,037
Subtotal	2,665.8		11,601
Planning Area 5			
Rural Residential	267.1	1 du/a	267
Suburban Residential	416.8	3.5 du/a	1,459
Medium Density	239.5	8 du/a	1,916
Subtotal	923.4		3,642
Total	5,372.0		23,601

Exhibit 81: Non-Residential Development Potential						
Category	Acreage	FAR	New Square			
		Assumption	Footage			
Planning Area 1						
Commercial	105.9	0.15	691,944			
Industrial	143.5	0.1	625,029			
Subtotal	249.4		1,316,973			
Planning Area 2						
Commercial	130.9	0.15	855,484			
Industrial	23.4	0.1	101,774			
Subtotal	154.3		957,257			
Planning Area 3						
Mixed Use	194.2	0.15	1,268,929			
Subtotal	194.2		1,268,929			
Planning Area 4						
Commercial	447.7	0.15	2,925,180			
Subtotal	447.7		2,925,180			
Planning Area 5						
Commercial	95.5	0.15	624,291			
Industrial	214.3	0.1	933,704			
Subtotal	309.9		1,557,995			
Total	1,355.5		8,026,335			

Exhibit 81: Non-Residential Development Potential

As shown in **Exhibit 82**, the future land use plan provides more than adequate capacity to support projected population and employment growth through the year 2025.

	Capacity	Demand	Surplus Capacity
Residential	23,601	9,643	13,958
Residential	New dwellings	new dwellings	new dwellings
Commorgial	6,365,828		
Commercial	square feet		
Industrial	1,660,507		
inuusinal	square feet		

Exhibit 82: Summary of Development Potential

IMPLICATIONS OF FUTURE LAND USE ALTERNATIVES

DOWNTOWN

- a. Issues
 - i. Business vitality
 - ii. Parking
 - iii. Access across the railroad tracks
 - iv. Appearance
- b. Land Use Alternatives
 - i. Gateway Opportunities
 - Heavy Commercial the downtown currently is bracketed by some relatively heavy commercial uses on the north side of the east entry. The west gateway is defined by auto service businesses on small parcels with highly visible outdoor operations. These uses may be maintained, or phased out over time.
 - Civic Center the north side of downtown's eastern gateway is sparsely used and relatively unattractive. The vacant land presents an opportunity for a civic center and attractive green entryway. The extensive vacant land in this area could be used as a community park and gathering area.
 - Museum the Avanti auto assembly plant presents a unique opportunity for downtown. Within the plant is a museum quality collection of automobiles that could serve as a strong regional tourism draw. The relatively unattractive industrial building could be modified to complement the historic commercial core and the front parking area upgraded to continue the downtown landscaping theme.
 - ii. Neighborhood Alternatives
 - 1. Maintain existing low residential densities.
 - 2. Increase densities within walking distance of downtown to generate more pedestrian traffic to support downtown businesses.
 - iii. Commercial Corridor Alternatives
 - 1. Maintain the existing intensity
 - 2. Facilitate development of second floor residences and offices
- c. Implications
 - Carrying capacity The key choices that will affect downtown residential carrying capacity are the intensification of surrounding neighborhoods and the creation of second floor residences. Given existing use patterns both these

alternatives are not likely to result in significant increases in the total number of units in this area.

- ii. Character The identified alternatives could result in significantly different characters for downtown. On the commercial front, the introduction of a downtown civic center (with city hall, park land and an outdoor pavilion and/or amphitheater) and car museum would add a significant new customer base for downtown businesses without creating the need for much additional parking. Completion of the planned streetscape and parking improvements would create a more pedestrian friendly and vital downtown. Increases in the intensity of downtown densities, particularly the creation of second floor residences or offices also would increase commercial traffic. However, to facilitate this, the City would need to coordinate with property owners to create additional parking. Increasing densities on parcels within walking distance of downtown could generate additional business, without increasing downtown business parking requirements. However, this will require the redevelopment of numerous lots currently developed for low density single family homes. New units are likely to include a mix of patio homes, town homes and other attached residential unit types.
- iii. Infrastructure to be determined
- iv. Policy Implications the preceding alternatives raise the following policy implications, which should be addressed in the future land use element:
 - 1. Parking
 - a. Should the City facilitate provision of additional parking to serve downtown businesses?
 - b. Should that facilitation be funded by the general fund, by downtown businesses requiring the parking or a combination of those sources?
 - 2. Civic Center. The existing city hall building will not be adequate to continue to serve the demands of the City's growing population. Developing a new city hall as part of a civic center in the downtown would provide additional support for businesses in the area and could improve the downtown's gateway. While this move will require significant capital funding, it could stimulate additional downtown business and development.
 - 3. Museum. A downtown auto museum is likely to generate significant weekend tourist traffic and some traffic throughout the week. This traffic would bring new revenues to the downtown merchants and the city.
 - a. Should the City participate in improving the street front and parking of the Avanti site?

- b. Should the City support or participate in the development of the museum?
- 4. Downtown Residential. With few exceptions, any additional residential development will consist of redevelopment of existing properties. While unabated rezonings to accommodate such development could destabilize the neighborhoods, a clearly defined area of intensification would, over time, foster creation of new housing alternatives that would help support downtown businesses. To ensure that this redevelopment remains an asset, the City will need to establish adequate design standards.

EXISTING NEIGHBORHOODS

- d. Issues
 - i. Stability
 - ii. Compatibility
 - iii. Safety
- e. Alternatives the Steering Committee expressed the desire to protect existing neighborhoods from destabilizing influences. These influences may include low quality infill, excessive densities and incompatible design of new or remodeled units.
- f. Implications
 - i. Carrying capacity to be calculated
 - Character For the most part, changes to existing neighborhoods will be minimal. Where infill lots exist, development should reflect the character of existing neighborhoods. While somewhat higher densities may be allowed, lots abutting existing homes should provide effective transitions through compatible lot widths and/or buffering.
 - iii. Infrastructure limited impact anticipated
 - iv. Policy to truly protect existing neighborhoods, the City's development regulations should address compatibility and scale for infill, remodeling and redevelopment projects within neighborhoods.

DALLAS HIGHWAY

- g. Issues
 - i. Traffic
 - ii. Economic opportunity
 - iii. Neighborhood compatibility
- h. Alternatives This corridor will undoubtedly receive existing pressure for development as traffic from the north increases. The hospital expansion will spawn increased pressure for retail, service and office space in this primarily residential corridor. While it may be possible to retain some of the residential scale and character in parts of this

corridor, the City should consider designating areas near the hospital and the intersection of Dallas Highway and the new loop for intensification. The area near the hospital should allow for moderate density housing (attached units and various types of senior housing), office and service uses. The area near the intersection of this corridor and the loop could support some retail development. The remainder of the corridor will face strong market pressure for conversion to non-residential uses. The City could seek to maintain the balance of the corridor for single family use, allow broad commercial use of the corridor or allow limited commercial use for office and service use at a residential scale.

- i. Implications
 - i. Carrying capacity to be calculated

ii. Character - The corridor currently has a predominantly low density residential character with the exception of the hospital corridor. The hospital area already has become an activity center with medium intensity residential and office uses. The creation of a commercial node around the loop would change the existing low density residential character of the area. Committee members expressed interest in ensuring that the development was well designed, which suggests extensive landscaping and buffering within one or more planned centers at the intersection. The character of the remainder of the corridor will depend on the alternative selected by the committee. If change is limited to the two nodes, the rest of the corridor will not change in design character, though as traffic increases, homes are more likely to become rental property. If limited commercial is allowed, the character is likely to be largely retained, though potentially with enhanced streetscaping. If commercial development is allowed to the full extent of market demands, the corridor is likely to be stripped with a mix of retail. office and service uses.

- iii. Infrastructure to be completed
- iv. Policy regardless of the alternatives selected by the committee, the future land use element will need to define the edges of planned commercial node and corridor development. Additionally, the plan and development regulations should address:
 - 1. the location, scale and design of parking areas;
 - 2. building scale and transitions between land uses;
 - 3. access;
 - 4. signage;
 - 5. lighting;
 - 6. streetscape design; and
 - 7. landscaping.

PROPOSED NORTH LOOP

- j. Issues
 - i. Economic development opportunities
 - ii. Transportation adequacy, including access
 - iii. Land use transitions
 - iv. Development design quality
- k. Alternatives While the area near the intersection of the proposed north loop and Hwy. 101 historically has been planned and zoned for industrial development, recent approvals of residential subdivisions creates some potential compatibility issues between potential residential and business uses. The intersection will continue to experience increased traffic, which may support limited commercial near at one or more of the intersection quadrants. Because residential development projects have been approved for the northern wedge of this intersection any business park or industrial development should be limited to the other quadrants.
- I. Implications
 - i. Carrying capacity to be calculated
 - ii. Character the northern quadrant of this intersection will be predominantly detached, single family residences. To the south and west is a mix of industrial development and vacant land that may be developed for industrial or business park purposes. If residential development is approved to the south of the loop road, it should be designed to be compatible with abutting industrial and public land uses. If retail uses are established at this location, they should be designed so they do not interfere with traffic flow through this busy intersection and so that they are compatible in scale and design with adjacent residential development.
 - iii. Infrastructure to be completed
 - iv. Policy In addition to defining the boundaries between future land uses on the land use map, this area will require clear policies on land use transitions. In particular, industrial or business park development will need to be designed to minimize views of operational areas from this entry corridor.

MIRROR LAKE

- m. Issues
 - i. Residential densities and build-out potential
 - ii. Buffering the wastewater treatment plant
 - iii. Open space
- n. Alternatives While most of this area has been planned for a mix of residential development as part of the initial Mirror Lake PUD, the City has not closely monitored the total numbers of units between projects. Furthermore, there are a few out-parcels that were not encompassed within the original PUD. The primary option for

development of the remaining sites are to choose between suburban (single-family) and medium (attached or mixed unit types) density development. High density development should not be considered due to site access limitations.

- o. Implications
 - i. Carrying capacity to be calculated
 - ii. Character neither development option is likely to have any influence on the character of surrounding development.
 - iii. Infrastructure to be calculated
 - iv. Policy -- The primary policy issues affecting development in this area are:
 - 1. the adequacy of the transportation and wastewater systems to support new development;
 - 2. buffering between the wastewater treatment plant at adjacent development; and
 - 3. the integration of open spaces with new development.

<u>e hwy 8 / 78</u>

- p. Issues
 - i. Mix and compatibility of uses
 - ii. Access
 - iii. Development holding time
- q. Alternatives. This area has excellent access to I-20 via the Liberty Road interchange, has fiber optic cabling and is relatively easy to provide with wastewater service. The fact that this site is isolated from adjacent development enables this site to be used for any of the following purposes without external land use compatibility issues:
 - i. Residential uses;
 - ii. Retail uses;
 - iii. Mix of residential and office, retail or service uses; or
 - iv. Business park or industrial uses
- r. Implications
 - i. Carrying capacity to be calculated
 - ii. Character none of the development options is likely to have any influence on the character of surrounding development. Due to the location of the site between I-20 and the railroad tracks, this site is likely to be noisy for residential purposes unless significant sound abatement is provided. With the retention of adequate screening between I-20 and the development, this area could be developed for relatively intensive business or industrial purposes without detracting from the appearance of this community gateway.
 - iii. Infrastructure to be determined
 - iv. Policy Other than the future land use decision, the key policy issues affecting this site are access and buffering. Under all scenarios, the Plan should address the number of access points allowed from Hwy 78. If this site is developed for retail

purposes the plan also should address the design issues relative to I-20. If the site is planned for other uses, then the Plan should address screening of the site from I-20 and Hwy 78.

LIBERTY ROAD INTERCHANGE

- s. Issues
 - i. Land use mix
 - ii. Extent of non-residential uses
- t. Alternatives While the existing land use pattern at the interchange already is determined, the uses, extents and character of the surrounding land uses remain undecided. While the land along the interstate lacks adequate access, it has high visibility that is likely to make it desirable for non-residential purposes. To the south of the existing truck stop and gas station, several sites have been graded and there is one existing industrial use. While limited site investment has not prejudiced the future land use decisions on the sites to the south, the predominance of rural and suburban residential development to the south suggests that any future development should be designed to be compatible with residential traffic (e.g., minimal truck or other heavy traffic, safe access and attractive design). There is some potential for low intensity industrial development to the west of Liberty Road.
- u. Implications
 - i. Carrying capacity to be calculated
 - ii. Character This area transitions from highway-oriented uses (truck stop and gas station) to rural development. While the roadway is largely rural in character, there are several suburban residential developments along the road to the south. The I-20 frontages are largely wooded, although limited clearing has occurred on some of the parcels. Currently, this is not an attractive interchange, but with greater attention to building, driveway and landscape design, its appearance could be improved if the most of the remaining land is developed for retail, service and/or office uses. The area west of Liberty Road offers an out-of-the-way location for low intensity industrial uses, if it is adequately screened from the I-20 and Liberty Road.
 - iii. Infrastructure to be determined
 - Policy The policy issues facing this area are similar to those affecting the E-78 corridor, which include providing safe access and ensuring that non-retail development is adequately screened.

SE QUADRANT

- v. Issues
 - i. Development intensity
 - ii. Phasing with adequacy of street and wastewater capacity
 - iii. Compatibility with existing rural development
 - iv. Quality of residential development
 - v. Open space provision
- w. Alternatives The two basic alternatives in this area are for rural or suburban density residential development. While there are scattered rural residential developments at densities between 1 and 2 dwellings per acre, any areas receiving municipal wastewater service should be developed at average gross densities of 3.5 dwellings per acre or higher.
- x. Implications
 - i. Carrying capacity to be calculated
 - ii. Character With the exception of development abutting the commercial corridor, suburban or rural residential development should be designed to maintain the rural character along roadways and abutting existing rural developments. Interior to sites, the City may seek a conventional suburban character or promote residential clusters that retain more meaningful open space within the development. Generally, this type of development will allow smaller lots and a wider variety of unit types in exchange for the added amenity provided by the open space.
 - iii. Infrastructure to be calculated
 - iv. Policy the development of this area triggers numerous policy issues, including:
 - 1. How will infrastructure be funded?
 - 2. How will the City ensure that development is phased with the provision of adequate water, wastewater and transportation system capacity?
 - 3. What standards will the City use to ensure that development meets minimum standards for quality and sustainability?

HWY 61 SOUTH CORRIDOR

- y. Issues
 - i. Commercial design standards
 - ii. Consistency with County standards
 - iii. Access
 - iv. Maintaining highway capacity
 - v. Phasing development with sewer capacity
- z. Alternatives The location and existing zoning in the corridor reflect the strong demand for commercial development within the corridor, though some attached housing may be appropriate.

aa. Implications

- i. Carrying capacity to be determined
- ii. Character The character of this corridor is largely established by the mix of automobile oriented retail development.
- iii. Infrastructure to be determined
- iv. Policy The key policy areas in this corridor relate to projection of the corridor and include
 - 1. Ensuring that commercial development meets City standards for high quality building and site design;
 - 2. Coordinating City and County development standards;
 - 3. Coordinating site access to minimize interference between traffic flow along Hwy. 61 and traffic accessing commercial development in the corridor; and
 - 4. Phasing development with the availability of adequate wastewater capacity.

<u>W. HWY 8 / 78</u>

- bb. Issues
 - i. Mix of land uses
 - ii. Land fragmentation
 - iii. Wastewater service availability
 - iv. Traffic capacity
 - cc. Alternatives This corridor includes a hodgepodge of residential and non-residential development. Residential development ranges from rural to suburban densities and non-residential development includes retail, service and light industrial uses. Land patterns are highly fragmented, inhibiting large-scale development projects. As traffic continues to increase in this arterial corridor, single-family residential development along the frontage will become less desirable. Given these facts, the following land use alternatives seem most likely:
 - i. Office and service uses along the corridor, with light industrial uses, such as contractor shops behind these businesses.
 - ii. Multiple use development with a mix of retail, service and multi-family development along the corridor, with lower density residential development to the rear.
 - iii. Office, retail and service uses along the corridor, with rural residential development outside the corridor.

dd. Implications

- i. Carrying capacity to be calculated
- ii. Character The three alternatives described above will result in very different areas. The first alternative will provide for long-term business development needs of the city, but could create some land use conflicts with existing residential subdivisions unless adequate buffering is established. The second alternative will be more compatible with existing

development, but also would generate more traffic along this constrained corridor. While the frontage along Hwy. 78 will be similar for each of the alternatives, the third alternative will result in much lower intensity development to the south of the corridor, with development using on-site wastewater systems rather than municipal wastewater.

- iii. Infrastructure under the first two alternatives, the City will need to expand wastewater capacity into this area. The third alternative would require only modest increases in wastewater capacity.
- iv. Policy Under each of the alternatives, the City would need to:
 - 1. protect roadway capacity through access limitations and policies increasing access between parcels;
 - 2. ensure compatibility between residential and non-residential uses;
 - 3. establish appearance standards for development fronting on the corridor; and
 - 4. phase development with the availability of adequate water and wastewater capacity.

^{[11}Sustainable development patterns maintain environmental quality, social equity, economic and fiscal health, and efficient land use practices.

^[2] Compatibility is the ability of adjacent land uses to co-exist without significant interference with the normal activities of either use. The intent of this definition is to ensure that where different uses are established adjacent to one another, any negative impacts of those uses are mitigated.

INTRODUCTION

Transportation provides the means for getting people, goods and services from one location to another. The aim of a transportation system is to move people, goods and services efficiently. The transportation system in the City of Villa Rica is an interconnecting web of roads, highways, bridges, railroads, airports, sidewalks, and trails. This chapter will describe how people use the transportation network, inventory the existing system, and determine areas where improvements may be in order.

	Carroll		Douglas		Villa Rica	
	No.	Per.	No.	Per.	No.	Per.
Workers 16 years and over	39,730	100%	46,176	100%	1,791	100%
Worked in State:	39,257	98.8%	45,840	99.3%	1,781	99.4%
Worked outside State	473	1.2%	336	0.7%	10	0.6%
Worked in county	24,611	61.9%	16,924	36.7%	833	46.5%
Worked outside county	14,646	36.9%	28,916	62.6%	948	52.9%

Exhibit 83: Place of Work--Villa Rica, Carroll and Douglas

U.S. Bureau of the Census, 2000

A higher percentage of residents working in their county of residence (46.5% in 2000 versus 44.5% in 1990) is encouraging because the more work found locally means there is less need for long commutes.

	2000					
	Carroll		Douglas	•	Villa Rica	
Workers 16 years and over: Total	39,730	100%	46,176	100%	1,791	100%
Car, truck or van	37,552	94.5%	44,286	95.9%	1,628	90.9%
Drove alone by car, truck or van	31,384	79.0%	37,698	81.6%	1,237	69.1%
Carpooled by car, truck or van	6,168	15.5%	6,588	14.3%	391	21.8%
Public transportation	111	0.3%	233	0.5%	27	1.5%
Motorcycle	61	0.2%	20	0.0%	-	0.0%
Bicycle	67	0.2%	20	0.0%	11	0.6%
Walked	738	1.9%	214	0.5%	69	3.9%
Other means	290	0.7%	289	0.6%	10	0.6%
Worked at home	911	2.3%	1,114	2.4%	46	2.6%

|--|

U.S. Bureau of the Census, 2000

Exhibit 84 illustrates that the vast majority (69%) of Villa Rica residents drive alone in their passenger vehicle when going to work. This percentage is down from 1990, when 72.6% of the residents drove alone to work. The change appears to be due to an increased use of people working out of their homes, carpooling and use of transit. In both 1990 and 2000, residents of Villa Rica were slightly less likely to drive alone than residents of Carroll and Douglas counties as a whole.

TRAVEL TIME TO WORK

The travel time for Villa Rica residents has changed since the 1990 Census. Overall, it is taking less time to travel to work, however, this gain is almost entirely offset by the increase in the ratio of people who travel more than 60 minutes to their work place. As more jobs are located in and around the City, it should be expected that that overall commute time would decrease for City residents.

Exhibit 65. Commuting Timevina Rica and Douglas						
	Villa Rica	1	Carroll	County	Dougla	s County
Travel Time	1990	2000	1990	2000	1990	2000
	0.7%	2.6%	1.4%	2.3%	1.6%	2.4%
Did not work at home; Commutes less than 30 minutes	52.3%	50.8%	67.1%	60.0%	48.1%	45.2%
Commutes 30 to 60 minutes	36.5%	31.4%	22.6%	25.2%	43.7%	39.6%
Commutes 60 minutes or more	10.5%	15.2%	8.8%	12.5%	6.6%	12.7%

Exhibit 85: Commuting Time--Villa Rica and Douglas

U.S. Bureau of the Census, 2000

AIR QUALITY NONATTAINMENT STATUS AND ITS IMPLICATIONS

A portion of Villa Rica lies within Carroll County, which has been recently added to the list of Georgia counties not in conformance with air quality standards for ozone and particulate matter. This designation of "Nonattainment" status will impact the future development of transportation projects to serve the needs of Villa Rica residents. Where Federal transportation funds are used in a project within these designated areas, the county and State Department of Transportation must show that the project does not result in more pollution being created. Indeed, the goal is to do projects that will help to reduce the pollution problem. The Atlanta Regional Commission administers the process of certifying that projects meet these air quality performance objectives. Future projects must be submitted to the Commission for review and adoption into the metropolitan area Regional Transportation Plan before Federal funding is authorized for construction.

LAND USE IMPLICATIONS

The Suburban County Study produced in June 2004 by Day-Wilburn Associates for the Georgia Department of Transportation notes the following about the impacts of land use upon the transportation system:

LAND USE

Management of the type and location of growth in Carroll County over the next 30 years could support the reduction of traffic congestion and yield a higher quality of life. Planning the location of community activities and services closer to neighborhoods and one another could substantially reduce trips made by vehicle. In addition, promoting intra-parcel access and alternative access facilities between land use types can encourage non-vehicular trip making. This has the potential to lessen traffic congestion, particularly in heavily traveled commercial corridors.

Mixed-use land planning on an activity center, community, and regional level will improve accessibility to the daily locations that people in a community need to visit. The clustering or mixing of uses in a small area enables a community's residents to have access to most of their daily needs within a short multi-purpose drive, bicycle ride, or walk from their homes. Schools, shopping centers, and places of employment are destinations visited daily by a large portion of the population and should be developed in locations providing maximum accessibility to the residents of the community or region. Land use regulations, such as zoning or subdivision development codes, can enable growth while reducing traffic congestion in Carroll County.

ACCESS MANAGEMENT

The application of access management standards can improve the efficiency of a transportation network. Access management is a tool that can help prevent traffic congestion by limiting and controlling vehicles entering, exiting, and turning along a travel corridor. Application of access management techniques to arterial and collector roadways enable the roadways to best serve their designated function. Minimizing the potential disruptions to the vehicles in the roadway facilitates traffic movement. Effective access standards benefit a community by reducing accidents, increasing roadway capacity, providing better access to businesses, and improving mobility.

STREETS, ROADS, AND HIGHWAY FUNCTIONAL CLASSIFICATION

Roads serve a variety of needs. Some provide large volumes of traffic a high speed, direct route to the area of their destination, while others provide little more than direct access to one's property. Roads are classified according to their "Functional Classification". This classification impacts decisions about maintenance responsibility, funding levels, and, in some jurisdictions is used to determine zoning restrictions. The transportation element of the Stephens County Comprehensive Plan and the FHWA publication, Functional

Classification Guidelines (available at http://www.fhwa.dot.gov /planning/fcsec2_1.htmfsfsua) has a good discussion about the functional classification system and provides the basis of the text in this section of this element.

Roads are generally classified into one of three broad categories: Arterials, Collectors and Local. **Arterials** provide longer through travel between major trip generators (larger cities, recreational areas, and so forth.). **Collector** roads collect traffic from the local roads and also connect smaller cities and towns with each other and to the arterials. **Local** roads provide access to private property or low volume public facilities. Exhibit 85 below generally shows how these three categories relate to one another.



Exhibit 86: Functional Road Categories

FUNCTIONAL ROAD CLASSIFICATIONS

The U.S. Department of Transportation (USDOT) and the Federal Highway Administration (FHWA) have identified 11 different types of Functional Classifications in the United States. Each individual State's designated Transportation Agency is responsible for the classification of all roads in the public road system. In Georgia, this responsibility belongs to the Georgia Department of Transportation (GDOT). Exhibit 86 below identifies the different types of classifications used for roadways in Georgia.

Key For Functional Classification	Stands For
IPA	Interstate Principal Arterial
PAR	Principal Arterial- Rural
MAR	Minor Arterial- Rural
MCR	Major Collector- Rural
NMC	Minor Collector- Rural
LOC	Local- Rural
UFY	Freeway- Urban
UPA	Principal Arterial- Urban
MAS	Minor Arterial- Urban
CST	Collector Street- Urban
LOU	Local- Urban

Exhibit 87: Functional Classification Key

Source: GDOT, Office of Transportation Data

The City of Villa Rica was classified by the GDOT under the rural designations until recently. The City is, like Carroll County, undergoing a transition from a rural county to one that is classified using the urban classification designations. Map 19 shows the functional classification for the roads and highways in the City of Villa Rica as proposed in an October 2004 meeting with GDOT personnel.

The four functional systems for urbanized areas are urban principal arterials, minor arterial streets, collector streets, and local streets. The differences in the nature and intensity of development between rural and urban areas cause these systems to have characteristics that are somewhat different from the correspondingly named rural systems.

URBAN PRINCIPAL ARTERIAL SYSTEM

In every urban environment there exists a system of streets and highways, which can be identified as unusually significant to the area in which it lies in terms of the nature, and composition of travel it serves. In smaller urban areas (under 50,000) these facilities may be very limited in number and extent and their importance may be primarily derived from the service provided to travel passing through the area. In larger urban areas their importance also derives from service to rural oriented traffic, but equally or even more important, from service for major movements within these urbanized areas.

This system of streets and highways is the *urban principal arterial system* and should serve the major centers of activity of a metropolitan area, the highest traffic volume corridors, and the longest trip desires; and should carry a high proportion of the total urban area travel on a minimum of mileage. The system should be integrated, both internally and between major rural connections.

The principal arterial system should carry the major portion of trips entering and leaving the urban area, as well as the majority of through movements desiring to bypass the central city. In addition, significant intra-area travel, such as between central business districts and outlying residential areas between major inner city communities, or between major suburban centers should be served by this system. Frequently the principal arterial system will carry important intraurban as well as intercity bus routes. Finally, this system in small urban and urbanized areas should provide continuity for all rural arterials that intercept the urban boundary.

Because of the nature of the travel served by the principal arterial system, almost all fully and partially controlled access facilities will be part of this functional system. However, this system is not restricted to controlled access routes. In order to preserve the identification of controlled access facilities, the principal arterial system is stratified as follows: (1) Interstate, (2) other freeways and expressways, and (3) other principal arterials (with no control of access).

The spacing of urban principal arterials will be closely related to the trip-end density characteristics of particular portions of the urban areas while no firm spacing rule can be established which will apply in all, or even most circumstances, the spacing of principal arterials (in larger urban areas) may vary from less than one mile in the highly developed central business areas to five miles or more in the sparsely developed urban fringes.

For principal arterials, the concept of service to abutting land should be subordinate to the provision of travel service to major traffic movements. It should be noted that only facilities within the "other principal arterial" system are capable of providing any direct access to adjacent land, and such service should be purely incidental to the primary functional responsibility of this system.

Within the City of Villa Rica, the principal arterial system consists of Interstate 20 as well as the Highway 61 Bypass (including the planned portion), South Carroll Road, Main Street and Dallas Road, and Highway 8/78 from the eastern terminus of the proposed bypass into Douglas County.

URBAN MINOR ARTERIAL STREET SYSTEM

The minor arterial street system should interconnect with and augment the urban principal arterial system and provide service to trips of moderate length at a somewhat lower level of travel mobility than principal arterials. This system also distributes travel to geographic areas smaller than those identified with the higher system.

The *minor arterial street system* includes all arterials not classified as a principal and contains facilities that place more emphasis on land access than the higher system, and offer a lower level of traffic mobility. Such facilities may carry local bus routes and provide intra-community continuity, but ideally should not penetrate identifiable

neighborhoods. This system should include urban connections to rural collector roads where such connections have not been classified as urban principal arterials.

The spacing of minor arterial streets may vary from 1/8 - 1/2 mile in the central business district to 2 - 3 miles in the suburban fringes, but should normally be not more than 1 mile in fully developed areas.

In the City of Villa Rica, the minor arterial street network consists of West and East Bankhead Highway, West and East Bankhead Streets, Hickory Level Road as it enters the City, portions of Dogwood Street, Rockmart Road, Old Town Road, Old Stone Road, Connors Road, and Liberty Road south of its intersection with Interstate 20.

URBAN COLLECTOR STREET SYSTEM

The *collector street system* provides land access service and traffic circulation within residential neighborhoods, commercial and industrial areas. It differs from the arterial system in that facilities on the collector system may penetrate residential neighborhoods, distributing trips from the arterials through the area to the ultimate destination. Conversely, the collector street also collects traffic from local streets in residential neighborhoods and channels it into the arterial system. In the central business district, and in other areas of like development and traffic density, the collector system may include the street grid that forms a logical entity for traffic circulation.

The Urban Collector system in the City of Villa Rica includes Berry Drive, Edge Road, Thomas Dorsey Boulevard east of Spring Street, Spring Street between South Carroll Road and Thomas Dorsey Boulevard, North Avenue, and West Church Street from North Carroll Street to North Avenue.

URBAN LOCAL STREET SYSTEM

The *local street system* comprises all facilities not on one of the higher systems. It serves primarily to provide direct access to abutting land and access to the higher order systems. It offers the lowest level of mobility and usually contains no bus routes. Service to through, traffic movement usually is deliberately discouraged.

Map 19 shows the proposed Functional Classification network being recommended by Villa Rica staff working in conjunction with the Georgia Department of Transportation.

SYSTEM INVENTORY

According to GDOT reporting, the mileage of roads within the City of Villa Rica has increased by 5.36 miles during the 2000-2003-time period. This represents a 1.25% increase annually in the mileage of roadways. It is important for residents to note that 85% of the new mileage comes in the form of additional local (city) streets, which the city must budget to maintain each year.

Route Type	Route Type 2000 Mileage		Mileage Increase (Decrease)	Percent Change, 2000-2003	
State Route	10.87	10.87	0	0%	
County Road	16.01	16.40	0.39	2.4%	
City Street	36.92	39.21	2.29	6.2%	
Total	63.80	66.48	2.68	4.2%	

Exhibit 88: Villa Rica Road Mileage, 2000-2003

The streets and highways within the City of Villa Rica are in generally good condition, with some exceptions, which are noted on **Map 21** labeled "Condition Classification". According to the data provided by the GDOT Multi-Modal Transportation Planning Tool, these roads in and around the Villa Rica city limits were in need of immediate maintenance:

Within the City of Villa Rica:	Immediately outside the City of Villa Rica:
Barber Drive	Harlan Lane Road
Stockmar Road	Luther Circle
Jones Street	Sapphire Street
East Wilson Street	Ridgeside Drive
	Old Scenic Road

Count Station	Street	GDOT Name	1998	2000	2002	2003	1998-2003
443	S. Carroll St.	CS 084111	3,298	3,814	5,302	5,550	68%
105	W.Montgomery St.	SR 61,8	6,667	7,780	8,552	11,200	68%
447	Dogwood St.	CS 081511	522	648	957	870	67%
167	Dallas Road	SR 61	6,483	8,806	9,524	9,470	46%
165	Dallas Road	SR 61	6,284	7,157	7,567	8,520	36%
107	E.Montgomery St.	SR 8	8,590	9,480	10,780	11,220	31%
201	Rockmart Road	CR 814	6,054	6,784	7,828	7,870	30%
159	Industrial Blvd.	SR 101	13,051	10,968	16,943	16,750	28%
161	Main Street	SR 61	8,330	6,651	9,424	10,230	23%
152	Highway 61	SR 101	23,443	22,999	27,889	27,350	17%
284	Interstate Highway	I-20	56,690	62,357	65,108	63,870	13%
101	E. Bankhead Hwy	SR 8	13,539	16,886	17,408	15,020	11%
156	Ga Route 61 Bypass	SR 101	22,999	28,465	24,615	25,050	9%
445	Main Street	SR 61	6,884	7,300	7,227	7,450	8%
158	Industrial Blvd.	SR 101	24,042	27,620	23,354	25,720	7%
454	Paulding St.	CS 081711	6,300	5,300	2,705	3,100	-51%
441	S. Carroll St.	CS 084111	3,230	2,857	3,000	1,230	-62%
198	Rockmart Road	CR 814	4,572	5,260	4,996	280	-94%
	TOTAL		82,722	85,087	104,766	109,030	32%

Exhibit 89: Villa Rica Traffic Counts, 1998-2003

Travel volume on the interstate, state highway and local road systems in the Villa Rica area is expected to differ by system. In 2001/2002, the average annual daily traffic (AADT) carried by the three transportation systems was as follows:

Interstate System -- 52,750

State Highway System --13,118

Local (city and county) Road System --1,140

ACCIDENT HISTORY

Using software provided by the Georgia Department of Transportation, it is possible to identify those road segments that have a higher-than-normal road accident history. For Carroll County, the software reviewed the crash rates over the three-year period 2000, 2001 and 2002. For Douglas County, the data review was limited to a one-year reporting period, the year 1997. Map 20 illustrates these crash prone corridors.

	GDOT					3 Yr Avg.	Average
ROAD NAME			AADT	RTE	FC	Crash Rate	Crash Rate
Hwy 8/78	8	East from City limits to Carroll Road	12100	STR	MAS	674	540
Hwy 8/78	8	"	17400	STR	MAS	969	540
Hwy 8/78	8	"	8600	STR	MAS	2053	540
Hwy 61	61	From N.Candler St. to N. Carroll St.	24600	STR	UPA	1100	646
Hwy 61	61	"	7200	STR	UPA	1268	646
Interstate 20	402	East of Villa Rica Interchange	65100	CYR	IPA	219	166
Hickory Level Rd.	393	West from S. Carroll Road	1000	CYR	MAS	595	540
Barber Drive	626	From Hwy 61 to Stockmar Road	830	CYR	LOU	1158	607
Pate Drive	728	From Hwy 61 to dead end	830	CST	LOU	1000	607
Henderson Street	733	From Hwy 101 to dead end	830	CST	LOU	1375	607
Edge Road	758	From S. Wilson St. to Liberty Rd.	830	CST	LOU	1435	607
Darden Street	761	From Louise Lane to Anderson Dr.	830	CST	LOU	1834	607
Spring Street	773	From Westview Dr. to Thos. Dorsey Blvd.	830	CST	LOU	1079	607
W. Wilson Street	775	From W. Bankhead St. to Stone St.	830	CST	LOU	6034	607
Cheves Street	780	From Dogwood St. to dead end	830	CST	LOU	917	607
Jones Street	781	From Peachtree St. to Main St.	830	CST	LOU	5501	607
Maple Street	785	From Dogwood St. to W. Montgomery St.	830	CST	LOU	917	607
Wall Street	792	From Hwy 8 to Midway St.	830	CST	LOU	647	607
Clearview Street	793	From Midway St. to Meadowlark Dr.	830	CST	LOU	2201	607
Punkintown Road	802	From Hwy 61 to Old Stone Rd.	830	CST	LOU	825	607
Dogwood Street	815	From Cheves St. to S. Carroll Rd.	1000	CST	MAS	571	540
Dogwood Street	815	"	830	CST	LOU	1000	607
E. Montgomery St	250	From E. Bankhead St. to Mirror Lake Blvd.	430	CYR	LOC	754	245

Exhibit 90: Villa Rica Crash Analysis

From: GDOT Multi-Modal Transportation Planning Tool, version 3

LEVELS OF SERVICE

The concept of "Level of Service" is meant to help evaluators of a transportation system determine where the traffic system is, or will be, overloaded. Level of Service (LOS) is a qualitative measure on a scale of "A" to "F" describing operational conditions while driving in traffic and motorists' perceptions of those conditions. LOS "A" is described as free flow conditions with low volumes and high speeds. Motorists perceive traffic conditions as "excellent" at this LOS. Conditions deteriorate across the scale, with LOS "F" characterized by frequent stops and starts and very unstable flow. Motorists perceive LOS "F" conditions as "completely unsatisfactory" because they are stuck in extreme traffic snarls and very slow travel times. While a transportation system that works at LOS A would be most desirable from a traveler's standpoint, it is also the most costly level of service to maintain. People are generally tolerant of a system that operates consistently at a level of service "C" or better.

SYSTEM DEFICIENCIES

Using computer software provided by the Georgia Department of Transportation, we can estimate the impact that growth will have on the City's street network. The following table presents an estimate of the levels of service 20-years from now by type of roadway and jurisdiction.

		Carroll				Douglas						
LOS	C	urrent		20-Year		Current			20-Year			
	Freeway	State	Local	Freeway	State	Local	Freeway	State	Local	Freeway	State	Local
А			58.77			56.18			19.13			16.47
В		0.88	5.89			2.59			0.33			2.66
С		1.06	2.13			4.75			0.5			
D	1.35	5.15	0.09			1.05		1.12				
Е	2.16	3.75				0.45	4.64				1.12	0.33
F	0.28	0.11			0.36			0.72				
~	0	0		3.79	10.59	1.86				4.64	0.72	0.5
Total Miles	3.79	10.95	66.88	3.79	10.95	66.88	4.64	1.84	19.96	4.64	1.84	19.96

Exhibit 91: Projected Level of Road Service

Estimated using data provided by the GDOT Multi-Modal Transportation Planning Tool, version 3.

Without additional improvements, this modeling suggests that 25.41 miles of roadway will be at level of service D or below in 20 years. This figure represents 23.5%, or almost a quarter of the existing roadways, that will not function at an acceptable level of service if no additional improvements are planned and executed within the next twenty years.

In a June 2004 transportation study of Carroll County conducted by Day-Wilburn and Associates at the request of the Georgia Department of Transportation, the road network was examined and modeled against projected population trends. When taking into account the existing road network plus those projects that are committed by GDOT to be built for the City, the study finds that several routes are probably going to be operating at less than desirable levels of service by the Year 2030. These routes include:

- **Highway 61** As it leaves the city center and travels north to Douglas County
- Highway 101 From the City center north to Lake Paradise Road
- Villa Rica Interchange All exit ramps
- South Carroll Road From Highway 61 to the City center

The following material comes directly from the Suburban County Study of Carroll County conducted by Day-Wilburn and Associates for the Georgia Department of Transportation in June 2004.

Carroll County is actively pursuing the development and maintenance of a road network that accommodates continuing growth. Map 23 shows the short and long-term transportation projects programmed to increase mobility and connectivity for the traveling public. Villa Rica is working with GDOT and Carroll County to assure that the future needs of the community are met in order that these projects are implemented.

PARKING FACILITIES

There is one park and ride facility in Villa Rica. The site is located off of Interstate 20 on SR 61. The 160 space lot is the largest in Carroll County and had a 51% utilization rate in 2004 which is a three percent increase over the previous year. (*Source: Georgia Department of Transportation*). The Villa Rica lot needs repaving and is identified on the District's priority list for this activity but is not funded. This lot serves carpools and vanpools. Resident can access express bus service at a 15.18 acre site behind the Douglas County Courthouse or another access point in Douglas County. From these locations residents catch express service to downtown Atlanta and the Cumberland Mall/Galleria area in Cobb County. GRTA provides the express service, which will add service to Hartsfield-Jackson International Airport in Summer 2006 (*Souce: Georgia Regional Transportation Administration*).

Given this usage and the anticipated non-attainment status of Carroll County, it is probable that the Georgia Regional Transportation Authority will be expanding commuter service (buses, HOV lanes) to Carroll County within the long term (future STIP) planning framework. Villa Rica will work with GRTA, the Regional Development Center, GDOT and with Carroll County in determining service alternatives to increase the auto occupancy in the I-20/Bankhead Highway corridor.

Downtown Villa Rica has an estimated 170 public parking spaces. (Source: Survey & Analysis: Ernest E. Blevins, MFA 1983) The utilization, according to the Blevins's study is 38%. The business community has taken an active role in the assessment of downtown parking needs in Villa Rica. Parking will be addressed in the Upcoming Downtown Master Plan.

BRIDGES AND BRIDGE CONDITION

There are seven road bridges located within the City of Villa Rica (**Map 24**). These bridges are at the following locations:

Bridge	Over				
SR 61 North-bound lanes SR 61 South-bound lanes SR 101 Daniel Street South Carroll Road Liberty Road North-bound Liberty Road South-bound	I-20 Spring Branch I-20 I-20 I-20				

All bridges are in good to excellent condition, as determined by GDOT.

EVACUATION ROUTES

The State of Georgia designates Interstate 20 as an evacuation route for hurricanes and as an escape route in the event of an incident at the Anniston Military Depot. Located in Anniston, Alabama, this military facility is in the process of disposing of all the nation's nerve gas supplies. The Depot lies approximately 50 miles west of the region.

	200)0	20	03	Change		
Type of Route	Total Mileage	Daily VMT	Total Mileage	Daily VMT	Total Mileage	Daily VMT	
State Route	10.87	277,506	10.87	293,762	0.0%	5.9%	
County Road	16.01	15,165	16.40	18,103	2.4%	19.4%	
City Street	36.92	44,263	39.21	45,900	6.2%	3.7%	
Total	63.80	336,934	66.48	357,765	4.2%	6.2%	

Exhibit 92: Villa Rica Road Inventory and Maintenance Responsibilities

There has been an increase in traffic on all roads within the study area. Even though there were more city streets added during the interim shown above, it is the county roads that experienced the greatest increase in traffic during that same time frame.

SIGNIFICANT BIKE AND PEDESTRIAN FACILITIES

The following material comes in large part from the Suburban County Study of Carroll County conducted by Day-Wilburn and Associates for the Georgia Department of Transportation in June 2004.

Used for transportation as well as recreation, pedestrian and bicycle facilities serve as an integral element of a multimodal transportation network. Pedestrian and bicycle facilities are vital for providing links to transit, accommodating short trips between neighborhoods and community facilities, and providing circulation between land uses in denser activity centers. The connection of neighborhoods to activity centers, including employment centers, community facilities, and retail opportunities, by way of pedestrian and bicycle facilities will improve resident accessibility to these locations. Demand for bicycle and a pedestrian facility has grown substantially since the inception of ISTEA and TEA-21, which provided more funding for these modes.

There are two basic categories or forms of bicycle improvements: on-road facilities and off-road paths or trails. Within these categories are included bike lanes, widened curb lanes, bike routes, multi-use paths, and designated bike routes. Bicycle users have varying levels of expertise; therefore, different types of facilities are desirable to different types of users. Cyclists are typically separated into three groups, Type A, Type B, and Type C, which are described in the AASHTO Guide for the Development of Bicycle Facilities as follows:

• Type A Cyclists: Advanced or experienced riders who generally use their bicycles as they would a motor vehicle.

• Type B Cyclists: Basic or less confident adult riders who may also be using their bicycles for transportation purposes, e.g., to get to the store or to visit friends, but prefer to avoid roads with fast and busy motor vehicle traffic unless there is ample roadway width to allow easy overtaking by the faster traveling motor vehicles.

• Type C Cyclists: Children, riding on their own or with parents, who may not travel as fast as their adult counterparts but still require access to key destinations in their community, such as schools, convenience stores and recreational facilities.

On-road facilities, such as designated bike routes, widened curb lanes or striped bicycle lanes immediately adjacent to vehicle travel lanes, serve mostly experienced cyclists (Type A) who use their bicycles as they would a motor vehicle. Less experienced Type B and Type C cyclists favor the security of wider roadways, less traffic, and off-road, multi-use paths.

STATE BICYCLE ROUTE

The Georgia Bicycle and Pedestrian Plan includes the Chattahoochee Trace Route, which includes 23 miles in Carroll County. This route enters the County from Coweta County on US 27 Alternate/SR 16 and continues on SR 166, Northside Drive/CR 1063, SR 113, CR 261, CR 273, CR 274 and Academy Road/CR 244 where it enters Haralson County. No part of this route passes through the City of Villa Rica.

REGIONAL BICYCLE ROUTES

The State of Georgia, in its '91-'92 Bicycle Touring Guide, indicates that the Chattahoochee Trail route passes through Temple, the Sand Hill community, and eastern Carroll County before exiting to the south through Whitesburg. No part of this route passes through the City of Villa Rica.

INTER-CITY ROUTES

The adopted form of the Chattahoochee-Flint Regional Bicycle and Pedestrian Plan lays out a network for the purpose of designating inter-city travel routes for cyclists. The inter-city system connects the City of Villa Rica with the cities of Temple and Carrollton. The Temple route uses State Route 8 (West Bankhead Highway) as it leaves Villa Rica and for the majority of the route into Temple. The Carrollton route makes use of South Carroll and Hickory Level Roads.

RECREATIONAL BICYCLE ROUTES

The two primary groups using bicycle travel for recreation are children and recreational cyclists. An assessment conducted by the Georgia Department of Transportation indicates that almost all of the streets within Villa Rica are suitable for the use of bicycles, with the exception of the state designated highway routes as these leave the central business district. Recreational cyclists have designated a route that enters Villa Rica from the north on Rockmart Road (SR 101) and exits to the south along the South Carroll route named earlier. A map showing the routes and areas designated suitable for bicycle and pedestrian use is attached to this plan.

PEDESTRIAN FACILITIES

There are three areas with sidewalks developed for pedestrian use within the City of Villa Rica. These areas are located:

- 1) in the historic downtown bounded roughly by Montgomery Avenues, North Avenue and Anderson Drive;
- 2) in the Mirror Lake development, and
- 3) in the Bay Springs development.

Both the Mirror Lake and Bay Springs areas are relatively new residential developments.

BIKE AND PEDESTRIAN FACILITY IMPROVEMENTS

The Temple and Carrollton inter-city bicycle routes lie along roads that are deemed in need of major improvements to make them safer for their use by cyclists. The 2010 cost estimate for these improvements are as follows:

SR 8 (West Bankhead Street/Highway)	\$264,000
South Carroll Road	\$ <u>596,000</u>
Total Improvements	\$860,000

City Hall is moving from its present location on West Bankhead Highway to a location in the historic downtown. With this relocation, plans are being discussed to create a greenway along the middle fork of Town Creek that will eventually tie in the downtown with the Mirror Lake development via a pedestrian path. The route will add about three miles of pathway to the existing pedestrian network. The project cost is estimated to be \$600,000.

Traffic calming, particularly in downtown Villa Rica can be accomplished with the addition of pedestrian bulb-outs, raised crosswalks and greenery. The Downtown Master Plan will address these amenities.

PUBLIC TRANSPORTATION

There is more than one transit provider operating for the benefit of Villa Rica residents, but these providers serve specific clientele and no one operation serves the mobility needs of the general public within the City limits of Villa Rica.

The Villa Rica Senior Center is served by the Coordinated Transportation System operating under the auspices of the Georgia Department of Human Resources. Their records indicate that in FY 2004, the system provided 4.946 trips to 23 participants in activities at the Villa Rica Senior Center. Others in Villa Rica use the system to access services from the Carroll County Department of Family and Childrens' Services, the Pathways Center, and the Carroll County Training Center, but the records do not specify the residency of those making these trips, so no numbers are available.

Douglas County operates a system that provides van pool and express bus services. All transit vehicles operate out of Douglasville meaning that the Villa Rica residents seeking to take advantage of the service must commute to that city to board the transit vehicle. The system provides 29 daily routes with the vanpool and operates Monday-Friday between the hours of 6:00 AM to 6:30 PM. The principal destinations are downtown and midtown Atlanta and DeKalb County. The peak hour capacity of the system is 350 passengers. The system collects annual revenues of \$110,000 against operating costs of \$300,000. The local government picks up the difference. The vanpool program reports that 28 persons living within the area defined by the Villa Rica zip code use the service, along with 10 from the Temple zip code area and 4 from the area designated by the Carrollton zip code.

The Georgia Regional Transportation Authority started the express bus service in July. The system provides five daily routes in the mornings and evenings between the hours of 5:30 AM and 6:30 PM, Monday-Friday. At the time of contact, there was no ridership information available.

RAILROADS

Norfolk-Southern Railroad serves the City of Villa Rica. Approximately 20-25 trains per day pass along this route, which traverses the center of the historic downtown. This route also provides passenger service through Amtrak, which uses the facility twice daily. The Crescent route has daily runs from New York City to New Orleans by way of Greensboro, NC and Atlanta, GA. There are no passenger stops for this route in the City of Villa Rica. The adjacent eastern and western boarding stops are at Atlanta, Georgia and Anniston, Alabama.

AIRPORTS AND AIR TERMINALS

The City of Villa Rica is served by one general aviation airport located elsewhere in Carroll County. The airport accommodates a variety of aviation related activities including recreational flying, agricultural spraying, corporate/business jets, experimental aircraft, police/law enforcement, and ultra-lights. The following information is provided from the State Aviation Plan.

EXISTING FACULTIES

The West Georgia Regional Airport is a 396-acre facility that has one runway of 5,500 feet. The airport has medium intensity runway lighting, a recently-installed Instrument Landing Approach system, and provides a full range of services including fuel, repairs, and storage. The general aviation airport is classified a Level III airport in the state aviation plan.

CURRENT AND FORECAST DEMAND

A review of the airport's historic demand levels shows that based aircraft increased from 55 in 1990 to a current level of 94. By 2021, the airport's based aircraft are expected to reach 117. The airport has approximately 47,325 annual aircraft takeoffs and landings divided between local and itinerant operations. This figure is projected to increase to 64,585 by 2021. By the end of the planning period, the airport is expected to reach 29% of its available annual operating capacity.

Exhibit 33. Anciait at West Georgia Regional Anport								
W-GA Regional-O.V. Gray Field	Current	2006	2011	2021				
Based Aircraft	94	99	105	117				
Operations	47,325	50,527	54,835	64,585				
Local	16,703	17,833	19,353	22,795				
Itinerant	30,622	32,694	35,481	41,790				
Enplanements	NA	NA	NA	NA				
Demand/Capacity Ratio	21%	22%	24%	29%				

Exhibit 93: Aircraft at West Georgia Regional Airport

AIRPORT FACILITY AND SERVICE NEEDS

West Georgia Regional – O.V. Gray Field has been classified a Level III airport and should provide appropriate facilities and services commensurate with its system role. Airport improvements identified in the System Plan include:

- Install precision approach
- Upgrade MIRL to HIRL
- Install MALSR*
- Phase III: 8 additional hangar spaces are needed
- Phase I: 24 additional apron parking spaces are needed;
- Phase II: 3 additional apron parking spaces are needed;
- Phase III: 6 additional apron parking spaces are needed
- Phase I: 109 additional auto parking spaces are needed;
- Phase II: 9 additional GA auto parking spaces are needed;
- Phase III: 18 additional auto parking spaces are needed
- Provide a separate 2,500 square foot terminal

* Committed funds and project is ongoing

The table on the following page summarizes current facilities and services, the airport's facility and service objectives, and actions/projects that are needed for West Georgia Regional – O.V. Gray Field to meet these objectives.

	Existing	System Objective	Recommended
Airside Facilities			
Runway Length (Rwy 16 / 34)	5,500	5.500 feet or greater	None
Runway Width	100	100 feet	None
Taxiway Length	Full Parallel	Full Parallel	None
Approach	Non-Precision	Precision	Precision
Lighting-Runway	MIRL	HIRL for precision approaches; MIRL for non-precision	HIRL
Lighting-Taxiway	MIRL	MIRL	None
NAVAIDS	Rotating Beacon	Rotating Beacon	None
NAVAIDS	Segmented Circle	Segmented Circle	None
NAVAIDS	Wind Cone	Wind Cone	None
NAVAIDS	PAPI	PAPI	None
Weather	AWOS-3	AWOS / ASOS	None
Ground Communication	Phone	GCO / Phone	None
Approach Light System	MALSR*	Approach Lighting System	None
General Aviation Lar	ndside Facilities		
Hangared Aircraft Storage	74 spaces	70% of based fleet	Phase III: 8 add'I spaces needed
Apron Parking / Storage	28 spaces	30% based of aircraft plus additional 75% for transiet aircraft	Phase I: 24 add'I spaces needed Phase II: 3 add'I spaces needed Phase III: 6 add'I spaces needed
Terminal /	1,000 square	2,500 square feet	Provide a separate 2,500 square
Administrative	feet	minimum with amenities	foot terminal building
Aviation Auto Parking	40 spaces	One space for each based aircraft, plus 50% for visitors / employees	Phase I: 109 add'I spaces needed Phase II: 9 add'I spaces needed Phase III: 18 add'I spaces needed
Services			
FBO	Full Service	Full Service	None
Maintenance	Full Service	Full Service	None
Fuel	AvGas	AvGas	None
Fuel	Jet Fuel	Jet Fuel	None
Rental Cars	Available	Available	None

Exhibit 94: West Georgia Regional Airport—Facility and Service Objectives

*Committed funds and project is ongoing

OTHER RECOMMENDATIONS

Additional actions or project required for West Georgia Regional – O.V. Gray Field to meet Level III performance objectives:

- Update the Master Plan/ALP in Phase I (2003) and Phase III (2013)
- Adopt land Use/Zoning Controls
- Pavement Condition Index (PCI) needs to increase 5 PCI to reach the 70 PCI objective
- Correct RSA deficiency

The following table provides estimated costs for airport to meet each of the recommendations of the Georgia Aviation System Plan.

Associated City FAA Identifies Level	Carrollton CTJ III		WEST GEORGIA REGIONAL AIRPORT					
Facility Objecti						Costs	_	
	Existing	Objective	Facility	Needs		Phase I	Phase II	Phase III
Airfield			·					T.
Runway Lengt	h 5,500	5,500						
Runway Width		100						
Taxiway Lighti	ng Full Parallel	Full Parallel						
Runway Lighti	ng MIRL	HIRL	Upgrade HIRL	e from MIR	L to	\$165,000		
Taxiway Lighti	ng MIRL	MIRL						
Land Acquisiti	on			19 acres f requireme		\$98,000		
Earthwork								
Pavement Maintenance	65PCI	>70PCI	Rehabili	itate runwa	ay	\$376,113		
Navigational A	ids							
PAPI	Yes	PAPI						
Rotating Beaco	on Yes	Rotating Beacon						
Segmented Circle	Yes	Segmented Circle						
Windcone	Yes	Windcone						
Weather	AWOS-3	ASOS orAWOS						
GCO / Phone	Phone	GCO / Phone						
Approach Lighting	None	Approach Lighting	1			Projected is funded / ongoing		
General Aviation	on Facilities							
			Phase I	Phase II	Phase III			
Hanger Storage	e 74	82			8			\$200,000
Apron	28	61	24	3	6	\$518,400	\$64,800	\$129,600
Auto Spaces	40	176	109	9	18	\$163,500	\$13,500	\$27,000
Terminal Space	e 1,000	2,000			2,500			\$375,000
Fuel								
Planning / Environmental								
ALP Update	1992	Update every 10 years	1		1	\$60,000		\$60,000
Environmental Assessment								
Subtotal						\$1,381,813	\$78,300	\$811,600
Total Esti	mated Cost	t				\$2,271,713		

Exhibit 95: West Georgia Regional Airport Development Costs
	Stop Sign	Beacon- Amber	Stop All Directions	Flasher	Traffic Control - Left Turn Arrow	Stop Sign Opposite	Traffic Control - Pedestrian Signal	Beacon - Red	Signal	Yield Sign Opposite Inventory	Yield Sign	Grand Total
Villa Rica	75	1	26		5	115		1	7		1	231
Carroll Co. Total	856	10	140	2	27	1154	18	8	74	3	9	2301

Exhibit 96: Signalization and Signage Inventory--Villa Rica and Carroll

Georgia Department of Transportation, RC File,

SIGNIFICANT TRANSPORTATION ISSUES

Based upon the data presented herein and the information gathered at the visioning meeting, the most critical issues facing Villa Rica pertaining to transportation are relative to congestion and its affect on the integrity of the community based activity centers, particularly Downtown Villa Rica. Improvements planned must not only emphasize through traffic but also the subregional needs in the community. New activity centers when developed need to be attractive, mixed-use, pedestrian-friendly places. Access corridors to downtown and the Villa Rica downtown need to be preserved and protected from the congestion caused by commuting. Residential areas, both new and existing need to be tied into the activity centers with parallel access and with pedestrian, transit and bicycle access.

Road safety must be maintained. This is critical to the smooth functioning of the roads and the activity centers. The lack of pedestrian activated signal devices and sidewalks throughout the community must be addressed.

Primary road corridors must be protected from inappropriate development patterns. Existing commercial corridors must be managed so as to not cause undue disruption to the access corridors and the activity centers. Access corridors to Villa Rica are identified as any road that enters and leads directly into the city limits and ultimately into the central downtown business district. These roads are classified as major and minor arterial.

In the City of Villa Rica, these roads include U.S. Highway 78 (East and West Bankhead Highway), GA Highway 61 (Dallas Highway), GA Highway 101 (Rockmart Road/ Main Street), and South Carroll Road.

INTERGOVERNMENTAL COORDINATION

The Intergovernmental Coordination element provides local governments an opportunity to inventory existing intergovernmental coordination mechanisms and processes with other local governments and governmental entities that can have profound impacts on the success of implementing the local government's comprehensive plan. The purpose of this element is to assess the adequacy and suitability of existing coordination mechanisms to serve the current and future needs of the community and articulate goals and formulate a strategy for effective implementation of community policies and objectives that, in many cases, involve multiple governmental entities.

INVENTORY OF EXISTING CONDITIONS

Carroll County and the cities of Bowdon, Mt. Zion, Temple, Roopville, Villa Rica and Whitesburg have adopted a verified Service Delivery Strategy. The strategy includes a land use dispute resolution process consisting of three levels of consultation on proposed annexations and land use changes within governments' zones of influence. First, notification is required of any proposed annexation or change of land use within the zone of influence. If a government takes issue with the proposed action, it first pursues informal negotiation with its partner. Third, if that process fails to produce a satisfactory result, the government may invoke a formal mediation process.

The Service Delivery Strategy identifies several formal agreements between governments. Cooperation in carrying out these agreements is generally managed at the staff level on a day-to-day basis.

- A mutual aid agreement between City and Carroll County for assistance with fighting fires.
- A contractual agreement for law enforcement between the Cities of Carroll County and the Carroll County Sheriff's office.
- An agreement for building inspection and fire safety inspection in the unincorporated county and the cities and the Carroll County code enforcement staff.
- An agreement between Carroll County and the Cities to provide emergency housing of prisoners in the county's jail in the event of overflow at the city facility.
- An agreement for the cities to provide certain recyclable materials recovery and processing for recyclables collected by the county.

The City of Villa Rica maintains its own full time recreation programs, but acknowledges that significant numbers of residents of unincorporated Carroll County participate in the programs, activities and facilities. Carroll County agreed to supplemental funding of the full-time Villa Rica recreation department.

The City of Villa Rica provides water supply and distribution to users within their service area.

The City of Villa Rica is a member of the Carroll County Water/Wastewater Study Committee. The study committee includes one member from each local governmental jurisdiction in Carroll County providing both the production and distribution of water and collection and treatment of wastewater (including the City of Villa Rica); a representative of the Carroll County Water Authority; three members geographically appointed by the Carroll County Board of Commissioners with professional expertise in the planning, design, operations, or major utilization of water/wastewater services.

From the Carroll County Service Delivery Strategy (1999) and the City of Villa Rica Comprehensive Plan (2006):

There is a formal agreement between the City of Villa Rica and the Sheriff to house city prisoners at the county jail in emergencies. The Sheriff has countywide jurisdiction within and outside each municipality of the County.

The City of Villa Rica appoints and funds the Villa Rica Board of Tourism (a volunteer organization) from hotel/motel taxes levied on guests staying in hotels/motels within the City of Villa Rica.

The City of Villa Rica has a Development Authority that focuses on the specific economic development needs of their community. In conjunction with the Development Authority of Villa Rica, the Carroll County Chamber of Commerce serves as the countywide clearinghouse, coordinator, recruiting, and marketing arm for economic development in Carroll County and its cities. The City of Villa Rica contributes to the Chamber for this purpose.

UTILITIES

There are three providers of electricity in Villa Rica: Carroll Electric Membership Corporation, Georgia Power, and Greystone Power. Although informal communication occurs among these entities, there is no formal process for coordinating activities. There are no formal procedures in place for coordination between any of the electric utilities and the city.

SCHOOL BOARD

The Carroll County Board of Education operates the schools serving Villa Rica. A small number of students living in the Mirror Lake Subdivision may elect to go to Mirror Lake Elementary, which is operated by the Douglas County Board of Education. The Carroll BOE schools serving Villa Rica include two elementary schools, one middle school, and one high school.

<u>HEALTH</u>

Tanner Health System operates a 92-bed hospital in Villa Rica that serves northeastern Carroll County, western Douglas County, and southeastern Paulding County. The Carroll County Health Department and West Georgia Family Medicine provide public health services. The county and city governments cooperate closely on a professional level on the issuance of various permits, including food service, septic tanks, and others.

STATE PROGRAMS

Appalachian Regional Commission

Carroll County and its cities are members of the Appalachian Regional Commission (ARC), a development agency of the U.S. government, operated in all or part of thirteen states under the U.S. Department of Commerce. The Commission's mission is to mitigate the obstacles to social and economic development inherent in the Appalachian terrain and to promote economic development in the region. Participation in ARC makes the City of Villa Rica eligible to receive economic development grants. The local liaison for ARC is the Chattahoochee Flint Regional Development Center in Franklin, Georgia.

ASSESSMENT

Land Use

No land use conflicts were identified during plan development. No land use conflicts have been identified with any adjacent counties. A conflict resolution process is in place via the county service delivery strategy. It is deemed satisfactory, although it has not been used to date.

Identified Needs

Villa Rica has determined an urgent need for coordinating growth with water plant expansion, so they may continue to be self-reliant on the city's water supply. The City has already completed a Watershed Assessment and Management Plan in 2003. Georgia's Environmental Protection Division requires municipalities to conduct such an assessment as apart of the permitting process for the expansion of water plants or the construction of new facilities.

Adequacy of Existing Coordination Mechanisms

The existing Service Delivery Strategy adopted by the county and the cities has been found to be satisfactory. Other regional and intra-county coordination mechanisms, organizations, and relationships are judged to be adequate and to provide sufficient sharing of information and planning among the governments of Carroll County, its neighbors, and regional organizations with which it is affiliated. With the exception of the multi-jurisdictional solutions for water supply and thoroughfares, there were no planned facilities, programs, goals, or implementation strategies identified in the development of this plan that are judged to require additional coordination mechanisms or to have impacts on other jurisdictions requiring new coordination mechanisms.

Needs

- Continued joint comprehensive planning approach to ensure a common basis is maintained for planning by all local governments and quasigovernmental agencies.
- Continued existing coordination through agreements and procedures already established.
- Cooperative approach to water supply in the Upper Little Tallapoosa River Basin.
- Coordination to ensure maximum benefit from tourism-related projects.

Vision

Establish formal relationship among governments and quasi-governmental entities within and outside Carroll County when necessary to eliminate duplication of services, minimize costs, and create opportunities for cooperation.

Continue informal cooperation at both the policy and staff levels for the same purpose.

Goals

- Maintain existing inter-governmental coordination mechanisms within the cities and counties and among partners in regional organizations.
- Investigate the potential for a regional or multi-jurisdictional approach to water supply in the Upper Little Tallapoosa River Basin.
- Maximize the benefit from tourism-related activities identified in this plan by coordinated efforts by Villa Rica, Carroll County, and appropriate state agencies.

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Project / Activity	2005	2006 2	2007	2008	2009	2010	Responsible Party		Cost Estimate	Funding Source
COMMUNITY FACILITIES										
Contract w/ Douglas County Water & Sewer Authority	x						City/Douglas Cty			
Contract w/ Carroll County Water & Sewer Authority	x						City/Douglas Cty			
North Sewer Plant expansion		x					City	\$	12 Million	City; GEFA; SPLOST; CDGG
Identify Inflow/outflow	x	x					City			Gen. Fund
Inflow/Outflow rehabilitation			x				City	\$	1 Million	Gen. Fund
West Sewer Plant expansion					x		City	\$	35 Million	City; GEFA; SPLOST; CDGG
Property acquisition for West Sewer Plant		x					City			Gen. Fund
Construct Pine Mnt. Gold Mine Museum		X					City	\$	480,000	SPLOST
Rehab Centerfields Ball Fields	х						City	\$2	2.2 Million	Gen. Fund
Rehab Centerfields Civic Center	X						City	\$	50,000	SPLOST
Construct Public Works Building			х				City	\$	450,000	Gen. Fund
Develop Spring Lake Nature Park			Х				City	\$	1 Million	SPLOST
Conduct Water Rate Study	X						City	\$	5,000	Gen. Fund
Complete Downtown Landscape Improvements			Х				City	\$	50,000	SPLOST
Downtown Waterline Repalcement		X	Х	Х			City	\$	1 Million	Capital Impr.
3 year Meter Replacement Program	X	X	Х				City	\$1	100,000/yr	Water Tap Fees
800 Mhz radio system		X					City	\$	100,000	SPLOST/County
Acquire land for Library expansion		X					City	\$	300,000	SPLOST/Gen. Fund
30,000sq ft library complex			Х	х	х		City	\$	3,750,000	SPLOST/Gen. Fund
Low pressure waterline & sewer line upgrade			х				City	\$	56,000	SPLOST/ Tap Fees
Water Line extension from Hwy 78 to Industrial Park	x						City	\$	100,000	UDAG
Extend/upgrade Douglas Co. sewer lines		x	х				D.C. Water & Sewer	\$	470,000	SPLOST
Purchase & install sewer flow management equipment		x	x				City	\$	65,000	Tap Fees
Build water tank on NW Hwy 101			X				City	\$	750,000	Tap Fees
Build settling pool for water plant		X					City	\$	100,000	Tap Fees

Project / Activity	2005	2006	2007	2008	2009	2010	Responsible Party	E	Cost Estimate	Funding Source
TRANSPORTATION										
Industrial Park turn lanes on Industrial Blvd			x				City	\$	250,000	UDAG
Engineering for North Villa Rica By-pass		x					City	\$	65,000	Gen. Fund
NATURAL RESOURCES										
Purchase and protect Greenspace thoughout Villa Rica in Carroll and Douglas Counties		x	x	x	x	x	City	\$1	00,000 / yr	SPLOST/Gen. Fund
ECONOMIC DEVELOPMENT		l	l	1	1					
Develop a Downtown Master Plan	х						Chatt-Flint RDC	\$	16,500	Gen. Fund
Purchase 20 acres for Economic Development Zone in Downtown Area			x				City	\$	400,000	Gen. Fund
Fund Downtown Development Enterprise Fund to encourage new businesses to locate in downtown. I.e. parking deck, sidewalks		x	x	x	x	x	City	\$5	60,000 / yr	SPLOST
HOUSING	1	1	1	1	1					
Conduct housing training for city staff			x				Chatt-Flint RDC			Gen. Fund
HISTORIC RESOURCES										
Become a Certified Local Government				Х			City			
Nominate Villa Rica for National Register			X				Chatt-Flint RDC		\$5,000	Gen. Fund
Conduct an Historic Resources survey		x					Findlt Program		\$5,000	Gen. Fund
LAND USE										
Implement Downtown Master Plan			Х				City/DDA			Capital Impr.
Submit a Livable Centers Initiative (LCI) Grant			X				Chatt-Flint RDC			
Establish Overlay Districts		X					Chatt-Flint RDC			Gen. Fund
Rewrite Planning & Zoning Codes	X						Chatt-Flint RDC	\$	80,000	Gen. Fund
Comprehensive Plan Update						X	Chatt-Flint RDC	\$	55,000	Gen. Fund

Project / Activity	2005	2006	2007	2008	2009	2010	Responsible Party	Cost Estimate	Funding Source
COMMUNITY FACILITIES		1							
Contract w/ Douglas County Water & Sewer Authority	x						City/Douglas Cty		
Contract w/ Carroll County Water & Sewer Authority	x						City/Douglas Cty		
Identify Inflow/outflow	x	х					City	\$15,000	Gen. Fund
Inflow/Outflow rehabilitation			x				City	\$1 Million	Gen. Fund, GEFA, SPLOST
West/South Sewer Plant expansion					X		City	\$35 Million	Gen. Fund, GEFA; SPLOST; CDGG
Property acquisition for West Sewer Plant		x					City	\$1.2 Million	Gen. Fund, SPLOST
Construct Pine Mnt. Gold Mine Museum		х					City	\$480,000	SPLOST
Rehab Centerfields Ball Fields	x						City	\$2.2 Million	Gen. Fund
Rehab Centerfields Civic Center	х						City	\$50,000	SPLOST
Construct Public Works Building			х				City	\$450,000	Gen. Fund
Develop Spring Lake Nature Park			Х				City	\$1 Million	SPLOST
Conduct Water Rate Study	х						City	\$5,000	Gen. Fund
Complete Downtown Landscape Improvements			Х				City	\$50,000	SPLOST
Downtown Waterline Repalcement		x	х	x			City	\$1 Million	Tap Fees, GEFA, SPLOST
3 year Meter Replacement Program	х	Х	Х				City	\$100,000/yr	Tap Fees
800 Mhz radio system		Х					City	\$100,000	SPLOST/County
Acquire land for Library expansion		Х					City	\$300,000	SPLOST/Gen. Fund
30,000sq ft library complex			X	X	Х		City	\$3,750,000	SPLOST/Gen. Fund
Upgrade water and sewer service within the City			X				City	\$56,000	SPLOST/ Tap Fees
Water Line extension from Hwy 78 to Industrial Park	x						City	\$100,000	UDAG
Extend/upgrade Douglas Co. sewer lines		X	X				D.C. Water & Sewer	\$470,000	SPLOST
Purchase & install sewer flow management equipment		x	X				City	\$65,000	Tap Fees
Build water tank on NW Hwy 101			х				City	\$750,000	Tap Fees
Build settling pool for water plant		X					City	\$100,000	Tap Fees

Project / Activity 2	2005	2006	2007	2008	2009	2010	Responsible Party	Cost Estimate	Funding Source
TRANSPORTATION							<u>.</u>		
Industrial Park turn lanes on Industrial Blvd			x				City	\$250,000	UDAG
Engineering for North Villa Rica By-pass		x					City	\$650,000	SPLOST
NATURAL RESOURCES									
Purchase and protect Greenspace thoughout Villa Rica in Carroll and Douglas Counties		x	x	x	x	x	City	\$100,000 / yr	SPLOST/Gen. Fund
ECONOMIC DEVELOPMENT									
Develop a Downtown Master Plan	(Chatt-Flint RDC	\$16,500	Gen. Fund
Purchase 20 acres for Economic Development Zone in Downtown Area			x				City	\$1.25 Million	Gen. Fund
Fund Downtown Development Enterprise Fund to encourage new businesses to locate in downtown. I.e. parking deck, sidewalks		x	x	x	x	x	City	\$50,000 / yr	SPLOST
HOUSING									
Conduct housing training for city staff			x				DCA	\$2,000	Gen. Fund
HISTORIC RESOURCES									
Become a Certified Local Government				X			City	N/A	N/A
Nominate Villa Rica for National Register			Х				Chatt-Flint RDC	\$5,000	Gen. Fund
Conduct an Historic Resources survey		x					Findlt Program	\$5,000	Gen. Fund
LAND USE									
Implement Downtown Master Plan			Х	Х	X	X	City/DDA	Cost TBD	Gen. Fund
Submit a Livable Centers Initiative (LCI) Grant			Х				Chatt-Flint RDC	\$2,000	Gen. Fund
Establish Overlay Districts		X					Chatt-Flint RDC	\$5,000	Gen. Fund
Rewrite Planning & Zoning Codes	Х						Chatt-Flint RDC	\$80,000	Gen. Fund
Comprehensive Plan Update						X	Chatt-Flint RDC	\$55,000	Gen. Fund

City of Villa Rica				
Report of Accomplishments	STATUS OF	PROJECT O	R ACTIVITY	
Project or Activity from Previous STWP	Completed	** Currently Underway	** Postponed *	Not Accomplished *
COMMUNITY FACILITIES				
Contract w/ Douglas County Water & Sewer Authority			X	
Contract w/ Carroll County Water & Sewer Authority	X			
North Sewer Plant Expansion				X
Identify Inflow/outflow		X		
Inflow/outflow rehabilitation		X		
West Sewer Plant Expansion		X		
Property acquisition for West Sewer Plant		X		
Construct Pine Mnt. Gold Mine Museum		X		
Rehab Centerfields Ball Fields		X		
Rehab Centerfields Civic Center		X		
Construct Public Works Building			X	
Develop Spring Lake Nature Park			X	
Conduct Water Rate Study	X			
Complete Downtown Landscape Improvements		X		

Downtown Waterline Replacement		X	
3 Year Meter Replacement Program	X		
800 Mhz radio system			X
Acquire land for Library expansion			X
30,000 sq ft library complex	X		
Low pressure waterline & sewer line upgrade	X		
Waterline extension from Hwy 78 to Industrial Park			X
Extend/upgrade Douglas Co. Sewer lines	X		
Purchase & install sewer flow management equipment	X		
Build water tank on NW Hwy 101	X		
Build settling pool for water plant	X		
TRANSPORTATION			
Industrial Park turn lanes on Industial Blvd		X	
Engineering for North Villa Rica By-pass	X		
NATURAL RESOURCES			
Purchase and protect Greenspace throughout Villa Rica in Carroll and Douglas Counties.	X		
Develop a Downtown Master Plan	X		
Purchase 20 acres for Economic Development Zone in Downtown Area	X		

Fund Downtown Development Enterprise				
Pund to encourage new businesses to locate			v	
in downtown. I.e. parking deck, sidewalks			X	
HOUSING				
Conduct housing training for city staff				X
HISTORIC RESOURCES				
Become a Certified Local Government		X		
Develop a Villa Rica historic register		X		
Conduct an Historic Resources Survey		X		
LAND USE				
Implement Downtown Master Plan		X		
Submit a Livable Centers Initiative (LCI) Grant	X			
Establish Overlay Districts		X		
Rewrite Planning & Zoning Codes		X		
Comprehensive Plan Update		X		

**Currently underway or temporarily postponed
activities or projects should appear in new STWP
* Explanation for Postponed or Not Accomplished Project or Activity
Unable to reach agreement
Does not comply with the Metropolitan North Georgia Water Planning District Plan
Reviewing alternatives
2007-2008

Osumtu vide elen en held hu sount :
County-wide plan on hold by county
Reviewing alternatives
retro thing alternatives
2007
2007
Not needed
2006-2007
2000-2007
0007 0000
2007-2008
Still under negoiations with GDOT
0007.0000
2007-2008

Still in planning process
Sum in planning process
Not in current plans
Not in current plans



Map 1 Villa Rica Comprehensive Plan Development Constraints

Legend

- —— Major Roads
- 🚃 Urban Service Area
- —— Roads
- ------ Streams
- 🕂 🕂 Railways
 - Wetlands





Produced by: Chatt-Flint RDC GIS Dept. Novem ber 16, 2004 Source: Planning Works





Villa Rica Comprehensive Plan Historic and Cultural Resources Significant Historic Gold Mines

Legend City Limits Roads × Gold Mines



Produced by: Chatt-Flint RDC GIS Dept. August 24, 2005





Villa Rica Comprehensive Plan Historic and Cultural Resources Eligible Historic Districts

Legend

City Limits Parcels
Bankhead Highway
Fullerville
North Villa Rica Residential (early-mid 20th century) North Villa Rica Residential (older)
South Villa Rica Commercial
South Villa Rica Residential
West Villa Rica Residential



Produced by: Chatt-Flint RDC GIS Dept. October 18, 2004





Resource Name	Map #	Resource Name	Map #
Auto Repair Shop	14	Simmons Home	2
Auto Service Center	15	Stockmar Gold Mine	21
Berry House	7	Talley Home	4
Connally House	5	Ulla Wilson Home	10
Crawford Estate	16	Victorian c. 1868	6
E.J. Simmons Home	3	Victorian c. 1913	8
First United Methodist Church	12	W.B. CandlerHouse	13
Fullerville Jail	1	Westside Baptist Church	19
Funeral Home and Residence	18	Wicks Tavem	17
JeffHenderson Home	9	Williams Family Farm	22
Mount Prospect Baptist Church	20	Zack Allen Home	11



0 0.5

Map 5

Villa Rica Comprehensive Plan Historic and Cultural Resources Significant Individual Properties





Produced by: Chatt-Flint RDC GIS Dept. October 18, 2004





Map 7 Villa Rica Comprehensive Plan Water & Sewer Systems

Legend

	Water Lines
	Sewer Lines
WTP	Water Plant
•	Wastewater Treatment Plant
FS	Pump Station
9	Storage Tank
W	Well
	Roadways
	Interstate
- 	Railroad
	VillaRicaWater
	VillaRicaSewer



Produced by Clatt Flint GIS Department 11/17/04 Data Source: Keel & Wood





Villa Rica Comprehensive Plan Functional Classification System

Legend

—— City Limits
—— Local Roads
Interstate/Principal Arterial
—— Major Arterial
—— Minor Arterial
——— Urban Collector



Produced by: Chatt-Flint RDC GIS Dept. October 18, 2004





Map 20 Villa Rica Comprehensive Plan High Accident Zones

Legend

— Local Roads

---- City Limits

— Accident Zones



Produced by: Chatt-Flint GIS Dept October 18, 2004 Souce: GA Dept of Transportation

б

3

9

⊐Miles



Villa Rica Comprehensive Plan Condition Classification

Legend

- ----- Considerably Deteriorated
- ----- Good
- ------ Very Good
 - Local Roads
- ----- City Limits



Produced by: Chatt-Flint GIS Dept October 18, 2004 Source: GA Dept of Transportation





Villa Rica Comprehensive Plan Long Range Transportation





Produced by Chatt-Flint, GES Department, November 16, 2004



Map 23 Villa Rica Comprehensive Plan Proposed Transportation Projects

Мар Ш	Segment/Location.	Implementation Period
9	Interstate 20/SR 402 from SR 61 to Haralson County Line	2021-2030
12	Rockmart Road from SR 61 to Haralson County Line	2011-2020
13	SR 61 from US 78/SR 8 to Douglas County	2011-2020
15	US 78/SR 8 from SR 101 to Douzlas County	2006-2010
17	Commuter rail-Atlanta to Bremen	2021-2030
18	Feasibility Study-Parallel route south of 1-20/SR 402 from Bowdon Jet to Villa Rica	2006-2010
20	S. Carroll Road from SR61 to US 78/SR 8	2021-2030
21	SR 61	2011-2020
25	Villa Ricabypass extend Wfrom proposed SR 61 bypass to SR 101	2006-2010
26	SR 61 Commfrom Nof NSRR bridge at Douglas Cnty Line to SR 61	2006-2010
29	US 78/SR 8 at SR 61	2006-2010
31	SR 61 at North Hickory Level Rd/CR 393	2006-2010

Legend



Map Identification Number



Produced by: Chatt-Flint RDC GIS Dept. October 18, 2004 Source: GA Dept of Transportation

8

12 ⊐Miles

4



Map 24 Villa Rica Comprehensive Plan Bridges

Legend





Produced by: Chatt-Flint GIS Dept October 18, 2004





Villa Rica Comprehensive Plan Bicycle and Pedestrian Suitability

Legend

-	Incomplete Data
	Major 2
	Minor1
	Minor 2
	Major1
	Suitable
	Local Roads
	City Limits
	Sidewalk Location



Produced by: Chatt-Flint GIS Dept October 18, 2004 Source: GA Dept of Transportation





9 ⊐Miles